

# **Ph.D. Rules and Regulations 2023**

( w.e.f 25th March, 2023 onwards)



**BRAINWARE UNIVERSITY**

*398, Ramkrishnapur Road, Barasat, North 24 Parganas, Kolkata - 700 125*



## **Ph.D. Rules and Regulations**

### **1. Preamble**

The Brainware University will award the following Doctoral Degrees "Doctor of Philosophy" - abbreviated as Ph.D.): Ph.D. in Science; Ph.D. in Engineering and Ph.D. in Commerce and Ph.D. in Management under School of Computational and Applied Sciences, School of Engineering, School of Management & Commerce, respectively. Later, the University may introduce Ph.D. degrees in other subjects under the existing Schools and/or under new Schools.

### **2. Eligibility**

The following are eligible to seek admission to the Ph.D. programme:

#### **(1) Candidates who have completed**

A 1-year/2-semester master's degree programme after a 4-year/8-semester bachelor's degree programme or a 2-year/4-semester master's degree programme after a 3-year bachelor's degree programme or qualifications declared equivalent to the master's degree by the corresponding statutory regulatory body, with at least 55% marks in aggregate or its equivalent grade in a point scale wherever grading system is followed or equivalent qualification from a foreign educational institution accredited by an assessment and accreditation agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country to assess, accredit or assure quality and standards of the educational institution.

A relaxation of 5% marks or its equivalent grade may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled, Economically Weaker Section (EWS) and other categories of candidates as per the decision of the Commission from time to time.

Provided that a candidate seeking admission after a 4-year/8-semester bachelor's degree programme should have a minimum of 75% marks in aggregate or its equivalent grade on a point scale wherever the grading system is followed. A relaxation of 5% marks or its equivalent grade may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled, Economically Weaker Section (EWS) and other categories of candidates as per the decision of the Commission from time to time.

#### **(2) Candidates who have completed**

M.Phil. programme with at least 55% marks in aggregate or its equivalent grade in a point scale wherever grading system is followed or equivalent qualification from a foreign educational institution accredited by an assessment and accreditation agency which is approved, recognized or authorized by an authority, established or incorporated under a law in its home country or any other statutory authority in that country to assess, accredit or assure quality and standards of educational institutions, shall be eligible for admission to the Ph.D. programme. A relaxation of 5% marks or its equivalent grade may be allowed for those belonging to SC/ST/OBC (non-creamy layer)/Differently-Abled, Economically Weaker Section (EWS) and other categories of candidates as per the decision of the Commission from time to time.

### **3. Procedure for admission**

(1) The admission shall be based on the criteria notified by the institution, keeping in view the guidelines/norms in this regard issued by the UGC and other statutory/regulatory bodies concerned, and taking into account the reservation policy of the Central/State Government from time to time.

(2) Admission to the Ph.D. programme shall be made using the following methods:



- i. Brainware University may admit students who qualify for fellowship/scholarship in UGC-NET/UGC- CSIR NET/GATE/CEED and similar National level tests based on an interview.  
And/or
- ii. Brainware University may admit students through an Entrance Test conducted at the level of the individual University level. The Entrance Test syllabus shall consist of 50% of research methodology, and 50% shall be subject specific.
- iii. Students who have secured 50 % marks in the entrance test are eligible to be called for the interview.
- iv. A relaxation of 5% marks will be allowed in the entrance examination for the candidates belonging to SC/ST/OBC/differently-abled category, Economically Weaker Section (EWS), and other categories of candidates as per the decision of the Commission from time to time.
- v. Brainware University may decide the number of eligible students to be called for an interview based on the number of Ph.D. seats available.
- vi. Provided that for the selection of candidates based on the entrance test conducted by the Brainware University, a weightage of 70 % for the entrance test and 30 % for the performance in the interview/viva- voce shall be given.

#### **4. Admission of International students in Ph.D. programme**

- (1) Each supervisor can guide up to two international research scholars on a supernumerary basis over and above the permitted number of Ph.D. scholars as specified in clause 6 below.
- (2) The BWU may decide their own selection procedure for Ph.D. admission of international students keeping in view the guidelines/norms in this regard issued by statutory/regulatory bodies concerned from time to time.
- (3) At any point, the total number of Ph.D. scholars under a faculty member, either as a supervisor or a co-supervisor, shall not exceed the number prescribed in clause 6.3 and clause 4.1.

#### **5. Procedure for Registration**

- (a) A candidate will generally be eligible for registration within two years of admission provided he/she has completed coursework under approval by his/her supervisor and the Departmental Research Committee (DRC). The said period, however, can be extended subject to the approval of the Vice-Chancellor.
- (b) The Departmental Research Committee (DRC) will process applications of the qualified candidates. A doctoral research proposal (in the prescribed format, along with other approvals as given in Appendices I to V) should also be submitted to the Departmental Research Committee (DRC) along with the application for registration.
- (c) Registration for Ph.D. degree shall be granted to a candidate provided that the Departmental Research Committee (DRC) is satisfied that:
  - i) the candidate satisfies the requirements for eligibility as per norms;
  - ii) it shall be possible for the candidate to maintain regular contact with his/her Supervisor throughout the entire period of his/her work;
  - iii) the experimental part (if any) of the work can be carried out at this University or in other recognized University or organization or research institute or Industry where adequate facilities for carrying out such work exist. Carrying out such work outside Brainware University shall require approval of the Supervisor, the respective Departmental Research Committee (DRC) and the Academic Council.
- (d) If the candidate is accepted for registration, then he/she shall have to register his/her name within the stipulated time prescribed for this purpose by paying a registration fee and other fees determined by the University.



- (e) On payment of the fees, the candidate's name and other particulars shall be included in the register maintained by the office of the concerned Faculty.
- (f) The University shall maintain the list of all registered Ph.D. students on its website on yearly basis. The list shall include the names of the registered candidates, topic of his/her research, name of his/her supervisor/co-supervisor, dates of admission and registration.
- (g) A certificate of registration will be issued by the Registrar after completion of the aforesaid formalities.
- (h) Permission to pursue Ph.D. degree in a different Subject/Faculty, other than the one the candidate has specialized in his/her post-graduate studies, may be granted in special cases on the recommendation of the Departmental Research Committee (DRC) and the Academic Council after judging the proficiency of the candidate in the subject concerned and on payment of the prescribed fees.
- (i) In case of failure to register within the prescribed time, the application shall be deemed to have been cancelled unless special permission is granted by the Vice-Chancellor on the basis of a written application by the candidate through the supervisor and Departmental Research Committee (DRC).
- (j) A candidate's registration may also be cancelled if he/she does not fulfill necessary criteria as required by the University.

## 6. Allocation of Research Supervisors

Eligibility criteria to be a Research Supervisor, Co-Supervisor, Number of Ph.D. scholars permissible per supervisor, etc.

- (1) Permanent faculty members working as Professor/Associate Professor of the Higher Educational Institution with a Ph.D., and at least five research publications in peer-reviewed or refereed journals and permanent faculty members working as Assistant Professors in Higher Educational Institutions with a Ph.D., and at least three research publications in peer-reviewed or refereed journals may be recognized as a Research Supervisor in the university where the faculty member is employed or in its affiliated Post-graduate Colleges/institutes. Such recognized research supervisors cannot supervise research scholars in other institutions, where they can only act as co-supervisors. Ph.D. awarded by a university under the supervision of a faculty member who is not an employee of the university or its affiliated Post- Graduate Colleges/institutes would be in violation of these Regulations.

For Ph.D. scholars working in Central government/ State government research institutions whose degrees are given by Higher Educational Institutions, the scientists in such research institutions who are equivalent to Professor/Associate Professor/Assistant Professor can be recognized as supervisors if they fulfill the above requirements.

Provided that in areas/disciplines where there is no, or only a limited number of peer-reviewed or refereed journals, the Higher Educational Institution may relax the above condition for recognition of a person as Research Supervisor with reasons recorded in writing.

Co-Supervisors from within the same department or other departments of the same institution or other institutions may be permitted with the approval of the competent authority.

Adjunct Faculty members shall not act as Research Supervisors and can only act as co-supervisors.

- (2) In case of interdisciplinary/multidisciplinary research work, if required, a Co-Supervisor from outside the Department/School/Centre/College/University may be appointed.
- (3) An eligible Professor/Associate Professor/Assistant Professor can guide up to eight (8) / six (6) / four (4) Ph.D. scholars, respectively, at any given time.
- (4) In case of relocation of a female Ph.D. scholar due to marriage or otherwise, the research data shall be allowed



to be transferred to the Higher Educational Institution to which the scholar intends to relocate, provided all the other conditions in these Regulations are followed, and the research work does not pertain to a project sanctioned to the parent Institution/Supervisor by any funding agency. Such scholar shall, however, give due credit to the parent institution and the supervisor for the part of research already undertaken.

- (5) Faculty members with less than three years of service before superannuation shall not be allowed to take new research scholars under their supervision. However, such faculty members can continue to supervise Ph.D. scholars who are already registered until superannuation and as a co-supervisor after superannuation, but not after attaining the age of 70 years.

## 7. Coursework

### **Credit requirements, number, duration, syllabus, minimum standards for completion, etc.**

- (a) The Credit requirement for the Ph.D. coursework is a minimum of 12 credits, including a “Research and Publication Ethics” and a research methodology course. The Research Advisory Committee can also recommend UGC recognized online courses as part of the credit requirements for the Ph.D. programme.
- (b) All Ph.D. scholars, irrespective of discipline, shall be required to train in teaching /education /pedagogy/writing related to their chosen Ph.D. subject during their doctoral period. Ph.D. scholars may also be assigned 4-6 hours per week of teaching/research assistantship for conducting tutorial or laboratory work and evaluations.
- (c) Candidate will be eligible to sit for the course work examination, if they have at least 75% attendance in course work classes. In case of attendance less than 75%, the candidate may be allowed to sit for the examination provided he shows valid reason in this context and this is approved by Registrar or Vice- chancellor. Such candidate may be required to pay additional fee in the form of fine as prescribed by the university.
- (d) A Ph.D. scholar must obtain a minimum of 55% marks or its equivalent grade in the UGC 10-point scale in the course work to be eligible to continue in the programme and submit his or her thesis.

## 8. Privileges and obligations of registered candidates

- (a) A registered candidate shall work under the guidance of the Supervisor(s) appointed by the Departmental Research Committee (DRC).
- (b) A registered candidate shall abide by such regulations as may be prescribed by the Departmental Research Committee (DRC) from time to time.
- (c) A registered candidate shall report to his/her supervisor at the institution as per the supervisor’s direction and shall carry out the research work to the satisfaction of the supervisor.
- (d) A registered candidate will be required to give a seminar presentation along with a progress report (in the prescribed format, APPENDIX VI) in each semester to the DRC to provide updates about his/her research and invite suggestions/modifications/guidance towards a more enriched work towards the attainment of the Ph.D. degree.
- (e) Academic Council shall have the power to cancel the admission of a student at any time, on disciplinary or any other grounds which are considered to be not in consonance with the dignity, diligence and behavior of a research scholar or for non-payment of the relevant fees.

## 9. Duration of the Programme

- (1) Ph.D. Programme shall be for a minimum duration of three (3) years, including course work, and a maximum



duration of six (6) years from the date of admission to the Ph.D. programme.

(2) A maximum of an additional two (2) years can be given through a process of re-registration as per the Statute/Ordinance of the Higher Educational Institution concerned; provided, however, that the total period for completion of a Ph.D. programme should not exceed eight (8) years from the date of admission in the Ph.D. programme. Provided further that, female Ph.D. scholars and Persons with Disabilities (having more than 40% disability) may be allowed an additional relaxation of two (2) years; however, the total period for completion of a Ph.D. programme in such cases should not exceed ten (10) years from the date of admission in the Ph.D. programme.

The relevant Departmental Research Committee (DRC) may, on receipt of application in the prescribed form from the candidate, recommend extension of the duration of the program based on the merit of individual case as per norms stated above. If extended, the candidate shall have to pay a re-registration fee.

(3) A candidate cannot submit any work for which a Degree or Diploma or other academic award has already been conferred on him/her by BWU or any other University or Institution, as his/her thesis but may incorporate it as part of the thesis with proper citation/reference.

(4) If the work is interdisciplinary in nature, with supervisors from different Schools, then the respective Departmental Research Committee (DRC) should present the work in a joint meeting of the Schools. The major part of work shall decide the branch of Ph.D. degree.

(5) The non-refundable fee for submitting a thesis for examination will be as determined by the University from time to time.

(6) Female Ph.D. Scholars may be provided Maternity Leave/Child Care Leave for up to 240 days in the entire duration of the Ph.D. programme.

## **10. Evaluation and Assessment Methods, minimum standards/credits for award of the degree etc.**

(1) Upon satisfactory completion of course work and obtaining the marks/grade prescribed in clause (C) of Regulation 7 above, the Ph.D. scholar shall be required to undertake research work and produce a draft dissertation/thesis.

(2) Before submitting the dissertation/thesis, the Ph.D. scholar, who has satisfactorily completed the coursework and other requirements, must present his/her work at a meeting of the Departmental Research Committee (DRC) in an open seminar (pre- submission seminar), where the Supervisor(s) shall be invitee members. The pre-submission seminar date shall be finalized in consultation with the external experts of the Departmental Research Committee (DRC). Any suggestion may be suitably incorporated under the advice of the supervisor(s). If necessary, the title can be modified at this stage provided the new title is approved both by the Supervisor and the respective Departmental Research Committee (DRC). The notice for the meeting should be circulated. The student, whose work is approved in the said meeting should submit the thesis within six months counted from the date of pre-submission seminar. Further, in the case when the work presented is found unsatisfactory by the members of DRC, the candidate will be required to make necessary modifications. For such students, pre-submission seminar will again be arranged at a later date as per the rules and regulations.

(3) The Higher Educational Institution concerned shall have a mechanism using well-developed software applications to detect Plagiarism in research work and the research integrity shall be an integral part of all the research activities leading to the award of a Ph.D. degree.

(4) A Ph.D. scholar shall submit the thesis for evaluation, along with (a) an undertaking from the Ph.D. scholar that there is no plagiarism and (b) a certificate from the Research Supervisor attesting to the originality of the thesis and that the thesis has not been submitted for the award of any other degree/diploma to any other Higher Educational Institution.

- (5) Every Ph.D. Scholar shall get a plagiarism check on prescribed plagiarism checking software of his draft thesis to detect plagiarism and shall submit the report generated on the plagiarism checking software of his draft thesis along with a soft copy of the draft thesis and declarations about the plagiarism on the prescribed format (policy on plagiarism is available on the website of University) for consideration by the Departmental Research Committee (DRC).
- (6) A registered candidate shall have to submit four hard copies (the number may be determined separately in case of co- supervision) and one soft copy of the thesis in pdf format duly recommended by the supervisor(s) embodying the results of the research he/she has carried out, together with four printed and one soft copy of the synopsis of the thesis. The copies of the thesis should be submitted to the Registrar together with a receipt of the fees paid to this University for this purpose. Proof of the candidate's fulfillment of other requirements shall also be submitted at this time.
- (7) The format of the thesis shall be decided by the Schools.
- (8) The thesis should be written in English. Any request for using any other language shall have to be submitted to the Departmental Research Committee (DRC) (through the supervisor) stating clearly the reasons for not writing in English. The Departmental Research Committee (DRC) shall then judge the given reasons critically and may or may not accept the request and the decision shall be binding to all concerned.
- (9) The Governing Board/Academic Council shall have the power to revoke any Ph.D. degree conferred duly, if the candidate is subsequently proved guilty of plagiarism, falsification/copying of data/information or any other form of academic or ethical malpractice. Such a decision of the Governing Board shall be final and binding to all concerned.
- (10) The Ph.D. thesis submitted by a Ph.D. scholar shall be evaluated by his/her Research Supervisor and at least two external examiners who are experts in the field and not in employment of the Higher Educational Institution concerned. Such examiner(s) should be academician with a good record of scholarly publications in the field. Wherever possible, one of the external examiners should be chosen from outside India. The viva- voce board shall consist of the Research Supervisor and at least one of the two external examiners and may be conducted online. The viva-voce shall be open to the members of the Research Advisory Committee/faculty members/research scholars, and students. Higher Educational Institutions may formulate appropriate rules/ordinances to affect the provisions of this Regulations.
- (11) The Departmental Research Committee (DRC) shall prepare a list of six persons (not below the rank of a Professor), who are well known authorities on the subject for appointment as external examiners of a thesis by considering the list submitted by the Supervisor(s). Three external experts shall be from outside the state of West Bengal.
- (12) Such examiners shall neither be teachers of this University nor persons who are supervising candidates for the Ph.D. degree registered at this University.
- (13) The final selection of the two external examiners from the panel thus submitted shall be done by the Vice Chancellor.
- (14) External examiners and the Supervisor(s) will be requested to state their opinion about the thesis in the prescribed form having the following options:
  - i. The candidate may be awarded the Ph.D. degree of the University.
  - ii. The candidate may be awarded the Ph.D. degree of the University provided that the following modifications are addressed in a separate addendum. The Examiners present at the viva-voce must certify that the modifications are satisfactorily addressed, failing which the thesis must be resubmitted for examination after addressing the suggested modifications.
  - iii. The candidate may be awarded the Ph.D. degree only after addressing the following



questions and resubmitting the thesis.

iv. The candidate shall not be awarded the Ph.D. degree of this University.

- (15) A detailed technical evaluation report signed by the examiner must also be submitted by the all the examiners individually.
- (16) A thesis which has been directed to be re-submitted by at least one of the external examiners, maybe submitted again after due revision, modification or alteration not earlier than three months from the date of communication of the recommendation to the candidate. A re-submission fee shall have to be paid as decided by the University. External examiners appointed will examine the resubmitted thesis again. A thesis may be re-submitted only once.
- (17) If differences of opinion still remain in the recommendations of the external examiners, all the reports and the thesis will be sent to a third external examiner (recommended by the Departmental Research Committee (DRC) and approved by the Vice- Chancellor) who will act as special adjudicator and his/her recommendation shall be considered as binding.
- (18) If both the external examiners reject the thesis, it shall not be further processed for award of the Ph.D. degree of the University and will be considered as rejected.
- (19) The viva-voce of the Ph.D. scholar to defend the thesis shall be conducted if both the external examiners recommend acceptance of the thesis after incorporating any corrections suggested by them. If one of the external examiners recommends rejection, the Higher Educational Institution concerned shall send the thesis to an alternate external examiner from the approved panel of examiners, and the viva-voce examination shall be held only if the alternate examiner recommends acceptance of the thesis. If the alternate examiner does not recommend acceptance of the thesis, the thesis shall be rejected, and the Ph.D. scholar shall be declared ineligible for the award of a Ph.D.
- (20) The Higher Educational Institution concerned shall complete the entire process of evaluating a Ph. D. thesis, including the declaration of the viva-voce result, within a period of six (6) months from the date of submission of the thesis.
- (21) A viva-voce examination shall be held for the candidate to defend his/her thesis, for which notice will be issued 15 (fifteen) days before the examination.
- (22) The Vice-Chancellor, on the recommendation of the Departmental Research Committee (DRC), shall appoint one expert who is not a teacher of this University and is a well-known authority on the subject (preferably one of the external examiners who evaluated the thesis), along with the Supervisor(s) of the candidate, as examiners for the viva-voce examination.
- (23) The examiners at the viva-voce examination may ask questions in order to satisfy themselves that the candidate has adequate knowledge of the particular branch of the subject on which he/she has submitted the thesis. The candidate shall provide answer to all the queries (if any) raised by the external examiner(s) within their adjudication report(s). If there is an addendum as mentioned earlier, the examiners will certify that it is satisfactory.
- (24) If the examiners are not satisfied, the candidate may be directed to appear again at the viva-voce examination after three months. Such a candidate shall pay an additional fee duly determined by the University.
- (25) A report on the result of the viva-voce examination has to be submitted in the prescribed proforma to the Registrar.
- (26) If the examiners of the viva-voce examination recommend that the candidate may be awarded the degree, then all the reports and recommendation shall be placed before the Vice-Chancellor by the Registrar. After obtaining the approval, the Registrar will issue a provisional certificate for the candidate on award of the Ph.D. degree.
- (27) The formal degree will be awarded by BWU in the next Convocation.



## 11. The Research Board

There shall be a Research Board consisting of the following:

1. The Vice-Chancellor – Chairman,
2. The Deans of the Schools – Members,
3. Professors and Associate Professors of the University – Members,
4. Three experts nominated by the Governing Board – Members,
5. The Registrar – Secretary

In absence of Dean of the Faculty School, the Vice-Chancellor may also nominate a Professor of a related subject under the same Faculty School till the Dean of the Faculty School is available.

The Ph.D. Programme of the university shall be monitored by the Research Board constituted for a period of four years. The nominated members will be eligible for re-nomination.

Without prejudice to the regulations in the form of Acts, Ordinances and Statutes, the Research Board shall conduct smooth and effective implementation of the Ph.D. Programme of the University.

The Research Board will deal with all such matters as may be referred to it by the Vice-Chancellor for advice and/or by the Departmental Research Committee (DRC) for direction from time to time.

One third of the total number of the members rounded off to the next integer shall form the quorum for a meeting of the Research Board.

## 12. Departmental Research Committee (DRC)

There shall be a Departmental Research Committee (DRC) for each department under the relevant school comprising of:

1. One Professor of the respective department to be nominated by the Vice-Chancellor.
2. Dean of the Faculty School – member.
3. Two teachers of the respective department, each having a doctoral degree and nominated by the DAC.
4. Two subject experts from research institutions or Universities, not below the rank of a Professor, nominated by the Vice-Chancellor.
5. Head of the department- Secretary.

If there is no Professor in the subject, then the Vice-Chancellor may nominate a Professor of a related subject under the same Faculty School till a full-time Professor of that subject or discipline is available. In absence of Dean of the Faculty School, the Vice-Chancellor may also nominate a Professor of a related subject under the same Faculty School till the Dean of the Faculty School is available.

The tenure of membership of a person shall ordinarily be three years, however he/she can be re-nominated. Five members, including at least one external member, shall form the quorum.

### **13. Research Advisory Committee / Departmental Research Committee and its Functions**

- (1) There shall be a Research Advisory Committee or an equivalent body as defined in the Statutes/Ordinances of the Higher Educational Institution concerned for each Ph.D. scholar. The Research Supervisor of the Ph.D. scholar concerned shall be the Convener of this committee, and this committee shall have the following responsibilities:
  - i. To review the research proposal and finalize the topic of research.
  - ii. To guide the Ph.D. scholar in developing the study design and methodology of research and identify the course(s) that he/she may have to do.
  - iii. To periodically review and assist in the progress of the research work of the Ph.D. scholar.
- (2) Each semester, a Ph.D. scholar shall appear before the Research Advisory Committee to make a presentation and submit a brief report on the progress of his/her work for evaluation and further guidance. The Research Advisory Committee shall submit its recommendations along with a copy of Ph.D. scholar's progress report to the Higher Educational Institution concerned. A copy of such recommendations shall also be provided to the Ph.D. scholar.
- (3) In case the progress of the Ph.D. scholar is unsatisfactory, the Research Advisory Committee shall record the reasons for the same and suggest corrective measures. If the Ph.D. scholar fails to implement these corrective measures, the Research Advisory Committee may recommend, with specific reasons, the cancellation of the registration of the Ph.D. scholar from the Ph.D. programme.

### **14. Depository with INFLIBNET**

Following the successful completion of the evaluation process and before the announcement of the award of the Ph.D. degree(s), the Higher Educational Institution concerned shall submit an electronic copy of the Ph.D. thesis to INFLIBNET, for hosting the same so as to make it accessible to all the Higher Educational Institutions and research institutions.

### **15. Termination from the Programme**

A scholar's PhD procedure will be terminated if:

1. He/she fails to complete the course work within the first year of provisional registration with a minimum of 55% marks or its equivalent grade in the UGC 10-point scale in the course work.
2. He/she fails to submit a satisfactory Research Proposal in three attempts.  
The PhD thesis has not been accepted after two re submissions.
3. Any disciplinary action has been taken against him/her on the recommendation of the appropriate committee.
4. He/she gets continuous non-satisfactory 6th month progress report.
5. He/she does not respond to the mails sent by PhD office or supervisor



**BRAINWARE UNIVERSITY**

398, Ramkrishnapur Road, Barasat, North 24 Parganas, Kolkata - 700 125

To

The Director,  
Research Board  
Brainware University  
Barasat 700125.

**Sub:** Topic of Research and Supervisor Approval

Dear Sir,

Enclosed herewith is the detailed outline of the proposed topic of research for my Ph.D. Programme, for consideration of the Research Board. The proposed topic of the research is:

\_\_\_\_\_  
\_\_\_\_\_

I propose the following as my Supervisor

\_\_\_\_\_

And co-supervisor:

\_\_\_\_\_

Date of Registration: \_\_\_\_\_

The following place and organisation for my research work may also be approved:

Place: \_\_\_\_\_

Organisation: \_\_\_\_\_

Yours faithfully,

\_\_\_\_\_  
(Signature of the Student)

Full Name of the Student: \_\_\_\_\_

Student Code: \_\_\_\_\_

Date: \_\_\_\_\_.



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Recommendations of the Proposed Supervisor(s):

I have scrutinized the proposed topic of research and I agree to act as his supervisor. I shall conduct thesis and other components of the Ph.D. programme of the candidate as per provisions of the Academic Regulations of BWU.

Date: \_\_\_\_\_

(Full Signature of proposed supervisor)

Date: \_\_\_\_\_

(Full Signature of proposed co-supervisor)

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Recommendations of the Director, Research

Date: \_\_\_\_\_

(Full Signature of Director, Research)

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**1. In case of a candidate having more than one co-supervisor please add the necessary details in this form.**



## **Ph.D. RESEARCH PROPOSAL REPORT FORMAT**

### **A. General Information**

1. **Proposed Title of the Study:** \_\_\_\_\_

*(It specifies the area of the proposed research work and is not the exact title of the thesis. Title of the thesis emerges at a stage when the candidate is almost ready to submit his/her thesis. Before submitting the thesis, exact title which will appear on the thesis, has to be approved by the DRC. The proposed topic of research should be written in "Title Case" and should not be too lengthy.)*

2. **Student Name:** \_\_\_\_\_

3. **Student Code:** \_\_\_\_\_

4. **Department:** \_\_\_\_\_

5. **Course Code:** \_\_\_\_\_

6. **Supervisor(s):**

a. **Name of the Supervisor:** \_\_\_\_\_

b. **Designation of the Supervisor:** \_\_\_\_\_

c. **University affiliated to:** \_\_\_\_\_

d. **Name of Joint-Supervisor (if any):** \_\_\_\_\_

*(Please attach a resume (in the prescribed format – APPENDIX V) of the supervisor, if he is an external faculty)*

e. **Designation:** \_\_\_\_\_

f. **University Affiliated to:** \_\_\_\_\_

7. **Date of Submission of Report (DD/MM/YYYY):** \_\_\_\_\_

### **B. Research Proposal Details**

#### Content

1. Introduction:

2. Literature Review and Gaps in existing literature

*It is expected that a broad summary of the present status of work and unresolved academic issues in the area are highlighted while giving the background of the proposed research. To identify the research gap, the candidate should refer latest peer-reviewed journal articles.*

3. Plan of work (which should include **Problem Statement** along with **Objectives**)

*Indicate the perception of the research work and it should not be a mere repetition of the topic of research. What is to be achieved as an outcome of the research has to be visualized while mentioning the objective of the research. Objective should be given point wise (3-4 points)*

4. Expected Outcome

5. Equipment Required (if any)

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## 6. References

**GENERAL FORMATTING GUIDELINES**

<b>Page Orientation</b>	Portrait
<b>Page Size</b>	A4 size
<b>Margins</b>	1 inch from all sides/Moderate in Word Doc.
<b>Headings</b>	Calibri, Bold, Size-14 points, Title case
<b>Sub-Headings</b>	Calibri, 12 points, Bold
<b>Body-text (paragraphs)</b>	Calibri, 11 points, Justified

- Initially TWO hard copies of the proposal are to be submitted to Director, Research for corrections and approval.
- After Approval, one CORRECTED hard copy and ONE SOFT COPY to be submitted with Director, Research.
- Each page of proposal has to be given page number at bottom & at the right
- The length of the proposal will depend on the nature of the problem, but approximately 10-12 pages (spacing: 1.15 lines) are usually sufficient.
- Proposal should be stapled and NOT TO BE BOUND (spiral or otherwise)
- Check your proposal against checklist provided at the end of this document.
- Tables and figures should be only used only if relevant and absolutely necessary. If included please follow the instructions given below:

**Tables**

- Number tables consecutively in the order of their first citation in the text and supply a brief title for each. Give each column a short or abbreviated heading.
- Be sure to give caption to each table and they are cited in the text.
- Table footnotes are to be avoided.
- If a Table has been published, cite the original source.

**Illustrations (Figures)**

- Letters, numbers, and symbols on Figures should be clear and uniform throughout, and of sufficient size so as to make legible.
- Figures should be made as self-explanatory as possible
- Be sure to give caption to each Figure and all figures are cited in the text.
- Figures should be numbered consecutively according to the order in which they have been first cited in the text.
- If a figure has been published, cite the original source.

**Units of Measurement**

Measurements of length, height, weight, and volume should be reported consistently throughout the proposal.

**Abbreviations and Symbols**

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Use only standard abbreviations. Avoid abbreviations in the title. The full term for which an abbreviation stands should precede its first use in the text except in case of measurement units.

**In-text citations**

- The identification of references within the text of your proposal by arabic (i.e. 1, 2...etc) numbers in square brackets. This applies to references in text, tables and figures.
- The original number assigned to the reference is reused each time the reference is cited in the text, regardless of its subsequent position in the text.
- When multiple references are cited at a given place in the text, use a hyphen to join the first and last numbers that are inclusive. Use commas (without spaces) to separate non-inclusive numbers in a multiple citation e.g. [2-5, 7, 10].
- The placement of citation numbers within text should be carefully considered, for example, a particular reference may be relevant to only part of a sentence. As a general rule, reference numbers should be placed, inside colons, semicolons, full-stops and commas. e.g. There have been efforts to replace mouse inoculation testing with in vitro tests, such as enzyme linked immunosorbent assays [2, 3] or polymerase chain reaction [5-7].

**Reference List**

A list of references contains details only of those works cited in the text. Punctuation marks and spaces within the references are very important. Keep uniformity with this respect. Also consider the following:

1. Minimum 12 to 20 references are needed
2. References should be written as per the format given.
3. 50-60 % references are needed are to be from reputed journal articles, that too from latest journals (within 5 years from the date of writing the proposal).
4. In case of conference proceedings dates, place of the conference and in case of published proceedings page nos. of proceedings should be given.
5. Citation dates for e-reference is a must.
6. Give the editions of the books referred by you.
7. Give full details of the reports taken as a reference i.e. place of publication, published by which agency, etc.

**Reference Format****Journal article:**

Neumann T., Ermert H. "Schlieren visualization of ultrasonic wave fields with high spatial resolution" *Journal of Ultrasonics*. 2006, 44: 561-566.

**If Organization is the author**

Diabetes Prevention Program Research Group "Hypertension, insulin, and proinsulin in participants with impaired glucose tolerance" *Hypertension*. 2002, 40:679-686.

**Books**

Goodman G. A. "The Pharmacological Basis of Therapeutics" 10th ed. McGraw Hill, New York, USA. 2001, 3-29.

**If Book has both Author(s) and Editor(s)**

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Johnson D. B., Maltz D. A., Broch J. "DSR: The dynamic source routing protocol for multi-hop wireless ad hoc networks" C.E. Perkins (Ed.), Ad Hoc Networking, Addison-Wesley, Reading, USA. 2001, 139–172.

**If Organization is the Author of Book**

Royal Adelaide Hospital: Department of Clinical Nursing, University of Adelaide, *Compendium of nursing research and practice development*, 1999-2000. Adelaide (Australia): Adelaide University; 2001.

**Chapter in a Book**

Meltzer P. S., Kallioniemi A., Trent J. M. "Chromosome alterations in human solid tumors" In: The genetic basis of human cancer. (Vogelstein B., Kinzler K.W., Eds.), McGraw-Hill, New York, USA. 2002, 93-113.

**Conference Proceedings**

1. Martinola G., Bauml M. F. "Optimizing ECC in Order to Prevent Shrinkage Cracking. Proceedings of the JCI International Workshop on Ductile Fiber Reinforced Cementitious Composites (DFRCC) - Application and Evaluation, Takayama, Japan, 2002, Oct 21-22, 143-152.
2. Xiang G., Boulton T. E., Coetzee F., Ramesh V. "Error Analysis of Background Adaption" Proceedings of IEEE Computer Society Conference on Computer Vision and Pattern Recognition, South Carolina, USA, 2000, Jun 13 – 15, IEEE, 2000, 1: 503-510.

**Scientific or Technical Report**

1. Russell M. L., Goth-Goldstein R., Apte M. G., Fisk W. J., *Method for measuring the size distribution of airborne Rhinovirus*. Berkeley (CA): Lawrence Berkeley National Laboratory, Environmental Energy Technologies Division; 2002 Jan. Report No.: LBNL49574. Contract No.: DEAC0376SF00098. Sponsored by the Department of Energy.
2. National Manufacturing Competitive Council, *The National Strategy for Manufacturing* Government of India Report, 2006

**Patent**

Pagedas A. C., inventor; Ancel Surgical R&D Inc., assignee. *Flexible endoscopic grasping and cutting device and positioning tool assembly* United States Patent US 20020103498, 2002 Aug 1.

**CD-ROM**

Anderson S. C., Poulsen K. B., *Anderson's electronic atlas of hematology* [CD-ROM]. Philadelphia, USA. Lippincott Williams & Wilkins; 2002.

**Journal article on the Internet**

1. Ruchir S., Bhardwaj V., Manoj M. "On the Design of Adaptive and De-centralized Load Balancing Algorithms with Load Estimation for Computational Grid Environments" 2002 Jun [cited 2002 Aug 12] Available from: <http://ieeexplore.ieee.org/iel4/5485/14764/00669970.pdf?arnumber=66997>
2. Rodrigo J.G., Lopes A.M.T., Silva R.M., Ferreira Q., *Kinetic Modeling and Trickle-Bed CFD Studies in the Catalytic Wet Oxidation of Vanillic Acid* Industrial Engineering Chemistry Research, 2007 Aug [cited 2007 Sep]. Available from: <http://pubs.acs.org/cgi-bin/abstract.cgi/iecred/asap/abs/ie070009a.html>.

**Monograph on the Internet**

Foley K.M., Gelband H., editors. *Improving palliative care for cancer* [monograph on the Internet]. Washington: National Academy Press; 2001 [cited 2002 Jul 9].





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Available from: <http://www.nap.edu/books/0309074029/html>

**Database on the Internet**

Jablonski S., Online *Multiple Congenital Anomaly/Mental Retardation (MCA/MR) Syndromes* [database on the Internet]. Bethesda (MD): National Library of Medicine (US). c1999 [updated 2001 Nov 20; cited [2002 Aug 12]].

Available from: [http://www.nlm.nih.gov/mesh/jablonski/syndrome\\_title.html](http://www.nlm.nih.gov/mesh/jablonski/syndrome_title.html)

**PhD Dissertation/ Thesis**

1. Klamecki, B.E., *Incipient Chip Formation in Metal Cutting - A 3-D Finite Element Analysis* Ph.D. Dissertation, Univ. of Illinois at Urbana Champaign, USA, 1973.

2. Zhuang X., *Compiler Optimizations for Multithreaded Multi-core Network Processors* [PhD. Thesis], Georgia Institute of Technology, USA, 2006.



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**CONSENT OF SUPERVISOR’S/CO-SUPERVISOR’S ORGANISATION PERMITTING HIM TO ACT AS SUPERVISOR**

*(To be provided on the letterhead or put the official seal of the signing official)*

**CERTIFICATE**

This is to inform that we have no objection in case our Shri/Dr \_\_\_\_\_  
(Name of the Proposed Supervisor), Designation \_\_\_\_\_ extends assistance and supervision  
to Shri/Ms. \_\_\_\_\_ (Name of Student) in his/her research work  
towards Ph.D. degree of BWU on the topic \_\_\_\_\_

Date: \_\_\_\_\_.

Place: \_\_\_\_\_.

Signature of Head/Controlling Officer of the Organization

(Full Name & Designation)

APPENDIX IV

**Consent of the Organization proposed as Place of Research Work**

*(To be provided on the letterhead or put the official seal of the signing official)*

**CERTIFICATE FROM THE ORGANISATION**

Shri/Ms. \_\_\_\_\_ registered in the Ph.D. programme of BWU is permitted to carry out  
his/her research work at \_\_\_\_\_ (Name of the organization and place).  
The necessary infrastructural and technical facilities needed for his/her research work are available and are  
accessible to him/her. The proposed research work by the candidate will professionally benefit the  
organization.

Date: \_\_\_\_\_.

(Signature of the Head/Controlling Officer of the Organization)

Full Name & Designation

**EXTERNAL SUPERVISOR'S BIO-DATA FORMAT**

1. Name
2. Present Designation, official address, telephone number & e-mail address
3. Permanent Address
4. Date of birth
5. Education (starting with high school/higher secondary, list all examinations passed, degrees obtained, dates and institutions/universities from which obtained).
6. Academic distinctions attained
7. Professional career beyond Master's degree to present date in chronological order (list all appointments and posts held, nature of the work done)
8. Broad field of research interests with specific areas of involvement.
9. Publications: give titles of papers, names of journals and dates of publications
10. Type of industrial and consultancy work done
11. Patents obtained
12. Visits abroad and nature of assignment
13. Membership of professional societies
14. Doctoral degrees thesis already supervised, if any (list titles)
15. Number of Ph.D. candidates, if any, currently registered under him along with university details
16. State in what manner connected with candidate's organization and proposed place of work.

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**DOCTORAL RESEARCH PROGRESS REPORT**

Proposed Research Topic:	
Name of the Student:	
Student Code:	
Department:	
Registration Date:	
Report Submission date:	
<b>SUPERVISOR(s)</b>	
a. Name of the Supervisor:	_____
b. Designation of the Supervisor:	_____
c. University affiliated to:	_____
d. Name of Co-Supervisor (if any):	_____
e. Designation:	_____
f. University Affiliated to:	_____

**Progress Reports Submitted so far**

Sl. No.	Duration		Date of Submission	Remarks (if any)
	From	To		
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

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**Progress Report for the period from \_\_\_\_\_ to \_\_\_\_\_****1. SUMMARY:**

Briefly (4-5 sentences) describe both the **research purpose and the underlying need** for this research. Include sufficient detail for readers to get acquainted with the project without having to refer to your proposal.

List the **objective(s)** of the research project, exactly as described in your approved Statement of Work.

**2. ACTIVITIES AND PROGRESS:**

Report on activities as outlined in your approved proposal for the period covered by this report and describe any changes to this, including the reasons for these. Do include any additional activities undertaken that are not in your work plan, providing the background to their inclusion.

**3. OUTPUTS AND DELIVERABLES (Work done so far):**

Describe any preliminary results, outputs or deliverable for this project (e.g. presentations, studies, papers)? Please describe, provide URLs or attach documents etc. If no preliminary results are available, state why (e.g., "The first period of data collection has only recently been completed and data analysis has not yet begun.").

**4. ISSUES AND CHALLENGES (if any):**

Report on any issues or problems related to your project/research that have impacted on the development and implementation of the project during the reporting period.

Detail what impact any issues may have on the achievement of project targets and set out how you plan to tackle these issues. Report on any unexpected project achievements.

**5. EVALUATION:**

Provide a brief (4-5 sentence) assessment of how you feel your overall project is progressing in terms of accomplishing your objectives and adhering to your overall timeline.

**6. COLLABORATION:**

Is there any collaboration you have with any parties to work on the project tasks? If any; please list them and detail on what type of collaborations they are.

**7. WORK REMAINING:**

Briefly list the activities planned and/ other information of relevance for the next stage of the project.

Name of the Research Scholar

\_\_\_\_\_

Signature & Date:

\_\_\_\_\_

Name of the Supervisor

\_\_\_\_\_

Signature & Date:

\_\_\_\_\_



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**REGISTRATION FORM**

To

The Director,  
Research Board  
Brainware University  
Barasat 700125.

**Sub:** Topic of Research and Supervisor Approval

Dear Sir,

Enclosed herewith is the detailed outline of the proposed topic of research for my Ph.D. Programme, for consideration of the Research Board. The proposed topic of the research is:

\_\_\_\_\_  
\_\_\_\_\_

I propose the following as my Supervisor

\_\_\_\_\_

And Co-supervisor:

\_\_\_\_\_

Date of enrolment: \_\_\_\_\_

The following place and organisation for my research work may also be approved:

Place: \_\_\_\_\_

Organisation: \_\_\_\_\_

Yours faithfully,

\_\_\_\_\_  
(Signature of the Student)

Full Name of the Student: \_\_\_\_\_

Enrolment No.: \_\_\_\_\_

Date: \_\_\_\_\_.



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**Recommendations of the Proposed Supervisor(s):**

I/We have scrutinized the proposed topic of research and I agree to act as his supervisor. I/We shall conduct thesis and other components of the Ph.D. programme of the candidate as per provisions of the Academic Regulations of Brainware University.

Date: \_\_\_\_\_

(Full Signature of proposed supervisor)

Date: \_\_\_\_\_

(Full Signature of proposed Co-supervisor)

-----  
Recommendations of the Director, Research

Date: \_\_\_\_\_

(Full Signature of Director, Research)

-----  
In case of a candidate having more than one co-supervisor please add the necessary details in this form.