Ordinance for Ph.D. Program
(approved by 98-B, Academic Council, held on 3rd May 2018)

EFFECTIVE FROM
ACADEMIC SESSION MO-2018

Birla Institute of Technology
Mesra, Ranchi-835215, Jharkhand

CONTENTS

Abbreviations:

PhD   :Doctor of Philosophy
UGC   : University Grants Commission
DST   : Department of Science & Technology
DBT   : Department of Biotechnology
CSIR   : Council of Scientific and Industrial Research
SCI   : Science Citation Index
SCIE   : Science Citation Index Expanded
SSCI   : Social Science Citation Index
AHCI   : Arts & Humanities Citation Index
DAC   : Departmental Academic Committee
DC   : Doctoral Committee
AC   : Academic Council
NET   : National Eligibility Test
GATE   : Graduate Aptitude Test in Engineering
JEST   : Joint Entrance Screening Test
ICMR   : Indian Council of Medical Research
NBHM   : National Board for Higher Mathematics
JRF   : Junior Research Fellow
PF   : Project Fellow
VC   : Vice Chancellor
AP   : Academic Program
CBCS   : Choice based credit system
ACAP   : Advisory Committee for Academic Programs
IFAC   : Institute Faculty Affairs Committee
ABDC   : Australian Business Deans Council
BINC   : Bio-Informatics National Certification Examination
IEEE   : Institute of Electrical and Electronics Engineers

The Ordinances/ Office orders of the Institute, issued time to time, shall take precedence over the PhD Ordinance in the matter of any dispute.

1.   PREAMBLE

1.1   Consistent with the availability of the required infrastructure, the 'Birla Institute of Technology, Mesra, Ranchi', a Deemed to be University u/s 3 of UGC act, 1956, hereinafter referred to as the 'Institute', shall provide facilities for research in several areas of Science, Technology, Engineering, Architecture, Pharmacy, Management, Humanities and other interdisciplinary fields leading to the award of the Degree of Doctor of Philosophy, hereinafter abbreviated as Ph.D. Off-Campus, wherever mentioned in this Ordinance, refers to an Off-Campus of the Institute.

1.2   The Ordinance, hereinafter specified, lay down the procedure to be adopted for the research program for the Ph.D. Degree of the Institute.

1.3.   Department, wherever mentioned in this Ordinance refers to a Department of the Institute.

1.4.   Academic Council, wherever mentioned in this Ordinance, refers to the Academic Council of the Institute.

1.5.   A scholar is an eligible person, who is enrolled at the Institute for any specific Ph.D. program. Prior to enrollment, this person is referred to as an applicant.

1.6.   Guide/Co-Guide/External Guide is a person approved by the Academic Council for the guidance of the scholar while pursuing the program of research leading to Ph.D. degree of the Institute.

2.   OBJECTIVES OF THE PH.D. PROGRAM

2.1   The objectives of the program are to impart research training to the scholar, and prepare him/her for a career in independent investigation and original research so as to enable him to make a significant contribution to knowledge in his/her field and profession. The research program shall ensure that it is not an end in itself, but a means for a fruitful research career.

2.2   To achieve these objectives, the research program shall ensure the following:
  (a) Acquisition of fundamental knowledge in the chosen discipline.

  (b) Acquisition of in-depth knowledge in the field of research.

  (c) Training in the use of research tools of the field and develop skill and capability to conduct original research.

2.3.   The university strives through a process of continuous improvement to fully integrate equal opportunity principles into all aspects of its activity through its decision making and planning processes.

3.   ELIGIBILITY CRITERIA FOR SELECTION

3.1.   Candidates with following qualification shall be eligible for admission to the Ph. D. Program of the Institute:

(a) Candidates possessing M.Tech./M.E./M.Sc.(Engg.)/M.Arch./M.Pharm./M.Plan. /M.Sc./MCA/MBA or equivalent Degree in relevant branch from a recognized University/Institute with minimum 60% marks or 6.0 CGPA on a ten point scale in the qualifying examination are eligible to apply for admission in the relevant departments.

(b) Candidates possessing B.Tech./B.E/B.Sc.(Engg.)/B.Pharm/B.Arch./B.Plan. or equivalent Degree in relevant branch from a recognized University/Institute with a minimum of 80% marks or 8.0 CGPA on a ten point scale in the qualifying examination and a valid GATE/GPAT score with a minimum of 80 percentile are eligible to apply for admission in the departments as per their Specialization. (In this case, the candidates need to pass in more numbers of qualifying Pre-PhD papers; the concerned detail is described in Section 9.1).

(c) Sponsored candidates must have minimum of two years of professional work experience, besides fulfilling the above criteria. In addition, such candidates should have valid sponsorship at least for three years.

(d) NOC from the Institute is mandatory for employees of the Institute which shall be obtained before appearing at the admission test for the PhD program.

(e) Employees from other organizations shall produce NOC from his/her respective employers at the time of admission.

Note: *In case of the candidates with other grade point scale, the decision of the equivalence made by the assigned committee of the Institute shall be final.*

3.2 RELAXATION FOR SC/ ST CANDIDATES

Eligibility criteria will be relaxed by 5% marks for SC/ ST candidates.

4. SELECTION PROCEDURE

4.1. The Ph.D. program shall be open to candidates of any Nationality in true spirit of a University Education provided that the candidate satisfies the clause 3.

4.2 The admission into the Ph.D. Program shall be made twice a year only, in January / July each year through the BIT PhD Entrance Test (BIT-PET) followed by an Interview for those qualifying in the BIT-PET. Any applicant seeking admission to the Ph.D. program shall in the first instance submit an application in the prescribed Application Form as per the Institute notification through advertisement in the Newspapers / Notification on the Institute Website www.bitmesra.ac.in.

Those with UGC-CSIR/DBT/BINC/ICMR JRF and all other similar all India fellowships based on a written test may be exempted from the BIT-PET but will be required to appear for interview. Others who shall be exempted from BIT-PET will be as per notifications issued from time to time.

5. ENROLLMENT & SEMESTER REGISTRATION

5.1. After submission of the required fees, a Roll Number will be assigned to the applicant by the Admission Office. Applicants provisionally admitted to the Ph.D. program will be required to contact the Head of the concerned department to get acquainted with research facilities & faculty members of the Department at Main/Off-Campus. All those selected for Ph.D. program shall complete their course work only at Main Campus. The department shall call the meeting of the Departmental Academic committee (DAC) to finalize the field of interest of the candidate, Guide/Co-Guide for the candidate and course work required for his enrolment to the Ph.D. program. The candidate is then required to fill up the enrollment form (**Annexure – I**) and deposit the same to the office of the Dean (AP) within the specified date.

Each scholar shall register in the beginning of every semester. If a scholar does not register in the beginning of semester, his/her PhD admission is liable to be cancelled. In case, a scholar fails to register for two successive semesters his/her admission shall be cancelled automatically.

5.2. TEMPORARY WITHDRAWAL

Under exceptional cases, a student may be allowed to temporarily withdraw from Ph.D. Program, only after a period of two semesters since admission, provided the scholar has passed in all qualifying Pre-PhD papers. However, such withdrawals shall be allowed only for a maximum of two semesters, but in interval of one semester. The period of temporary withdrawal will not be counted, when counting the number of semesters of Ph.D. duration.

6. GUIDE/CO-GUIDE FOR THE RESEARCH SCHOLAR

6.1 There shall be a Guide for each scholar embarking on a program of research for Ph.D. degree. If required, another expert can be considered as a Co-Guide.

A Guide/Co-Guide/External Guide shall be:

A Full-time regular faculty member of the Institute or its Off-Campus holding Ph.D. Degree with at least two publications of SCI/SCIE/SSCI/AHCI in last two years. He/She shall have at least three years of service remaining in the Institute.

A Guide or Co-Guide who is a Professor, at any given point of time, can guide up to a maximum of eight Ph.D. scholars. An Associate Professor as Guide or Co-Guide can guide up to a maximum of six Ph.D. scholars and an Assistant Professor as Guide or Co-Guide can guide up to a maximum of four Ph.D. scholars.

6.2. If considered necessary, the Academic Council may approve another Guide who could be a faculty member or an external expert from any reputed Academic/Research organization, working in the similar domain of proposed research for joint supervision and guidance of the scholar. In such a case, faculty member or expert so appointed, shall

be designated as External Guide. He/She must hold Ph.D. Degree with at least two publications of SCI/SCIE /SSCI/AHCI in last two years.

6.3. Sponsored candidates may have an External Guide from their Sponsoring Agencies if required.

6.4. In addition to these, the following criteria should be followed to choose a Guide/ Co-Guide/External Guide.

(a) The allocation of the Guide/Co-Guide/External Guide shall be taken up by DAC of the respective Department. The process of allocation of Co-Guide/External Guide should be free from all sorts of conflict of interest. (Spouses shall not be the Guide/Co-Guide/External Guide of the same scholar and also parents shall not be the Guide/Co-Guide/External Guide of their children/relative.)
(b) A scholar may have Co-Guide from another Department provided there is ample overlap between the research topic and demonstrated expertise of the concerned faculty member.
(c) A faculty member may be allowed to co-supervise PhD student(s) of another Institute if the scholar is from an Institute with which BIT has MOU for this purpose.
(d) The allocation of Guide to IRFs shall be as per the IRF - Guide distribution regulation.

For Guide/Co-Guide/External Guide in the areas of Engineering, Architecture and Management, two publications in SCI/SCIE/SSCI/AHCI/ABDC/non-paid Scopus indexed journals in last two years shall be admissible. This relaxation from common norms shall remain in force for one year for Core Engineering Departments and to be reviewed thereafter. For Architecture and Management Departments it shall remain in force for three years and to be reviewed thereafter. This relaxation shall not be admissible for faculty members with Ph.D. in Science and Humanities.

6.5. Change of Guide

Change of Guide/Co-Guide/External Guide may be permitted on recommendation of the DAC and Advisory Committee for Academic Programs (ACAP) of Dean (AP) after obtaining the feedback from (i) the student (ii) the present Guide/Co-Guide/External Guide and (iii) the proposed Guide/Co-Guide/External Guide. However, preference may be given to the choice of the student. Any matter unresolved through ACAP will be referred to Institute Faculty Affairs Committee (IFAC) whose decision shall be final.

6.6. Arrangement for PhD student when the Guide proceeds on leave

(a) Whenever a Guide leaves the Institute temporarily for a period not more than six months, the DC shall make appropriate alternate arrangement. The continuation of the original Guide on his/her return to the Institute may remain in the form of Guide.
(b) Whenever a Guide leaves the Institute for a period exceeding six months but not more than two years, the DAC followed by AC shall appoint a new Guide and the original Guide may continue as Co-Guide.
(c) If the Guide takes leave for more than two years, he/she ceases to be a Guide/Co-Guide.

7. RESIDENTIAL REQUIREMENT FOR Ph.D. CANDIDATE

The residential requirement is essential to build the research atmosphere in the Institute. The residential requirement for part time Ph.D. candidates shall be a minimum period of one semester **at the Institute** for the candidates having PG degree and two continuous semesters **at the Institute** for the candidates having B.Tech./B.E/B.Sc.(Engg.)/B.Pharm/B.Arch./B.Plan. or equivalent Degree. However, for full time scholars, the minimum residential requirement is of six semesters.

8. DEPARTMENTAL ACADEMIC COMMITTEE (DAC)

8.1 Each Department shall have a Departmental Academic Committee (DAC) duly approved by the Academic Council with the following composition:

A. DAC for Department of Main Campus

(a)	Head of the Department	: Chairperson
(b)	Two Professors by rotation of two years in order of seniority	: Members
(c)	Another four Faculty Members (including Associate& Assistant Professors) of the Department with Ph. D. degree (by rotation of two years and to be nominated by the concerned Head)	: Members
(d)	Two Faculty Members from allied department with Ph. D. Degree (by rotation of two years and to be nominated by the concerned Head through Departmental meeting)	: Members

- For PhD related issues, Guide/Co-Guide/External Guide shall be Invited Member(s) of DAC only for that purpose.

B. DAC for Off-Campus

(a)	Director/In-charge of the Centre	: Chairperson
(b)	Two Professors/Associate Professors of the Off-Campus or from Main Campus by rotation in order of seniority for duration of two years.	: Member
(c)	Two Assistant Professors with PhD Degree of the Off-Campus by rotation of two years in order of seniority	: Member
(d)	Two faculty members with Ph. D. Degree nominated by the Chairperson of the Academic Council for duration of two years.	: Member

- For PhD related issues, Guide/Co-Guide/External Guide shall be Invited Member(s) of DAC only for that purpose.

8.2   Role of the Departmental Academic Committee (**DAC**)

8.2.1   The Departmental Academic Committee shall call the candidate for counseling to discuss his/her Research program/selection of Guide/Co-Guide/External Guide and assignment of course work before filling the enrollment form. If necessary, the DAC may consult the proposed Guide/Co-Guide/External Guide. The recommendation for the course work must be submitted within the specified time in the academic calendar to the Dean (AP) for approval **(Annexure-II).**

8.2.2   **In cases where the Guide has supervised the scholar for at least three years or more, the following shall be taken into consideration.**

(a)   A faculty superannuating will continue to be the Guide if the thesis is deemed to be ready for submission within one year after superannuation (or end of two academic semesters whichever is early). However, a Co-Guide who is in service will be appointed in addition two years before superannuation. After superannuation the Guide shall become Co-Guide and Co-Guide shall become Guide. If the thesis is not submitted within two semesters from the date of superannuation, the superannuating faculty ceases to be the Co-Guide.

(b)   In case of superannuation, the Co-Guide ceases to be Co-Guide and full responsibility shall devolve on the Guide. A new Co-Guide may be appointed if deemed necessary by DAC.

(c)   Faculty members who cease to be in the service of the Institute may serve as External Guide, if the candidate has successfully completed Pre-PhD seminar and shall submit the thesis within a maximum period of three months, else he/she ceases to be the Guide/Co-Guide of the scholar and a new Guide/Co-Guide must be recommended by the DAC.

8.2.3   **In case of demise of Guide the following shall apply.**

In case of demise of the Guide, the DAC shall recommend a suitable replacement at the earliest as required.

8.2.4   The Scholar/Guide/Co-Guide should intimate the Institute within a fortnight regarding any change of his/her employment status, if any.

Note: *The recommendation(s) of the DAC and DC of a scholar shall be referred to the office of Dean (AP) for approval and reporting to Academic Council.*

9. **COURSE WORK**

9.1 A research scholar immediately after admission in the Ph.D. program has to undertake course work as prescribed by DAC. Pre-PhD qualifying courses shall be recommended from the list of approved courses of PG program of the Institute under the CBCS.

The following will be taken into consideration while assigning the course work.

(A) All Ph.D. scholars who have passed either of the M.E./M. Tech./M. Pharm/M. Arch/ M. Planning/Equivalent, or M.Sc. along with M. Phil. will be required to complete the following courses in maximum of two semesters.

Type of Course Credit

Theory courses (minimum credit requirement):

Research Methodology	: 4.0 credit
Two theory courses related to the discipline of research	: 6.0 credit
Term paper -1: Literature review (in the domain of research)	: 3.0 credits
Total Credit	**: 13**

(B) All Ph.D. scholars who have passed MBA/M.Sc./MCA or equivalent qualification will be required to complete the following courses in maximum of two semesters.

Type of Course Credit

Theory courses (minimum credit requirement):

Research Methodology	: 4.0 credit
Three theory courses related to the discipline of research	: 9.0 credit
Term paper -1: Literature review (in the domain of research)	: 3.0 credits
Total Credit	**: 16**

(C) All Ph.D. scholars with B.Tech./B.E/B.Sc.(Engg.)/B.Pharm/B.Arch./B.Plan. or equivalent Degree will be required to complete the following courses in three semesters after registration to the Ph.D. Program.

Semester – 1:
Type of Course Credit

Theory courses (minimum credit requirement):

Research Methodology	: 4.0 credit
Three theory courses related to the discipline of research	: 9.0 credit
Term paper -1: Literature review (in the domain of research)	: 3.0 credits
Total Credit (Sem-I)	**: 16**

Semester – 2:
Type of Course Credit

Theory courses (minimum credit requirement):
Four theory courses related to the discipline of research   : 12.0 credit
Term paper -2: Literature review (in the domain of research)   : 3.0 credits

Total Credit (Sem-I)   **: 15**
Total credit (Sem–I + Sem–II)   **: 31**

9.2. Each scholar needs to qualify Pre-Ph.D papers within a maximum of two attempts and should obtain at least 55% of marks or equivalent letter Grade to continue with the Ph.D. program. Examination, Assessment and Awarding of grades shall be similar to those for PG papers.

9.3   The theory courses shall be offered through class room instructions.

9.4   The above course work is the minimum requirement for submission of the Ph.D. thesis for evaluation. However, the Doctoral Committee may assign additional course work to the scholar if required.

Note : The scholar shall present a Seminar and submit two copies of each Term Paper to the Doctoral Committee for Evaluation. The Doctoral Committee will submit the evaluation marks to the examination office for processing the result. A scholar of the Ph.D. Program may be advised to take/audit appropriate course(s) of the postgraduate levels at the Institute to make up for his/her deficiencies or as a help in preparation for the written qualifying courses.

10. **SUBMISSION OF SYNOPSIS**

10.1 **Submission of Synopsis for the Ph. D. Program shall be allowed only after successful completion of the course work.**

10.2 Seminar presentation of synopsis will be delivered in the presence of DC. If the seminar is satisfactory then candidate will be allowed to register for continue his/her Ph. D. Program. However, if the DC is not satisfied by the seminar presentation, the candidate will be required to deliver another presentation with suitable modification or improvement within next two months.

10.3. Ph.D. program shall be for a minimum duration of six semesters, including course work and a maximum of twelve semesters. The program duration shall be counted from the beginning of the semester in which the scholar has taken admission. However, in special cases, this limit may be extended to a maximum of fourteen semesters as per decision of ACAP to be reported to Academic Council. The extension shall be for one semester at a time.

11. DOCTORAL COMMITTEE (DC)

11.1. The Doctoral Committee for a scholar in any Department of the Institute shall consist of at least six members as given below:

Head of the concerned Department	Chairperson (Ex-officio)
The Guide and Co-Guide/External Guide, if any	Member(s)
Two faculty members of the Department with Ph.D. degree (One related to the domain of research and another related to discipline of research)	Members
Two experts from the Allied Departments (with Ph.D. degree) related to the domain of research	Members

11.2 For Off-Campus, the Doctoral Committee shall consist of the following members:

Director/In-charge	Chairperson (Ex-officio)
The Guide and Co-Guide/External Guide, if any	Member(s)
Two faculty members of the Department/same Department of the Main Campus (One related to the domain of research and another related to discipline of research)	Members
Two faculty members of the allied department nominated by the Director/In-charge.	Members

Change of DC member(s) shall be done through the DAC and any such change(s) shall be reported to the Dean (AP) office within 10 days.

(i) Each DC member should be a full-time faculty member of the Institute or Off-Campus holding Ph.D. Degree with at least two publications of SCI/SCIE/SSCI/AHCI in last two years. The faculty member of Core Engineering, Architecture and Management Departments with at least two publications in SCI/SCIE/SSCI/AHCI/ABDC/non-paid Scopus indexed journals in last two years shall be admissible to become a DC member. This relaxation from common norms shall remain in force for one year for Core Engineering Departments and to be reviewed thereafter. For Architecture and Management Departments it shall remain in force for three years and to be reviewed thereafter. This relaxation shall not be admissible for faculty members with Ph.D. in Science and Humanities.

(ii) The process of allocation of DC members should be free from all sorts of conflict of interest. (Spouses shall not be members of the same committee and parents shall not be in the DC of

their children/relative. The faculty member under whom Guide had done Ph.D. shall not be the member of same DC and *vice versa*.)

(iii) In case, if Chairperson is a Guide, another senior member of the Department shall be nominated as the Chairperson of the concerned DC in consultation with Dean (AP).

11.3 FUNCTIONS OF THE DOCTORAL COMMITTEE

(a) After the registration of the scholar for the Ph.D. program, the Doctoral Committee shall perform the following functions:

Shall make one progressive review of the scholar just after enrollment (**Annexure III**) as well as every subsequent semester (**Annexure IV**), in association with the Guide / Guide and Co-Guide / Guide and External Guide, as may be feasible.

During synopsis submission as well as every subsequent semester, a candidate shall submit a document in the prescribed format (Annexure V) based on the proposed/progression of work to all DC members, at least seven days prior to his/her presentation. Every DC member should submit a review report in the format given in Annexure VI, based on the proposed/progression of work as well as presentation of the candidate. For progress presentation in alternate semester, the Chairperson shall invite one external expert from an Institute whose current NIRF (university) ranking is higher than that of BIT.

(b) Shall forward progress report to the Dean (AP) on the progress of scholar's research program in the specified format (**Annexure-IV**) along with the reports of individual DC members (**Annexure VI**).

(c) Shall organize a Pre-Ph.D. submission Seminar after completion of the research work of the scholar and **verifying the compliance report.** The research scholar should submit the complete text of his/her thesis in typed and softbound form and present the seminar. The Doctoral Committee shall submit its recommendation on the seminar in the specified format to the Dean (AP) (**Annexure VII**).

(d) When scholar submits his/her thesis, the Doctoral Committee in consultation with the Guide, after due re-verification of the compliance requirements, shall recommend names of 10 Examiners from reputed Institutions (5 from foreign countries and 5 from within India) at the level of Associate Professor/Professor/Equivalent, working in the relevant field for the evaluation of the Thesis. The foreign examiners must be from different reputed organizations, however may be from the same country. The examiners who have evaluated another thesis from BIT within last one year from the same research group shall be avoided in the panel.

(e) On receipt of the observations/recommendations of the examiners of the thesis, the Doctoral Committee shall submit these with the Committee's recommendations to the office of the Dean (AP) for further necessary action. In the event, if the reports of the examiners are favorable to the scholar as provided, then the Doctoral Committee would also recommend names for the viva voce Board of the scholar.

12. TRANSFER FROM FULL-TIME TO PART-TIME SCHOLAR AND VICE - VERSA

In general, a conversion from FT to PT may be permitted only under unavoidable circumstances (to be decided by DAC with consent of ACAP) or if the candidate has got a job after three years from the date of admission. In such cases, a Full-Time research scholar may be considered to be designated as Part-Time research scholar on request provided he/she fulfils the following conditions:

(a) The prescribed course work has been successfully completed.
(b) In all such cases, the fellowship awarded to him/her shall stand withdrawn.
(c) Fee and other terms and conditions will be applicable as per rules and regulations of the institute.

The Institute may also permit a Part-Time research scholar to switch over to Full-Time scholar with consent of DAC and ACAP.

13. COMPLIANCE REPORT

Prior to the submission of the thesis, the scholar registered for the Ph.D. Program either at the Institute or its Off-Campus should have complied with the following requirements:

(a) The research scholar must have carried out the research work for a minimum period of six semesters after his/her registration for Ph.D. program.

(b) The research scholar should have satisfied the minimum residential requirement.

(c) The research scholar should have taken and passed the prescribed qualifying examination and course works.

(d) The research scholar must have publications with the minimum criteria as written below:
(i) He /She must have at least two SCI/SCIE /SSCI/AHCI indexed publications. For Ph.D. in Management and Architecture Departments, at least two publications in SCI/SCIE/SSCI/AHCI/ABDC/ non-paid Scopus indexed journals shall be admissible. This relaxation from common norms shall remain in force for three years and to be reviewed thereafter.
(ii) In both the publications, the research scholar should be the first author.
(iii) He /She must have at least two paper presentations in seminars/conferences.

(e) The research scholar must have made Pre-Ph.D. thesis submission seminar presentation of his/her thesis work in the concerned Department of the Institute.

(f) The thesis must be checked with Anti-plagiarism software packages like Turnitin and be certified to be 80% free of any plagiarism excluding self published papers. In addition to that, the thesis must be checked through Grammatical Software, e.g. WhiteSmoke, Grammarly, etc.

14. ORGANIZATION OF THESIS

14.1 The thesis shall be a factual record of the scholar's research work characterized by discovery of facts, or fresh interpretation of facts and theories, or an independent design or

development of new product. It should bear evidence of the scholar's judgment and ability to carry out independent investigation, design and/or development work.

14.2 The thesis must contain besides the text and common matters like References and Conclusions:

(a) A brief Introduction in which the scholar shall state whether the thesis is based on discovery of new facts or new interpretation of established facts by others, or based on exhaustive study and critical analysis of published work of others, or design, or development work undertaken.

(b) The research scholar shall further furnish a statement indicating the sources from which the information has been derived, and the extent to which he/she has based his/her work on the work of others, and shall indicate which portion of the thesis is claimed as original. The scholar shall furnish a declaration in the thesis as given in **Annexure VIII.**

(c) An Abstract of the thesis (about 500 words) with key words (about 10).

(d) **The thesis shall be composed as per the IEEE Transactions template and instructions on how to create your article (Website: http://ieeeauthorcenter.ieee.org/create-your-ieee-article/use-authoring-tools-and-ieee-article-templates/ieee-article-templates/templates-for-transactions/).**

(e) A Certificate (in standard format, **Annexure IX**) from the Guide/Co-Guide/External Guide that (a) the work has been carried under his/her/their supervision, (b) the research scholar has fulfilled all prescribed requirements and (c) the thesis which is based on his/her own work has not been submitted elsewhere for a Degree/Diploma.

(f) The cover page of the thesis shall be sky – blue in color and in the standard format as given in **Annexure X**.

(g) The text in the thesis shall be **Times New Roman font size 12, typed on only one side of a page**. All Figures and Tables shall have appropriate legend.

14.3 The Thesis submitted for the Ph.D. degree shall not be one for which any degree or diploma has already been awarded by any other Institution or for any other candidate at BIT itself. No two theses shall have common content even if the work has been shared between different individuals.

15. EVALUATION OF THESIS

15.1 The research scholar has to submit two soft cover binding copies of thesis (one for the concerned Department and another for Examination Department) and one soft copy of the same for evaluation purpose. After evaluation and before viva voce, the research scholar should submit four or five copies (hard cover bound) as required by the Research scholar, Guide/Co-Guide/External Guide, library and departmental library and one soft copy for UGC; after incorporating corrections recommended by the examiners, if any.

15.2 Correspondence with the two Examiners (one from India and one from abroad), chosen from the approved panel of ten Examiners (five from within India and five from foreign), will be undertaken by an officer of the Institute specifically authorized for this task by the Vice Chancellor (VC). Each examiner shall be required to examine the thesis independently and forward his/her report with his/her recommendations directly addressed to the VC or to the assigned officer. All the reports, so received shall be considered by the Doctoral Committee which shall then forward these reports with its own observations/recommendations to the office of Dean (AP).

15.3. If all these reports are unanimously favorable to the scholar, the Doctoral Committee shall submit its recommendations for the constitution of the viva voce Board for the scholar, to the office of Dean (AP). The viva voce board shall be approved by the VC.

15.4. If there is no unanimity in the recommendation of the Board of Examiners, and if they do not recommend outright rejection of the thesis, the DC may permit resubmission of the thesis after revision within twelve months from the date of the concerned DC meeting. The revised thesis will then be sent to the same set of examiners for their opinion. If, however, any of the previous examiners decline to examine the resubmitted thesis the same will then be sent to another examiner of the previous panel. If the report is still unsatisfactory, the thesis shall be rejected and the research scholar shall be declared ineligible for award of the PhD degree.

15.5. If the thesis is not accepted for the award of the PhD degree by one of the external examiners, the DC shall recommend that the thesis be sent to another examiner out of the approved panel of examiners of same category (from India or from abroad) and the viva voce examination shall be held only if the report of the latest examiner is satisfactory. If the report of the latest examiner is also unsatisfactory, the thesis shall be rejected and the research scholar shall be declared ineligible for award of the PhD degree.

16. VIVA VOCE BOARD AND AWARD OF THE Ph.D. DEGREE

16.1 A viva voce Board shall be composed as follows:

(a) Chairperson (Doctoral Committee): Chairperson (Ex-Officio)
(b) Indian examiner: Member
(c) All members of the Doctoral Committee: Members
(d) Dean (AP): Observer

and be submitted for approval by the VC.

16.2 The viva voce Board shall conduct an oral examination of the scholar with a view to test the scholar's insight and power of comprehension in his/her field of research and his/her understanding of the allied fields. The viva voce Board shall submit its report(s) /

recommendation(s) to the VC. The VC, in turn, will submit the document to the Academic Council which may recommend the award of the Ph.D. degree to the scholar if the recommendations are favorable to the scholar. If, for any reason, the recommendations of the viva voce Board are not favorable to the scholar, he/she will be permitted to appear before the viva voce Board again, within a period of six months from the date of the previous meeting of the Board.

17. LEAVE RULES

17.1 All research scholars are entitled for leave for a maximum of thirty days per year in addition to Institute Holidays. Also ten days leave on medical reasons is permitted.

17.2 In addition to the above mentioned in 17.1, women scholars are also entitled for maternity leave for a period of one eighty (180) days. This should be supported by a medical certificate. The Dean (AP) as per recommendation of the Head of the Department, is authorized to sanction the above leave.

17.3 No vacation in Summer is admissible.

17.4 Special Leave to attend Seminars/Conferences in India/abroad to present research papers, with the permission of the Dean (AP) through proper channel, is admissible.

17.5 Research scholars under funded projects may also be subject to the rules of the funding agencies as required.

*Discipline, Time Limits for Different Activities Related to Ph.D. Program and Required activities of a Doctoral Student are described in **Annexures XI, XII and XII** respectively.*

Enrollment Form for Ph.D. Program

Date: _____

The Vice Chancellor

Birla Institute of Technology

Mesra, Ranchi – 835215

Through: The Dean (Academic Programs)

Dear Sir/Madam,

1. I have been admitted to the Ph.D. Program of the Institute in Department of_____. I am enclosing herewith my bio-data for your kind perusal and needful.

2. My proposed field of research will be

    (a) Discipline: _____

    (b) Field of Research work:

    _____

    (c) Name of the Guide : _____

    (d) Proposed Course work:

Theory		Term Paper	
Code	Subject	Code	Subject

3. The No Objection Certificate from my organization (for part - time research scholar only) is attached herewith. The certificate for providing the required research facilities by my organization/institution is also attached herewith.

4. I certify that the particulars given above are correct and I undertake to

    (a) Abide by the Rules of the Institute during the Ph.D. Program.

    (b) Appear before the relevant Admission Committee whenever directed to do so.

    (c) Take any test or qualifying examinations as specified for the Ph.D. program.

5. The proof of my date of birth, caste (General/OBC/BC/SC/ST) and qualifications are attached.

6. I shall also comply with residential requirement specified for the Ph.D. program.

Thanking you.

Yours faithfully,

Signature: _____

Name: _____

Roll No. _____

Approved / Recommended / Comments _____

Chairperson (DAC/OAC) _____

Minutes of the Departmental Academic Committee (DAC) / Off-Campus Academic Committee (OAC)

1. Date of DAC/OAC Meeting

2. Name of the Department:

3. Name of the research scholar and Roll No.

4. Affiliation :

5. Contact Address:

    Telephone / Mobile No./Email Id :

6. Permanent Address :

7. Qualification of the research scholar (Degree with specialization, Year of passing, % Marks and University)

8. Details of Guide
    (a) Name

    (b) Designation

    (c) Qualification and Experience

    (d) Contact Address

    (e) No. of current Ph.D. scholars under his/her supervision

9. Details of Co-Guide/External Guide as applicable (Optional)
    (a) Name

    (b) Designation

    (c) Qualification and Experience

    (d) Contact Address

    (e) No. of current Ph.D. scholars under his/her supervision

10. Field of Research :

11. Details of the newly formed Doctoral Committee:
    (Detailed information should be provided in an additional sheet)

12. Recommendation of DAC/OAC

    (a) Utility of the proposed research program

    (b) Suitability of the applicant to undertake the program

(c) Availability of infrastructure for undertaking the research program

(d) Extent of External assistance required (if any)

(e) Recommendation for Ph.D. Enrolment

(f) Details of Qualifying courses assigned to the scholar:

S.No.   Course No.   Course Title   Credit

13. Any other Comments:

14. Signatures of the DAC/OAC Members.

Minutes of the First Meeting of the Doctoral Committee

1.　　Date of Doctoral Committee Meeting:

2.　　Name & Affiliation of Research scholar:

3.　　Registration No. & Roll No.

4.　　Date of approval by Academic Council:

5.　　Receipt No. & date of submission of Registration Fees: [Mandatory for conducting the meeting]

6.　　Research Topic:

7.　　Details of Guide:
(a)　　Name

(b)　　Designation

(c)　　Qualification and Experience

(d)　　Contact Address

(e)　　No. of current Ph.D. scholars under his/her supervision

8.　　Details of Co-Guide/External Guide as applicable (Optional)

(a)　　Name

(b)　　Designation

(c)　　Qualification and Experience

(d)　　Contact Address

(e)　　No. of current Ph.D. scholars under his/her supervision

9.　　Recommendation of Doctoral Committee:

　　　(a)　　Details of any Additional /Audit course if recommended

10.　　Signature of the Members of the Doctoral Committee:

Semester Progress Report

1.   Name of the Research scholar and affiliation:

2.   Date & No. of Semester Progress Presentation:

3.   Date of previous Semester Progress presentation of the research scholar:

4.   Registration Number & Roll No.

5.   Date of submission of Registration Fees:

6.   Receipt No. & Date of submission of Annual Fees: [Mandatory for conducting Seminar]

7.   Date of Seminar

8.   Title of Ph.D. Thesis:

9.   Status of Qualifying Examination:

10.   Details of audit courses, if any

11.   Progress of Research Work including Publication if any:

12.   Comments of individual DC member:

Separate individual report (Annexure VI) is to be provided.

13.   Consolidated report of the Doctoral Committee.

14.   Signature of the Members of the Doctoral Committee:

Note: Semester progress report will be included with the reports of individual DC members, documented using Annexure VI. The Chairperson will go with the two third majorities, if there is lack of unanimity.

Progress Report to be submitted by the research scholar

1.   Name:

2.   Roll no.:

3.   Field of research work:

4.   Name of Guide:

5.   Name of Co-Guide/External Guide (Optional):

6.   Origin of work:

7.   Objectives of the work:

8.   Works done so far (with some results and discussion in brief): In separate pages.

9.   Works to be done:

10.   Mention if there is some problem in continuing your research work:

11.   References:

Report of individual DC member:

(Separate sheet should be provided by each DC member.)

a) Comment on the progress of the work (few lines at least).

b) Relevant suggestion if the scholar's progress is not satisfactory for any reason.

c) Is the work relevant with the topic concerned?

                                       Y / N/ Unable to make comment
                                           (If no, give justification.)

d) Is the work novel, as per your knowledge?

                                       Y / N/ Unable to make comment

Signature with date:

Name:
Designation:
Department:

Minutes of the Meeting of the Doctoral Committee on

Pre-Ph.D. Thesis Submission Seminar

a) Date of Pre-Ph.D. Thesis Submission Seminar Presentation:

b) Name of the Department:

c) Affiliation:

d) Name and Roll No.

e) Receipt No. & date of submission of Registration Fees: (Mandatory for conducting the meeting).

f) Title of the thesis:

g) Guides (Guide, Co-Guide, Internal Guide, External Guide as applicable):

h) Comments of the Doctoral Committee:

   Does the title of the thesis require any modification:
   If yes-
   Previous Title of the thesis:

   Proposed Title of the thesis:

   Reason:

i) Recommendation of the Doctoral Committee:

j) Signatures of the members of the Doctoral Committee:

__Declaration__

I certify that

a) The work contained in the thesis is original and has been done by myself under the general supervision of my Guide/Guides.

b) The work has not been submitted to any other Institute for any degree or diploma.

c) I have followed the guidelines provided by the Institute in writing the thesis.

d) I have conformed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.

e) Whenever I have used materials (data, theoretical analysis and text) from other sources, I have given due credit to them by citing them in the text of the thesis and giving their details in the references.

f) Whenever I have quoted written materials from other sources, I have put them under quotation marks and given due credit to the sources by citing them and giving required details in the references.

Signature of the Student

Name

Roll No.

Approval of the Guide(s)

Recommended that the   thesis entitled "---"
prepared by Mr/Ms ……………………… under my/our supervision and guidance be accepted in
partial fulfillment of the requirements for the degree of Doctor of Philosophy.

To the best of my/our knowledge, the contents of this thesis did not form a basis for the award of
any previous degree to anybody else.

Date:

Signature   Signature

(Name of the Co-Guide/   (Name of the Guide)
External Guide, if any)
                                             Department
Department/Affiliation

Margins

Top: 1.25",Bott: 80.36"

Left:1.5", Right: 1"

1.5 Line spacing throughout

18, Arial Black

Bold Upper Case

2 Blank Lines,14 Font

22, Monotype Corsiva

14, Arial, Bold, Italics

16, Arial Black, Bold

1 Blank Lines, 14 Font
1" x 1" Logo

PLEASE MENTION TITLE OF THE THESIS

A Thesis

SUBMITTED TO

BIRLA INSTITUTE OF TECHNOLOGY

FOR AWARD OF
THE DEGREE OF DOCTOR OF PHILOSOPHY

By

NAME OF THE RESEARCH SCHOLAR

NAME OF THE DEPARTMENT

Discipline

i) Notwithstanding the provision contained in the clauses of the regulation, the Academic Council may cancel Ph.D. registration of any scholar at any time without assigning reason(s), if it is so satisfied.

ii) Scholars are expected to observe disciplined behavior / manners inside and outside of the Institute / Campus so as to enhance the image of the Institute / Campus. Any act which may be considered derogatory shall not be acceptable.

Time Limits for Different Activities Related to Ph.D. Program

Sl. No.	Scheduled Academic Activities	Full-Time (Time Limits)	Part -Time (Time Limits)
1.	Enrolment to the Ph.D. Program	Within the assigned date	Within the assigned date
2.	Course Work finalization and formation of DC by DAC	As Specified in the Ph.D. Ordinance	As Specified in the Ph.D. Ordinance
3.	Change of category from Full- Time to Part – Time and vice versa	After three years from the date of admission provided The candidate fulfils the conditions mentioned in Section 12.	After one year of admission provided The candidate fulfils the conditions mentioned in Section 12.
4.	**Seminar for the submission of PhD synopsis**	After successful completion of Course work	After successful completion of Course work
5.	**Thesis Pre-Submission Seminar**: At the time of pre-submission seminar the candidate should submit synopsis. After the satisfactory performance in pre-submission seminar the Doctoral committee will submit the panel of examiners.	Minimum six semesters	Minimum six semesters
6.	**Thesis Submission for final evaluation**	Within (maximum) three months of approval of Pre-Submission Seminar	Within (maximum) three months of approval of Pre-Submission Seminar
7.	**Minimum time Limit for completion of Ph.D. Program from the date of enrolment**	**Six semesters**	**Six semesters**
8.	**Maximum time Limit for completion of Ph.D. Program from the date of enrolment**	**Twelve semesters**	**Twelve semesters**
9.	Extension of Registration beyond above maximum Time limits **on the recommendation of DC and as approved by the Dean AP and Academic Council**	Additional one year (in special case).	Additional one year (in special case).
10.	Resubmission of the Thesis after Revision	Within two semesters from the date of the Academic Council's decision.	Within two semesters from the date of the Academic Council's decision.

Required activities of a Doctoral Student

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┌─────────────────────────────────────┐
│          Admission Test             │
└─────────────────────────────────────┘
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                  ▼
┌─────────────────────────────────────┐
│        Admission & Enrollment       │
└─────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────────────────┐
│                  DAC meeting                     │
│                                                  │
│  • Submission of Enrollment form (Annexure –II)  │
│  • Allotment of  Course work                     │
│  • Allotment of Guide(s)                         │
└─────────────────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────────────────┐
│   After successful completion of Course work,    │
│ • Semester registration and Submission of Synopsis│
│   through successful seminar in front of DAC & DC │
└─────────────────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────────────────┐
│ Semester registration as well as progressive presentation│
│                                                  │
│              (in every semester)                 │
└─────────────────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────────────────┐
│            After completion of work,             │
│              • Pre-Ph.D. seminar                 │
│   • Submission of PhD thesis in soft bound form  │
└─────────────────────────────────────────────────┘
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                  ▼
┌─────────────────────────────────────────────────┐
│ Thesis submission (soft bound form) after successful Pre-│
│ Ph.D. seminar & fulfilling all criteria of Compliance report│
└─────────────────────────────────────────────────┘
                  │
                  ▼
┌─────────────────────────────────────────────────┐
│ After the process of Thesis Evaluation successfully, Final│
│ submission of Thesis (hard bound form) before PhD viva│
│                voce Examination                  │
└─────────────────────────────────────────────────┘
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