

Draft 'Regulations governing Doctoral Degrees' of WBUT for consideration for adoption in the forthcoming Academic Council Meeting

The Doctoral programmes in the University is intended towards encouragement and recognition of original research by candidates in achieving new insights/ new findings and conclusions/ new methods of analysis of relationships etc

D.Sc. and, D.Litt. degree may be awarded on the basis of a singly authored published work of a candidate considered an original generation and augmentation of knowledge in appropriate areas. The candidate shall submit the work to the University. No supervisory guidance under directions from the University shall be necessary. There shall be no time restriction for submission of the thesis for consideration of the award of the Degree.

Ph.D degrees may be considered for award only after the completion of the mandatory registration period with the University ,completion of prescribed course work, seminar and other requirements as prescribed by the School PhD Committee/Doctoral Committee, the submission of the thesis based on original research and which envisages new insights/ new findings and conclusions/ new methods of analysis of relationships and its successful defense in the final viva-voce as decided by the Doctoral Committee

Research work for a PhD degree may be performed in the University or any of the colleges/institutes affiliated for the purpose by the University following rules framed from time to time by the Academic Council.

1. Title and commencement:

1.1 These regulations may be called "Ph.D., D.Sc. and D.Litt. Regulations-2010"

1.2 Concomitant with the provisions under Clauses (3), (6) and (10) of Section 5 of the University Act The University shall have the provisions for the award of:

(a) Doctor of Science (D.Sc.) degree in engineering / technology inclusive of Architecture and Pharmaceutical technology/ basic / applied sciences.

(b) Doctor of Literature (D.Litt.) degree in humanities and social sciences / management

(c) Doctor of Philosophy (Ph.D.) degree in engineering/ technology/ management/ basic and applied sciences/ interdisciplinary subjects relating thereto.

1.3 These regulations shall come in to effect from the date of CSR Notification issued by the West Bengal University of Technology (WBUT) and shall apply to all the affiliated colleges under the purview of WBUT.

1.4 Research scholar shall mean and also be known as a student or a candidate engaged in research with or without scholarship and registered in WBUT.

2. Eligibility for admission to Ph.D. programme

2.1 Candidates graduating from this University or of any other Indian University established by law or equivalent for foreign University approved by appropriate agency(s) of Govt. of India for the time being in force having a degree in any of the following programmes may seek admission to the Ph.D programme:

2.1(a) a master's degree of minimum two-year duration in M.Tech/ M.E./ M.C.P./ M.Arch/M.Pharm/M.Sc. (Engg)/ M.Phil/ M.D. or M.S / M.C.A. (done after B.Tech/B.Arch/M.Sc)/ M.B.A or M.B.M or PGDM or PGDIE or PGDIM (done after B.Tech/B.Arch/M.Sc/M.A./M.Com or equivalent degrees)/ or any other degree recognized as equivalent thereto provided the candidate has completed more than five years of graduate and post graduate studies in a recognised institution or University.

2.1(b) M.Sc./ M.A./ M.Com., Integrated M.Tech or any other degree recognized as equivalent thereto provided the candidate has completed a minimum of five years of graduate and post graduate studies in a recognised institution or University.

2.1(c) a full time bachelor's degree in B.Tech/B.Arch/B.Pharm/B.Sc (Engg)/ M.C.A (done after B.Sc.)/ M.B.A. or M.B.M or PGDM(done after B.A./B.Sc/B.Com/B.B.A)/ICWAI(done after Bachelor's Degree)/ M.B.B.S. or any other degree recognized as equivalent thereto.

2.2 All degrees referred to above are to be obtained from UGC recognized Universities. Equivalence of a professional degree with those listed in clauses 2.1(a),2.1(b) and 2.1(c) shall be solely determined by the appropriate nationally accredited professional bodies (like the AICTE for technical or CoA for Architecture or Medical Council for medical degrees) or with the classification adopted by the association of Indian Universities/UGC.

2.3(a) Candidates seeking admission under category 2.1(a)and (b) must possess at least 60.00% marks or a DGPA of 6.50 in the 10 point

scale in the qualifying examination in Engineering/Science/Commerce/Management, or at least 55.00% marks or a CGPA of 6.00 in the 10 point scale in the qualifying examination where the percentage or CGPA is calculated considering the results of all the examinations taken, without weights, to obtain the qualifying degree. This is as per UGC norm.

Relaxation on qualifying percentage of marks for candidates under reserved categories will as per UGC-NET norm.

2.3(b) Candidates seeking admission under category 2.1(c) must possess a minimum Cumulative Grade Point Average of at least 8.0 or an average of atleast 75% considering the results of all the examinations taken, without weights, to obtain the qualifying degree.

2.4 The candidate is not currently admitted as a student for any other degree/diploma or registered for Ph.D. in any other institution /University

3. Admission Procedure

3.1 Advertisement for admission to Ph.D program shall ordinarily be issued in the first week of June and December each year.

3.2 The number of seats to be advertised is to be ratified by the Academic Council after taking into consideration the number of eligible supervisors in that discipline in that department/institution, the number of scholars already registered by each of the supervisors, the infrastructure of the department/section and the academic record of the Department in pursuing post graduate degrees.

The advertisement of the University shall specify the number of seats for each department/discipline of the University and the affiliated colleges/institutions paying due attention to the reservation policy of the State of West Bengal.

3.3 Candidates seeking admission having the qualification as mentioned in 2.1 may apply to the Registrar, WBUT in response to the advertisement.

3.4 Each candidate would be listed according to the proposed area of work under advertised disciplines, within the purview of a School of the University.

3.5 Candidates applying to affiliated colleges/institutions will also be governed by one of the Schools of the University as advised by the Chairman, Academic Council.

3.6 All applicants shall ordinarily be required to qualify through a written test and an interview conducted by the School Ph.D committee(SPC)

3.7 Both the written and oral tests shall be to examine the academic competence of the applicant in the broad area of the discipline and also proposed area of work.

3.8 The written test will be qualifying in nature and the candidate has to secure 50% marks to qualify for the interview.

Candidates qualified at the NET/GATE/SET/UGC(JRF)/CSIR(JRF)/DBT/BET/BINC or any other examinations considered equivalent by the Ph.D. Committee shall be exempted from appearing the written admission test but will have to appear for the interview.

3.9 The merit list will be prepared on the basis of interview performance and their results in examinations starting from school final examination.

3.10 The merit list will remain valid for one year from the date of its publication. Candidates whose name appear in the merit list shall be eligible for admission against available seats/positions within the valid period of one year.

3.11 The reservation policy of the State Government with regard to admission to Postgraduate studies shall be followed for admission to Ph.D. programme.

3.12 Applicants admitted to an Integrated M.Sc-Ph.D programme of the University / affiliated colleges / institutes may not be required to take the entrance test if they were offered admission to the integrated programme through an examination and selection process. The number of such admissions would be within the strength approved by the Academic Council.

3.13 *Foreign students must have clearance from Government of India / and /or other appropriate authorities including appropriate visa at the time of admission.*

4. Eligibility of Ph. D Supervisor

4.1 Serving faculty members, re-employed and retired teachers of the University or other recognised University / institute, or of the affiliated colleges/institutes, engaged in reputed research organizations or in the research wings of the industry, may apply to the University for registering as supervisors of Ph.D research

students, provided that the applicant is a doctorate degree holder or has served an UGC recognised teacher/scientist position in a recognized research organisation for at least fifteen years.

A co-supervisor may be included, at any point of time, if the research work involves study or investigation in more than one subject or area of expertise, recommended by the supervisor in concurrence of the research scholar.

4.2 Applications may be submitted highlighting the applicant's achievements - awards, publications, patents, the number of years of teaching experience, especially at postgraduate level, etc.

4.3 All supervisors are required to submit a statement of the candidates registered for PhD with him/her in this or any other University or research organization. The supervisor must not have more than a total of eight (or as specified by the UGC or any other body replacing it) candidates registered under his/her supervision at a given point of time.

4.4 The Vice Chancellor shall appoint a committee ordinarily in the months of May and November each year with members from the relevant University BoS/department and invite experts to examine and update the list of approved supervisors.

4.5 The SPC will process the list and recommend to the Academic council for their recognition by the university. University shall maintain and update the list of approved Supervisors through regular interaction.

5. School Ph.D. Committees (SPC)

5.1 The Ph.D. program of the university shall be monitored by the Academic Council through the School Ph.D. Committees (SPC) constituted for a period of four years in each of the schools of faculty.

5.2 The SPC in each of the faculties would be appointed by the Vice Chancellor in consultation with the director of the School, with the following members:

- (i) Vice chancellor -Chairman
- (ii) Pro-Vice chancellor
- (iii) Director of the School
- (iv) All HoDs and Professors in the School.
- (v) Three Senior faculty members of the University/affiliated Institutions/research organizations.
- (vi) The Controller of Examinations - Convener

Each School Ph.D Committee (SPC) is responsible for admission to the Ph.D programme under the School.

5.3 Under the overall supervision and guidance of the Vice Chancellor a joint meeting of all the SPCs will be held at least once in a year to make policy decisions planning, promoting, coordinating and monitoring research activities at the university.

Each of the SPC shall meet atleast once in each semester to review the progress and execute plans and programs for realizing the objectives.

5.4 The functions, powers and duties of each SPC shall be

(i) Consider names of institutions or research organisations and to recommend to the Academic council for their recognition by the university.

(ii) for the purpose of permitting research student admission in the Departments of affiliated colleges SPC will recommend a panel of three experts including a chairman with Inspector of Collegeges as convener of a Quality Assessment Committee (QAC), that will examine the relevant documents and if satisfied may visit the department(s) in the affiliated colleges / institution(s) and submit the report to the chairman of the Academic Council. On the basis of the report the Academic Council will accord recognition to the department of the affiliated college as a research centre.

(iii) Faculty members of affiliated colleges having Ph.D. and five years U.G. teaching/three years of P.G. Teaching experience can supervise Ph.D. students.

(iv) process the list of supervisors(sec4.4 and 4.5) and recommend to the Academic council for their recognition by the university.

(v) To recommend to the Academic Council the number of seats available for the academic year in each Department within its scope, considering the number of candidates already enrolled, the capacity of the laboratories, library etc. On the basis of the recommendation admission notification will be made.

(vi) To scrutinize the applications received and prepare a list of eligible candidates for admission test.

(vii) to be responsible for organizing the entrance (written and oral) examination and suggest names of examiners for each discipline. A few senior members of Doctoral Committees shall also be additionally invited to the oral examination. The SPC shall submit the merit list to the Registrar for enrolment to the programme.

(viii) To organize counseling interviews and to decide the allocation of supervisor from the panel formed for the purpose based on available specialization and the research interest of the student.

(ix) to forward to the Chairman, Academic Council names for constituting the Doctoral Committee (DC) after assigning Supervisor(s) for each selected candidate.

(x) to recommend to the HoD./Director of School for allotment of new Supervisor(s) to the candidate considering the merit of the case, if at any point of time a Supervisor is unable to continue in that capacity or the candidate applies to the Chairman SPC for a change in Supervisor(s).

(xi) to permit under special circumstances, in consideration of the academic record of a candidate, a candidate to pursue research work independently.

6. The Doctoral Committee(DC)

6.1 The Doctoral Committee will be formed for each research scholar separately. The Doctoral Committee will comprise of the following members:

(i) Head of the Department of University/affiliated institution, Chairman

(ii) Supervisor(s), Members. The principal supervisor will be the convener of the committee.

(iii) Two experts from the University/affiliated Institutions/research organizations or from other institution(s)/Universities in the discipline nominated in consultation with the Supervisor(s)

(iv) One expert from an allied discipline.

(v) One member of the SPC other than the Chairman, common to all DCs under the SPC.

6.2 The functions, powers and duties of each DC shall be

(i) To recommend the subject(s) of the course work to be taken by an enrolled candidate.

(ii) To permit for the course work to be undertaken in a sister Department of the University/other recognized institute, if necessary.

(iii) To arrange for pre-registration presentation of a candidate and to recommend to the Registrar for /against registration of the candidate for Ph.D..

(iv) To cancel registration for infringement of rules or to remove the name of a registered candidate from the register if the report of the Supervisor(s) is not favourable or for any other cause which the committee may consider just for the purpose.

(v) To arrange for annual presentation to assess the progress of work after registration on a regular basis prior to pre submission presentation.

(vi) The DC may permit a portion of the work to be performed outside the University/affiliated departments provided that the work is limited to making a few measurements or tests. If actual

research is to be carried outside, then one of the Supervisors must be from that research body.

(vii) To arrange for pre submission presentation of the candidate and recommend modifications in the draft thesis if necessary. To approve/modify the title of the thesis and advise submission of the thesis.

(viii) To recommend to the Chairman, Academic Council the names of the examiners for evaluation of the thesis.

(ix) To recommend to the Chairman, Academic Council the names of the experts for viva-voce examination of the candidate if the reports of the examiners of the thesis are satisfactory.

(x) To recommend to the Chairman, Academic Council an extension of the period of registration beyond five years by one year at a time on the merit of individual cases and on recommendation by the supervisor(s) on sufficient grounds provided such extension shall not exceed two years.

(ix) To Scrutinise the adjudication reports of the examiners on the thesis and on the basis of the reports recommend for either holding of viva examination/ resubmission of the thesis/ rejection of the thesis

(x) To recommend to the Academic council the award of the degree on the basis of his completion of coursework, satisfactory reports of the examiners on the thesis and positive performance report in the viva examination.

(xi) To carry out any other related work as assigned by the Chairman, Academic Council.

7. Registration

7.1 Candidates selected for admission to the Ph.D. programme shall apply to the registrar tendering a non refundable registration fee to be decided by the university from time to time through administrative orders.

7.2 The application must include (a) proposal (nearly 1000 words) for Ph.D. work; b) bio-data of candidate along with supporting documents

7.3 Any whole time teacher of WBUT with three years postgraduate teaching experience and having adequate research publications can apply for Ph.D. registration independently.

7.4 Each application submitted to the Registrar will be sent to the convener of the SPC within 15 days for organising a seminar and evaluation of plan of work. If found suitable, the SPC will appoint supervisor(s) and recommend the registration of the student and propose the names of the DC.

7.5 If found unsuitable, he may be advised to resubmit the plan of work and deliver a seminar again.

7.6 The Registrar Will issue a certificate of provisional registration within 30 days from the date of receiving the recommendation of the SPC and issue notification of the DC. The registration will remain valid for a period of 5 years.

7.7 On satisfactory performance the period can be extended twice for one year each on the recommendation of the supervisor and the DC.

7.8 If the scholar fails to complete the Ph.D. work (submission of Thesis) in the extended period, he/she can apply for re-registration. The DC on the recommendation of the supervisors may recommend re-registration.

7.9 The mandatory registration period cannot be relaxed for any candidate under any condition.

8. Course Work

8.1 The DC in its first meeting shall suggest the course work for the researcher. The courses may be selected from amongst the courses offered from the immediately preceding level in the University/affiliated institutions in the broad area of the proposed thesis.

8.2 One course on research methodology and another on quantitative methods and computer applications shall be compulsory for all candidates. Those who have taken the last two courses while doing their master's degree as in 2.1 (a) may be exempted from retaking the courses. The courses may also be taken from approved pre-recorded courses or in approved sister institutions and credit transfer permitted.

8.3 Candidates admitted under category 2.1 (a) are required to take at least two courses in addition to the compulsory ones and those under category 2.1 (b) and 2.1(c) must take at least three and four additional courses respectively.

8.4 The candidate will appear in the written examination along with the other regular students taking the course and is required to obtain a minimum C Grade in the seven point scale in all the assigned courses. The examinations shall be held under the supervision of the Controller of Examinations centrally at the University.

8.5 The PhD researcher shall annually submit a report on the status of work and make a presentation as arranged by the DC. The DC may desire repeat presentations till it is satisfied with the progress of the work.

8.6 Stay in the campus for one semester or equivalent number of working days during a semester which is about seventyfive days.

9. Submission of Thesis

9.1 Candidates admitted under category 2.1(a) have to pursue a regular course of research for a minimum period of two years, under category 2.1(b) have to pursue a regular course of research for a minimum period of three years after registration to be eligible to submit the thesis provided the qualifying degree has been obtained by pursuing a full time course. A minimum of three and four years of research respectively for category of 2.1(a) and 2.1(b) after registration would be necessary for those who have obtained the degree by participating in a part time programme, provided that the bachelor's degree was obtained from a full time programme. Candidates who have obtained both degrees from part time programmes require a minimum four years of research after registration of which at least one year should be on a full time basis.

Candidates admitted under category 2.1(c) have to pursue a regular course of research after registration for a minimum period of four years to be eligible to submit the thesis provided the qualifying degree has been obtained by pursuing a full time course.

The mandatory registration period cannot be relaxed for any candidate under any condition.

9.2 A registered candidate has to complete a minimum period of work as specified in Section 8.1 and completed the stipulated courses mentioned in Sections 7.1 and 7.2 become eligible for submission of thesis

9.3 The supervisor(s) may permit the student to submit the thesis if they are satisfied with the status of work performed

9.4 The candidate must have one publication/ accepted for publication in a refereed journal out of the research work prior to submission.

9.5 Prior to submission of the thesis the candidate must submit and defend a synopsis of the thesis and present a seminar before an open audience including members of the DC.

9.6 The synopsis of about five thousand words must be soft bound and printed on either side. All chapters of the thesis including conclusions and bibliography must be described along with the essential illustrations. The document must be signed both by the candidate and the supervisor(s).

9.7 The DC will examine the competence and progress of the candidate at the seminar in the area of research. The candidate will be

permitted to submit the thesis only if found successful by the DC and after payment of the fee as intimated by the Registrar.

9.8 If the candidate is not successful, the candidate may resubmit a synopsis and present another seminar within a maximum period of one year.

9.9 After pre-submission seminar the candidate has to submit six soft-bound copies of the synopsis with the corrections incorporated as advised by the DC.

9.10 The exact title of the thesis, within the broad scope as declared in section 7.5 and as accepted by the DC at this stage, shall be final.

9.11 Recommendations of the DC are to be sent to the Controller of Examinations for perusal.

9.12 The thesis (in English) may be submitted as prescribed, within three months of the DC accepting the synopsis.

9.13 Four copies of the thesis, and one extra for each supervisor, of which at least two are to be soft bound, with the cover page and the certificate in the format advised by the Controller of Examinations, and one soft copy (CD) of the thesis is to be submitted.

9.14 The thesis must contain besides the text, bibliography/references and summary/conclusions:

An abstract of the thesis (about 500 words) and identify about 20 key words.

10. Thesis evaluation for Ph.D. Degree

10.1 The DC will recommend to the Chairman, Academic Council a panel of six experts three from India and the rest from abroad for adjudicating the thesis. Two experts from the panel of adjudicators, one from each group shall be appointed as the external examiners, with the supervisors being the internal examiners.

10.2 The synopsis copies are to be mailed to the external examiners to obtain their consent to act as thesis examiner. The thesis is to be subsequently mailed.

10.3 Each of the examiners shall report separately on the thesis and forward their recommendations to the Controller of examinations.

10.4 The examiners shall be requested to state their recommendation in the following format that includes the following options:

(a)The candidate may be awarded the PhD degree of the University

(b)The candidate may be awarded the PhD degree of the University provided that the following modifications are addressed in a separate addendum. The modifications must be sent to me before the viva voce OR

the external examiner present at the viva voce must certify that modifications are satisfactory and the certificate must be send to me.

(c)The candidate may be awarded a degree only after addressing the following questions and resubmitting the thesis to me.

(d)The candidate cannot be awarded the PhD degree of the University.

A detailed report of the examination of the thesis must also be submitted along with the above, all duly signed by the examiners.

10.5 The Chairman, School Ph.D Committee will examine the reports of the thesis and send it to the Chairman, Academic Council. The reports shall thereafter be sent to the DC for their perusal and necessary action. The four possible situations and the actions to be taken in each case are:

(a) The candidate may be asked to appear for the viva voce examination if all the examiners are of the opinion that the candidate may be awarded a PhD degree.

(b) A thesis which has been directed to be resubmitted by at least one of the external examiners may be submitted again after due revision, modification or alteration but not earlier than three months and not later than six months from the date of communication of the recommendation to the candidate. Fees have to be paid again. External examiners appointed under Section 8.4 will again examine the resubmitted thesis if so desired by them.

(c)If there is a difference of opinion in the recommendations of the external examiners when one examiner recommends award of the degree and another rejects it, the case may be recommended to the Academic Council for permission to appoint a third external examiner. The modified or the original thesis, as decided by the DC may be sent to him. His recommendations may be treated as final.

(d)If both the external examiners reject the thesis, the thesis shall be considered as rejected.

10.6 A thesis may be re-submitted only once.

10.7 Recommendations of the DC are to be sent to the Controller of Examinations for perusal.

10.8 The Indian examiner may be invited for the viva voce examination. In case he is not available within a reasonable period of time, DC may provide a list of three experts for the examination. The examination should preferably be held within three months of the favourable recommendation of the DC.

10.9 The D.C will examine the report on viva-voce examination and will recommend for the award of the degree if the report is favorable or ask to reappear for the viva-voce exam again within a period of three months.

10.10 Nothing contained in these regulations should preclude a candidate from publishing/patenting either independently or jointly with the supervisor(s) the results of the work incorporated in the thesis, any time before or after publishing the thesis.

Thesis evaluation for D.Sc / D.Litt. Degree

10.11 The DC will recommend to the Chairman, Academic Council a panel of eight experts three from India and the rest from abroad for adjudicating the thesis. Three experts from the panel of adjudicators, one from India and two from abroad shall be appointed as the external examiners. Rest of the clauses(10.2 through 10.10) as applicable for evaluation in case of Ph.D. Degree as above will be applicable in this case as well. However, in this case declination by even one adjudicator will mean the same as in 10.5 (c).

11. Award Of Degree

11.1 On receipt of a positive report on the viva-voce examination D.C will recommend the award of the degree on the basis of his completion of coursework, satisfactory reports of the examiners on the thesis and positive performance report in the viva examination.

11.2 On the recommendation of the DC, the Vice Chancellor provisionally approves the award of the degree which needs to be ratified later by the Academic Council.

11.3 The registrar will issue a provisional certificate after the approval of the Vice chancellor

11.4 The Degree will be awarded in the next convocation

12. Depository with UGC

12.1 Following the successful completion of the evaluation process and announcements of the award of Doctoral Degree, the University shall submit a soft copy of the Doctoral thesis to the UGC within a period of thirty days, for hosting the same in INFLIBNET, accessible to all Institutions/Universities.

Alongwith the Degree, the University shall issue a Provisional Certificate certifying to the effect that the Degree has been awarded in accordance with the provisions to these Regulations of the UGC.

12.2 Subsequent to the award of Doctoral Degree, a hard copy of the Doctoral thesis will be kept in the University Library within a month.

13. Repeal

All previous Regulations or Rules on the Ph.D. Programme do hereby stand repealed.