

## **Guidelines for Department Research Committee (DRC)**

Academic Graduate Studies & Research (Ph. D. Programme) Division

Birla Institute of Technology and Science, Pilani

## **CONTENTS**

Sr. No.	Topic	Page No.
1	Introduction	1
2	Details about DRC composition and functions	1
	List of sub-areas for each department	5
	Inter conversion of Full Time Ph D to Part Time	9
	Procedure for JRF-SRF upgradation for own fellowship students	10
	Fee waiver, Scholarship and leave rules	11
3	Formats required by DRC for different functions	12
	3.1 Format for approval of DRC	12
	3.2 Format for submitting the course work	13
	3.3 Format for forwarding the semester drop request	14
	3.4 Format for application to DRC for Ph. D Qualifying Examination	16
	3.5 Format of evaluation sheet for Ph. D Qualifying Examination	18
	3.6 Format for forwarding the results of Ph. D Qualifying Examination	19
	3.7 Appendix I to be attached with research Proposals	20
	3.8 Format for evaluation of the research proposals	22
	3.9 Format for forwarding the research proposals	26
	3.10 Format for sending the grades (mid-semester/end-semester)	27
	3.11 Format for evaluation of pre-submission draft	28
	3.12 Format for forwarding the thesis	31
	3.13 Format for forwarding continuation of fee waiver and / or Institute fellowship	33

3.14 Format for recommending continuation of fee waiver and / or Institute Fellowship	3
3.15 Format for recommending extension of time limit for submission of thesis	3
3.16 Format for submission of approved list examiners in sealed envelop	3
3.17 Vital Information of Examiners Proposed for Ph D Thesis	3
3.18 Format for any changes in place of work, topic of research and/or supervisor	3

#### 1. Introduction

This brochure presents comprehensive information on the functions related to Doctoral Research Committee (DRC). The DRC will function closely with Academic Graduate Studies & Research (Ph. D. Programme) Division (AGSRD) for smooth running of Ph. D. Programme of the Institute. DRC may use the enclosed formats in their routine functions.

### 2. Details about DRC composition and functions

### 2.1 Departmental Research Committee (DRC)

Each Department has a "Departmental Research Committee" (DRC), consisting of Head of Department (HOD) as ex-officio member and Chairperson, and 2 to 6 faculty members, at the level of Assistant Professor or above, who are active in research. The size of DRC may depend on the number of faculty members in the Department. One of the members acts as its Convener. The term of DRC members is of two years. DRC is approved by the Director of the Campus on the recommendation of HOD through Dean AGSRD and helps AGSRD in operations from admission to final thesis submission of a Ph. D. Candidate.

### 2.2 Admission of on-campus candidates

DRC plays an important role in admission of the Ph. D. candidate. Admissions Division sends a link for list and details of candidates applied to all HOD's. HOD, in consultation with DRC members, adopts a suitable criteria and accordingly shortlists the candidates to be called for test/interview. Based on HOD recommendation, final list is compiled by Associate Dean, AGSRD. The applications of shortlisted candidates will be handed over to the DRC for further review. The examination paper (wherever needed) will be made by the DRC in consultation with other campuses, thus, the same examination paper will be used by all campuses for a particular discipline. On the day of examination, DRC will conduct the test, evaluates the test paper and conduct interview of short listed candidates.. For the purpose of interview, DRC may co-opt some more faculty members depending on need and circumstances.

Selection & recommendation of vertical transfer students should be done by the HOD/DRC, only after their source of fellowship/funding is identified and approved.

During interaction with the candidates, DRC will also identify the area of research, notional supervisor, DAC members and the course package for the shortlisted candidates. This information will be send to Associate Dean, AGSRD in the appropriate format (enclosed in this document). Students holding first degree (B.Tech, B.E., M A, M.Sc etc.) must be prescribed a minimum of six courses spread in two semesters with minimum of 24 units.

The recommendations (i.e. list of selected/rejected candidates), application forms, name(s) of notional supervisor(s) and the course package (if applicable) are forwarded to Associate Dean, AGSRD for further processing and admissions related formalities.

Usually, if the suggested course is available in the bulletin then the student is advised to register in the same course name and code. This will be added as a course for the department and the I/C will directly submit grades to ARCD. However, if some course material is not available as a structured course in the bulletin, then the student may register for all those courses under other heads like Study in Advanced Topics, Reading Course, Independent study etc. Only two undergraduate courses can be taken by Ph.D candidates as part of their course work. Both these courses should be greater than or equal to level 4.

### 2.3 Admission of Part Time candidates:

Admission may be given to the students who are working in reputed research organizations, academic Institutes and industries, situated preferably in the close vicinity of one of the campuses of BITS Pilani, on part time basis. The candidate selected under this scheme, shall be guided by one of the BITS faculty as Supervisor. The progress of these students will be monitored by the respective Departmental Research Committee . Admission will be made along with full time students by following the same process for selection. All existing academic regulations will be applicable to part-time Ph D students also, unless specifically mentioned otherwise.

### 2.4 Admission of off-campus candidates

Off campus aspirants will apply for admission against the advertisement/notification. Based on the status of collaboration with candidate's organization and academic background, the suitable applications will be forwarded to the concerned DRC. DRC will review the applications with respect to suitability of research area and possibility of co-supervisor from the department. Based on the recommendation of DRC, Dean AGSRD may allow a candidate to appear for Ph D qualifying examination.

### 2.5 Registration

All Ph. D students have to register for required courses suggested by DRC. A Ph. D. candidate under special circumstances can seek permission for not registering in a

particular semester. His request has to be verified and forwarded by DRC to the Dean/Associate Dean, AGSRD.

#### 2.6 Course work

For students with First Degree, depending upon the student's qualifications and background, the DRC will, in consultation with the student's notional supervisor and DAC members, prescribe course work for such a Ph.D. student, and will communicate the same to the Associate Dean, AGSRD for record. The minimum of number of courses shall be six with minimum of **24 units**. The number of units in one semester should not exceed 14. Candidate should not obtain less than D grade in any course and should have minimum CGPA of **5.50**. If less than D grade is obtained, course should be repeated. On obtaining less than D grade in more than one course or CGPA less than 5.50, student shall be discontinued from the programme.

Usually, if the suggested course is available in the bulletin then the student is advised to register in the same course name and code. This will be added as a course for the department and the I/C will directly submit grades to ARCD. However, if some course material is not available as a structured course in the bulletin, then the student may register for all those courses under other heads like Study in Advanced Topics, Reading Course, Independent study etc Only two undergraduate courses can be taken by Ph.D candidates as part of their course work. Both these courses should be greater than or equal to **level 4.** 

Students with Higher Degree (HD) may also be required to do course work if he is working in different area than his area of HD or having less than 6 courses in his HD. Number of courses will be decided by the Notional Supervisor and DAC members in order to prepare the candidate to undertake research in the chosen area. Number of courses can vary from zero to 6. Campus-based Associate Dean, AGSRD will forward the prescribed list of courses for all Ph.D. students to campus-based ARCD for purpose of course registration. On successful completion of prescribed course work a Ph.D. student will be eligible to appear in qualifying examination, and can apply for the same to DRC.

### 2.7 Ph. D. Qualifying Examination

In the beginning of each semester, the DRC of each department will announce at least two dates for holding qualifying examination and major subject areas for conducting examination.

Each Ph.D. student will communicate to DRC on prescribed format, the preferred examination date and two areas from the list of qualifying examination areas announced by the department. One of these must be in the sub-discipline in which he/she proposes to undertake research. On receiving request from eligible Ph.D. students, the DRC will conduct qualifying examination comprising of written test on two chosen areas, and viva.

As per requirement, each subarea may have several sections with a total of 150/160 marks for theory and 50/40 marks for viva. The duration of each theory examination will be 3.0-4.0 hrs. Viva may be conducted separately for each sub area. A student will get a maximum of two attempts for clearing the qualifying examination.

The rigor & quality of Ph. D qualifying examination is the responsibility of individual DRC's. The student has to secure a minimum of 50% in individual sub areas. The recommended result of the DRC is finalized **only** after the receipt of Registrar signed letter from Pilani.

Results of qualifying examination will be sent to Dean/ Associate Dean, AGSRD for approval of Examination Committee. Answer books of PhD qualifying exam are collected back by DRC after showing to the students and send them to AGSRD along with the question paper from the department. Results of qualifying examination will be sent to Dean AGSRD through Associate Dean AGSRD for approval of Examination Committee.

Date of submis	sion to AGSRD	Item		
31 St August & th November	st 31 January & th 15 April	Conduct of Ph. D qualifying examination		
30 th October & 24 January	th 15 April & 10 <sup>th</sup> August	Submission of Ph. D proposal duly approved by DRC &  All Matters related to the board like change of locale, organization supervisor if any and Research Proposal		

## List of Sub-areas for each department

Department	Proposed area				
Biological Sciences	<ol> <li>Environmental and Microbial Biotechnology</li> <li>Parasitology and Vector Biology</li> <li>Bioinformatics and Computational Biology</li> <li>Plant Biotechnology</li> <li>Human Diseases and Immunology</li> <li>Biochemistry</li> <li>Molecular Biology and r-DNA technology</li> <li>Animal Biotechnology</li> </ol>				
Chemical Engineering	<ol> <li>Transport Phenomena &amp; Separation Processes</li> <li>Chemical Reaction Engineering &amp; Thermodynamics</li> <li>Material Science and Engineering</li> <li>Environmental Engineering</li> <li>Energy and Process System Engineering</li> <li>Petroleum and Petrochemical Engineering</li> <li>Biochemical Engineering</li> </ol>				
1. AI, Machine Learning & Data Mining 2. Computer Architecture, Embedded Systems & Robotics 3. Databases & Data Warehousing 4. High Performance & Distributed Computing 5. Image Processing & Multimedia 6. Networking & Mobile Computing 7. Algorithms Theoretical Computer Science					
Management  1. Finance & Accounting 2. Marketing 3. Organizational Behavior & Human Resource Management 4. Operations Management & Decision Science 5. Information Technology & Technology Management 6. Strategy & Entrepreneurship					
Mechanical	<ol> <li>Design engineering</li> <li>Thermal engineering</li> <li>Fluid engineering</li> <li>Manufacturing engineering &amp; management</li> <li>Material science and engineering</li> <li>Industrial Engineering and Operations research"</li> <li>Computer aided engineering</li> <li>Automation, mechatronics and MEMS</li> </ol>				
Humanities & Social Sciences	<ol> <li>Cultural Studies: Media and Communication, Film, Theatre</li> <li>English Language, Literature and Linguistics</li> <li>Philosophy: Indian Philosophy and Ethics</li> <li>Education</li> <li>History and Politics</li> <li>Psychology: Research Methodology, Positive Psychology</li> <li>Public Administration and Development Studies</li> <li>Public health and Environment Studies</li> <li>Sociology</li> </ol>				
Pharmacy	Pharmaceutics and Pharmacokinetics     Pharmaceutical Chemistry, Natural Drugs and Phyto-Chemistry				

	3. Pharmacology and Toxicology					
	4. Pharmaceutical Analysis and Quality Assurance					
	5. Clinical Research and Clinical Pharmacy					
6. Pharmaceutical Biotechnology						
	1. Astrophysics & Cosmology					
	2. Condensed matter physics					
	3. Nonlinear science and Complex systems					
TO 1	4. Nuclear & High energy physics					
Physics	5. Optics & spectroscopy					
	6. Quantum physics					
	7. Semiconductor physics					
	8. Theoretical Physics					
	1. Macroeconomics					
	2. Microeconomics and Industrial Economics					
	3. Public Finance and Policy.					
	4. International Economics					
Eco & Fin	5. Applied Econometrics and Quantitative Techniques in Economics and Finance.					
	6. Corporate Finance					
	7. Investment Analysis and Management					
	8. Financial Economics and Financial Engineering.					
	1. Organic Chemistry					
	2. Inorganic Chemistry					
Chemistry3. Phy						
Chemistry 5. 1 my	4. Analytical Chemistry					
	5. Theoretical and Computational Chemistry					
	Algebra					
	2. Analysis					
	3. Differential Equations and Applications'					
	4. Discrete Mathematics					
Maths	5. Applied Statistics					
	6. Operations Research					
	7. Numerical Methods and Applications					
	8. Cosmology and Relativity					
	Structural Engineering					
	2. Transportation Engineering					
	3. Environmental Engineering					
	Water Resources Engineering					
Civil	5. Geotechnical Engineering					
	6. Geomatics Engineering					
	7. Infrastructure Planning & Design					
	8. Applied Mechanics					
	1. Instrumentation & Control 2. Communication Engagenetworks					
	<ul><li>2. Communication Engg, networks</li><li>3. RF, Microwave, Antenna design &amp; Wireless systems</li></ul>					
FFF	4. Power systems & Electrical Engineering, Renewable energy, smart grids.					
EEE &	5. Power electronics and drives					
X Instrumentation	6. Embedded systems					
mstrumentation	7. Micro/Nano electronics					
	8. Electronic materials, Devices and technology					
	9. Digital Signal processing					
	T					

#### 2.8 Semester Work

The DRC will recommend the courses to be done by each student, to Associate Dean, AGSRD. In the first semester (after clearing the qualifying examination), a full time student will register in (i) Teaching Practice-1 and (ii) Ph D. Seminar course, followed by

(i) Research Methodology-1 and (ii) Ph D. Seminar, in the second semester. For Part Time students, Teaching Practice-1 course will be replaced with Practice Lecture Series-1. For Aspirants, TP-1 will be replaced by PLS-1 and Ph D. Seminar by Independent Study. The supervisor(s) and DAC will monitor progress of the research scholar on a regular basis. Each semester, the DRC will conduct seminar to which members of the DAC (as also members of relevant departments) will be invited. At the end of each semester, supervisor will submit the grades to Associate Dean, AGSRD through DRC.

### 2.9 Topic of Research & Supervisor

Once a Ph.D. student clears the required qualifying examination, he/she will submit two copies of research proposal along with summary sheet in the prescribed format to DRC. DRC will get it reviewed by DAC members and arrange for oral presentation. Based upon DAC recommendation, the DRC will recommend to Dean, AGSRD for approval of (i) supervisor (and co-supervisor), (ii) the research topic together with the detailed proposal and its summary, (iii) the research plan, and (iv) place of research work, as per requirement. DRC will submit a soft copy of proposal and summary along with annexure I and relevant documents to Dean/Associate Dean, AGSRD

After the research proposal is approved, following semester onward student will register for Ph D thesis and Ph D seminar/Independent study courses till final thesis submission.

#### 2.10 Pre-submission draft and Seminar

On completion of research, the Ph.D. student will submit two copies of draft thesis to DAC members through DRC for its evaluation. DRC will coordinate and ensure that the evaluation is completed within three weeks. DRC will forward the comments of DAC members to the candidate. The candidate in consultation with supervisor, will incorporate these suggestion in his/her thesis or may give suitable explanation to DAC members. DRC will arrange a pre-submission seminar where supervisor, co-supervisor,

DAC member and other faculty will be invited. After successful completion of seminar, student can prepare his/her final thesis.

### 2.11 Thesis Title Approval

The exact title of the Thesis is discussed and finalized at the time of presubmission seminar. After the pre-submission seminar, DRC will forward the request of candidate (through supervisor) to approve the exact title of thesis to the Dean/Associate Dean, AGSRD. The title should be written following the `Title Case' style.

#### 2.12 Thesis submission

A PhD student, upon completion of his research work, will submit to DRC one (i) soft copy (in a CD) of the thesis along with (ii) spiral bound, double side printed copies of the same, one for each examiner, (iii) equal number of the synopsis, (iv) the reports of the DAC members, (v) the list of potential examiners (in sealed envelope), and (vi) other related documents as mentioned in check-list. The DRC will recommend to the Dean, AGSRD through the Associate Dean AGSRD that the evaluation of the thesis may begin after submission of examination fee by the candidate.

The student will be required to submit two copies of hard bound final thesis, along with the soft copy, after successful completion of viva voce examination by incorporating necessary corrections (if any).

### 2.13 Change of Locale/Supervisor/Topic of Research

A PhD student will choose a regular BITS faculty member holding PhD degree, as his/her PhD supervisor; He can choose a co-supervisor from other organization with adequate research background in the area of proposed research. In case any Ph. D candidate (eg; faculty) choose the supervisor from another department then the candidate will come under the purview of DRC to which the Supervisor belongs

Approval of the Research Board/DCC is required for any changes in place of work, topic of research and/or supervisor. For any such change Candidate will request through supervisor to DRC. After examining the request, DRC will forward it to Dean / Associate Dean, AGSRD.

## **2.14 Minimum academic requirements for continuation**: A student will not be permitted to continue in the Institute under any one of the following situations:

i. He/ she fails to take or pass the Qualifying Examination within the prescribed time of two semesters (excluding summer term) after the admission.

- ii. his/her CGPA, where applicable, falls below 5.50 and he fails to bring it up to 5.50 within two subsequent semesters;
- iii. he/ she accumulates two consecutive interim 'unsatisfactory' grades in the Thesis course;
- iv. he/ she fails to submit his/her thesis/revised thesis within the time prescribed for him, for such submission (refer 2.16);
- v. his/her thesis is rejected by the examiners;
- vi. his/her thesis does not receive unanimous final verdict from the examiners as required in clauses 8.30 or 8.32 of academic regulation.
- vii. he/ she receives final grade as 'unacceptable' in Thesis.

Of the above seven stipulations, the first four, specify the intermediate steps necessitating monitoring for a student before submission of his/her thesis. This monitoring is to be done by the DRC. The last three stipulations specify the events after the submission of the thesis and its examination by the appointed examiners. In these cases, the student will be discontinued from the programme. However, he may appeal to the Dean AGSRD for reinstatement giving full exposition and justification for the appeal. If the Dean AGSRD, decides to reinstate such a student, it will give clear instructions and conditions, consistent with overall spirit of the academic regulations that the student must fulfil after reinstatement. The verdict of the Dean AGSRD shall be final

#### 2.15 Inter conversion of Full Time Ph D to Part Time

A student admitted as Full Time scholar may be allowed to take transfer to Part time scheme provided-
Students meet the basic eligibility criteria of Part Time student.
Student has completed major part of his research work as certified by the supervisor and has completed at least 20 units of Ph D thesis course.
The concerned Ph D supervisor, co-supervisor and respective DRC agree for such transfer.

The DRC may also recommend the transfer of a student from Part-Time to Full Time category, provided research positions are available. The total number of Part Time student be limited to 40% of the existing full time Ph D students in a Department.

Approval for such transfers will be granted by Dean AGSRD in consultation with DCC. 9

#### 2.16 Duration of Ph D

A student must submit his thesis within ten semesters (excluding summer terms) to be counted from the semester next to passing the qualifying examination. If the student fails to submit his thesis within stipulated period he may request the respective DRC for extension of time. Such extension for submission of thesis are limited to a maximum of four semesters. Thus, the duration for submitting final thesis (including all extensions and semester withdrawals) are limited to 14 semesters. If a candidate fails to submit his/her final thesis during this period, he/she will be discontinued from the programme. The female candidates who have availed maternity leave during this period may be given one extra semester for thesis submission.

The existing students who were admitted on or before Dec 31, 2007, will be required to submit their thesis not later than Dec 31, 2015.

#### 2.17 Financial Assistance to the student

The DRC will recommend financial assistance, in terms of tuition fee waiver and stipend from the Institute, to be provided to the student. It is expected that DRC will judiciously distribute Institute fellowship amongst the student working with different faculty members. The Institute scholarship and stipend to the Ph D student admitted after 1st Aug 2011 or later will be limited for first five years from the date of admission.

## 2.18 Procedure for JRF-SRF upgradation & other external evaluations for own fellowship students

- 1. The candidate & Supervisor can plan the evaluation components as per the guidelines given by funding agency.
- 2. The date, time, venue & panel should be submitted to AGSRD for Director's approval.
- 3. Intradepartmental communication (DRC, HOD & Colleagues) pertaining to this, is the responsibility of the Supervisor.
- 4. Expenditure can be managed from the student or Supervisor contingency. Presently there is no provision at Institute level to support this expenditure.
- 5. Results sheet should be communicated to AGSRD for further formalities of Director Signature, dispatch etc.
- 6. Covering letter & dispatch will be by Associate Dean, AGSRD.

### 2.19 Fee waiver, Scholarship and leave rules

A part of tuition fees may be waived for a Ph. D student for which, he/she will be required to participate in the teaching and other activities assigned from time to time by the concerned department. Depending upon availability, fellowship from Institute or sponsored project may be given. A Ph. D. student may have his own fellowship from CSIR/UGC, etc.

Each candidate is eligible for 30 days of vacation and 15 days of casual leave in an academic year (August to July). Special casual leave of 15 days is permissible for attending conferences/workshop/symposiums/training programmes, etc. For female candidates, maternity leave of 90 days is permitted.

## 2.20 POLICY DOCUMENT ON RESEARCH SCHOLARS/Ph.D STUDENT'S LEAVE AS APPLICABLE TO GOA CAMPUS

- **i.** Maintaining the attendance register and monitoring presence is the responsibility of individual departmental DRC's.
- **ii.** All kinds of leave should be approved by the PI/Supervisor and the DRC of each department.
- **iii.** As per the Ph. D student guidelines, Ph. D students and research scholars are eligible for 15 days CL, 15 days SCL and 30 days of vacation leave.
- iv. Leave for Ph. D student is usually considered as per the academic year calendar i.e from 1st August to 31st July of every year.

#### v. Vacation Leave:

- a. Vacation leave of 30 days can be used anytime during the year, and can be preponed if necessary if course duties are appropriately taken care of. For Eg: In case of prolonged leave requirement like medical reason, marriage etc... Vacation leave can be used.
- b. Vacation leave can be taken only in one or two installments. Vacation leave cannot be split more than twice in one academic year.

### vi. On duty leave:

On duty leave is also under the perview of DRC of each department. If the work demands and if the PI and DRC have no objection, on duty leave may be permitted to the Ph. D student. Care needs to be taken by DRC that academic procedures like registration, grade submission, and other responsibilities of the student are not compromised.

### vii. Special Casual Leave:

- a. SCL conditions are the same as applicable to faculty. For attending Conferences, academic meetings, workshop, symposia etc....
- b. Reasons given above should be considered only under SCL and not as on duty leave. SCL should not be clubbed with on duty leave.

#### viii. Casual leave:

- a. Casual leave cannot be clubbed with any other leave.
- b. The maximum casual leave that can be taken at a stretch is only 10 days.

### ix. Maternity Leave:

For female candidates, maternity leave of 90 days is permitted.

## 2.21 Proposed Institute Fellowship criteria for full-time Ph.D. at BITS-Pilani, Goa campus

## Priority Criteria (a)

Candidate should have cleared the Ph.D. entrance exam with an overall performance (written +viva for some departments and interview alone for others as most candidates are higher degree holders) greater than or equal to 60% marks.

### **Priority Criteria (b)**

The need of the department as judged by the administration - Director during the Ph.D exam meeting.

CAaiii	meeting.
Some	genuine reasons could be:  Requirements for projects sanctioned but no manpower  Ph.D. students are essential in the department to assist with coursework  Higher priority research focus  Space crunch already noticed so accommodating new scholars may be difficult and immediate availability of space not possible  More possibility of attracting funding from agencies and industry
Priori	ty Criteria (c)
	While selecting a candidate for institute fellowship, the number of applicants in an individual department will be taken into account.
	This is because, in a department that receives a higher number of applicants as compared to another department, the candidate has essentially competed more stringently to achieve the overall performance mentioned in criteria (a).
	Hence, ranking of the departments will be done accordingly.
Priori	ty Criteria (d)
	The number of Institute fellows already allocated to a department.
	New departments and new faculty members will be encouraged.
	The maximum number of Institute Fellows for any department will be equal to the number of faculty members with Ph.D.s within that department.
	Normally ONLY ONE institute fellow per faculty member will be permissible in each department. Hence, new faculty members or those without institute fellows will be given preference

Once these criteria are followed and offers made, if additional positions are available then they will be distributed based on requests and discussions.

## 3. Formats required by DRC for different functions

## 3.1: Format for approval of DRC

BIRLA INSTITUTE OF		GY AND SCIEN CAMPUS	ICE PILANI,	
DEPA	RTMENT O	F		
			Date :	
To,				
The Director BITS Pilani, Goa campus.				
Subject: Approval	for Reconstitu	tion of Doctoral	Research Committee	
Dear Sir,				
We request you to ki Doctoral Research Committe			onstituted members of the	Э
1	: HOD, ex-	officio member a	nd Chairperson	
3.	: DRC me	mbers		
4.				
Reasons for reconstitution				
The existing members of the 1	: HOD, ex-c : Convener : DRC me	officio member a mbers	nd Chairperson	
Thanking you,				
Yours sincerely,				
Forwarded				
(Chairperson / HOD)			(Associate Dean, AGSR	D)
(Name:	)		(Name:	)
Approved / Not Approved:				
	Direc	ctor		

## $\textbf{3.2 Format for submitting the course work } (Bulletin\ course\ name\ Title)$

Department:

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI,	K K BIRLA
CAMPUS DEPARTMENT OF	
	Date:
To, Associate Dean BITS Pilani, K K Birla Goa campus campus.	
The suggested course package for following Ph. D. candidates is given below:	

Sr.	Name and	I Semester of AY 20 - 20			II Semester of AY 20 - 20				
No	ID of the	Course	Title	Instructor	Unit	Course	Title	Instructor	Unit
	candidate	Code				Code			
1									
2									

Signature with Name	Signature with Name
(DRC Convener)	(HOD)

## 3.3 Format for sending the grades (mid-semester/end-semester) for Pre-PhD courses

## BITS, PILANI K.K.BIRLA GOA CAMPUS Academic Graduate Studies & Research Division

First / Second Semester 201 -201

	MIDS	SEMESTER /	FINAL EVALUATI	ON FORM F	OR Pre-Ph.	D COURSE WORK		
(Note: If t	his course is offe	ered as a reg	gular course the e	valuation w	vill be as per	the course hand	out)	
NAME OF T	NAME OF THE CANDIDATE :ID.NO:ID.NO:							
NAME & CO	DDE OF COURSE	<b>:</b>						
NAME OF I	NSTRUCTOR		:					
CONTENT (	OF THE COURSE ST	TUDIED DURII	NG THE SEMESTER/	TERM:				
Course Work /	Content						lied from Books, ers, Thesis etc.)	
1. 2. 3. 4								
SEMINAR D Seminar 1 Seminar 2 Seminar 3	: :					1		
	ON AND GRADING	ī				1	1	
Component	Seminar 1 20%	Test 1 20%	Seminar 2 20%	Test 2 20%	Mid Sem Grade 40%	Seminar 3 20%	Written Comprehensi ve Exam. 40%	Total 100
Title of		•						
Seminar Marks					+			
Mid-Sem (	Grade( <b>A / A- B</b>	/B- C/C-	D / E & NC)::					
Date & Ve	nue of Comprel	nensive Exar	mination:					
Final Grad	ling:							
	ENDATED GRAD / B- C / C- D /							
Signature(	Instructor)		Signature(D	RC Convene	er)	Sign	ature(HOD)	

## 3.4 Format for sending the grades (mid-semester/end-semester)

		BIRLA INSTITU	JTE OF TECHNOLOGY A	ND SCIENCE I	PILANI,	CAMPUS
			DEPARTMENT OF	·	<del>-</del>	
						Date:
To,						
		Dean, AGSRD,				
BITS	Pilani	<i>'</i>	campus.			
	_					
						grades for following Ph. D.
cand	idate	(s) in our depar	tment. The summary is a	given below:		
			· · · · · · · · · · · · · · · · · · ·			
Sr.	ID.	Name of the	Grade in Semester I/II			
No.	No	candidate	TP I/ PLS-1 (above		Ph.D.	Ph. D. Thesis
			average/average/bel		Seminar/	(satisfactory/unsatisfactory)
			ow average)	C/C- D, E	Independent	
				& NC )	study	
					(Good/Poor)	
		<del></del>	· · · · · · · · · · · · · · · · · · ·			e)
-		r/Mentor)	(DRC Conve	ener)	(HOD)	)
Date	rate:					

## 3.5 Format for forwarding the semester drop request

## BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, \_ CAMPUS DEPARTMENT OF \_\_\_\_\_ Date: To, Dean/ Associate Dean, AGSRD BITS Pilani, \_\_\_\_\_campus. We have studied and discussed the request of No. \_\_\_\_\_\_ to drop the \_\_\_\_ Semester 20 - 20 in the DRC meeting dated \_\_. Our recommendation is (Name) (Name)\_\_\_\_\_ (DRC Convener) (HOD) Date: Date:

## Form for Request of Dropping a Semester (To be submitted to DRC by student/supervisor)

## BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, \_\_\_\_\_\_CAMPUS

CAMPUS				
	DEPARTMENT OF			
		Date:		
Name of the student:		ID No.		
Supervisor:				
Dropping Semester:	I/II	Academic year: 20 - 20		
Reason (Enclose supp	portive documents):			
Signature of the Stud	lent			
Recommendation of	Supervisor:			

## 3.6 Format for application to DRC for Ph. D Qualifying Examination (2 pages) BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, \_\_\_\_\_ \_ CAMPUS DEPARTMENT OF APPLICATION FOR Ph. D. QUALIFYING EXAMINATION I. General 1.1 Name in block letters (As given in the certificate of your highest qualification): 1.2 Official Address: PIN STD Code: \_\_\_\_\_ Phone No. \_\_\_\_\_ Fax No. \_\_\_\_ 1.3 Address of correspondence: Phone PIN E-mail Address: 1.4 Nationality: 1.5 Sex: Female Affix your Male passport size 1.6 Date of birth: photograph here 1.7 Marital Status: Single Married II. ACADEMIC RECORD 2.1 List your formal education (beyond H. Sc./10+2/Intermediate) Full Year of Division/ College/ time/ Degree Duration passing Subjects % marks Univ. part time basis

2.2 Are you holding a formal higher degree (M. E./M. Tech./M. Phil./M. Pharm./M. S., etc) of BITS or its equivalent? (Attach certificate). Do not tick YES if holding only M.A./M. Sc./M.Com./M.B.A./L.L.B./C.F.A./M.B.B.S.:

YES / NO

If yes, give Higher degree	name and discipline:
University:	Year passed:
	years. Number of courses in the degree
Completed as full time [	]/ Part time [ ] student.
III. ANTICIPATED PLA	AN FOR Ph. D.
3.1 Place of work:	
	City:
	earch:
3.3 Name of proposed super	ervisor:
	Designation:
Organization:	
3.4 Name of proposed Co-	supervisor (if any):
	Designation:
Organization:	
	n organization:
IV. DETAILS ABOUT P	h. D QUALIFYING EXAMINATION
4.1 Did you ever get permi	ssion to appear in the Ph. D. QE? Yes/No
If yes, give dates of appear	ring Result: PASS / FAIL
	ee courses (M. E./M. Tech./M. Phil./M. Pharm./M. S., etc).
Attach grade/marks shee	t and complete syllabus for all higher degree courses.
4.3: Subareas chosen for P	h.D. QE:
1.	2.
4.4. Selected Date of Quali	ifying Examination
Date:	Signature:

3.7 For	mat for forwarding the results of Ph. D	Qualifying Examination			
	BIRLA INSTITUTE OF TECHNOLOGY A	ND SCIENCE PILANI,	CAMPUS		
	DEPARTMENT OF				
To,					
Associa	ate Dean, AGSRD				
BITS Pi	lani, campus.				
	,				
We are	e forwarding herewith the Ph. D. Qualify	ying Examination result(s) for f	ollowing candidates		
for you	ir kind perusal and necessary action.				
Sr.	ID. No/ PSRN	Name of the candidate	Result		
No.					
Docum	ents attached: copy of Ph. D. QE evalua	ations sheets			
Signature Signature					
(Name	(Name)				
(DRC C	(DRC Convener) (HOD)				
Date:					

## 3.8 Format of Evaluation sheet for Ph. D Qualifying Examination BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, \_\_\_\_\_ CAMPUS DEPARTMENT OF \_\_\_\_\_ Ph.D. QUALIFYING EXAMINATION RESULT Name and ID No. of the Date of Ph D QE: Category (FT/PT): Candidate: Marks obtained Research Marks obtained **Total Marks** Recommendation (Pass/Fail) subarea in theory (150) in Viva (50) (200)1. 2. Overall recommendation: Pass/fail Name and signature(with date) of all Examiners: 1. 2. 3. 4. 5. (DRC Convener) (HOD)

Date:

## 3.9 Appendix I to be attached with research Proposals (2 pages) APPENDIX- 1

The Chairman	
Doctoral Counseling Committee	
BITS, Pilani.	
Sub: Topic of Research and Supervisor Approval.	
Through: Dean/Associate Dean,	
ARD 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 p the research is:	roposed topic of
I propose the following as my Supervisor	
And co-supervisor:	
Date of passing the Ph.D. Qualifying Examination:	
The following place and organisation for my research work may al	so be approved:
Place:	
Organisation:	
Yours faithfully,	
	(Signature of the student)
Date: Full Name:	
ID No. :	

(P.T.O)

## Recommendations of the Proposed Supervisor(s):

shall conduct thesis and other components of the Ph.D. programme of the candidate as per provisions of the Academic Regulations of BITS. As regards the foreign language requirements, I recommend that for the proposed topic of research (tick appropriate box (s) below): [ ] English language would be adequate [ ] Another modern European language would be necessary. Name of language is [ ] Another Indian Language would be necessary Name of Indian Language is for Ph.D. (Only in Indian Language/Literature) (Signature of proposed Date: \_\_\_\_\_ supervisor) Name: (Signature of proposed co-Date: supervisor) Name: - Recommendations of the Dean/Associate Dean, AGSRD (Dean/ Associate Dean, Date: AGSRD) Name:

I have scrutinized the proposed topic of research and I agree to act as his supervisor. I

## **3.10** Format for evaluation of the research proposals (to be given to DAC members; 4 pages)

## BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, CAMPUS DEPARTMENT OF

			Dated:
To:	Prof./I	Dr	
Dear	· Sir/M	Sub: Review of Doc Madam,	toral Research Proposal.
		,	osed Doctoral Research Proposal submitted
by t	he foll	llowing candidate and return the co	mpleted proforma within one week along
with	specif	ific suggestions, if any.	
Nam	ne of C	Candidate	ID No.
Nam	ne of P	Proposed Supervisor	
			(DRC Convener)
Prof	orma f	for Review of Doctoral Research Pro	posal.
Plea	se tick	k ( ) the appropriate box(es)	
1.	Pro	coposed Topic of Research	
a)		the proposed topic in one of the researcher to our Bulletin for Areas of Researcher	<del>-</del> • •
	[	] yes	
	[	] no	
b)	Do	oes the proposed topic reflect the ther	ne propounded in the proposal write up?
	[	] yes	
	[	] no	
c)	Is t	the proposed topic relevant to the nee	eds of the immediate environment?
	[	] yes	
	[	] no	
d)	Do	oes the proposed topic aim at	
	[	] designing an innovative product	:
	[	] designing a new process or a sy	stem
	[	] taking up research in an advanc	ed frontier area

<u>C</u>	bjective of the proposed research
A	are objectives clearly spelt out?
[	] yes
[	] no
	Your answer is no, could you please write under item No.7 as to what needs to e done.
A	are objectives derived based on the literature survey?
[	] yes
[	] no
Is	the outcome of the work clearly visualized?
[	] yes
[	] no
T	he outcome of the work
	[ ] will improve the present state of art
	[ ] will only be of an academic interest
	[ ] will be useful for the industries
B	ackground of the Proposed Research
	the literature survey up-to-date and adequately done to finalize the esearch topic?
[	] yes
[	] no
Is	s a broad summary of the present status given in the proposal?
[	] yes
[	] no
A	are unsolved academic issues in the area highlighted?
[	] yes
[	] no
N	<u>lethodology</u>
Is	the methodology to be adopted for exhaustive literature survey given?
[	] yes
г	l no

b)	Are data sources identified?
	[ ] yes
	[ ] no
	[ ] not applicable
c)	Are experimental facilities for research work envisaged clearly?
	[ ] yes
	[ ] no
	[ ] not identified
	[ ] not applicable
d)	If yes in (c), are envisaged experimental set-ups available at the place of work?
	[ ] yes
	[ ] no
	[ ] not yet identified
	[ ] not applicable
e)	If yes in (c) and no in (d), is it explained how the work will be carried out?
	[ ] yes
	[ ] no
f)	Are required computing facilities available at the place of work
	[ ] yes
	[ ] not able to judge
	[ ] not applicable
g)	Is methodology clearly spelt out for the completion of research work?
	[ ] yes
	[ ] no
5.	Literature References
a)	Is citation of literature done in a standard format?
	[ ] yes
	[ ] no
b)	Is cited literature referred in the text?
	[ ] yes
	[ ] no
	partially

c)	Is cited literature relevant to the proposed work?	
	[ ] yes	
	[ ] no	
6.	Overall Comments	
	[ ] proposal may be accepted	
	[ ] proposal needs minor modifications	
	[ ] proposal needs revision	
7.	Reasons for recommendation at item No. 6	
8.	Any other comments:	
	·	
Dated:		
		Signature
		Name of faculty member

## **3.11** Format for forwarding the research proposals

	CAMPUS
DEPARTMEN	T OF
	Date:
To,	
Dean/ Associate Dean, AGSRD,	
BITS Pilani, campus.	
We are forwarding herewith the rese	earch proposals for following candidates for your
_	e assure you that necessary formats and
guidelines have been followed in mal	·
Sr. No. ID. No	Name of the candidate
Documents attached (for each candid	late):
1. Summary of Research Proposal	
2. Research Proposal	
3. Appendix I duly signed by Supervis	• •
4. Evaluation sheets of both DAC mer	
<ol><li>Soft copy of Summary, Research P</li><li>Evaluation sheets of both DAC mer</li></ol>	roposal, Scanned copies of the Appendix I
6. Notice for Research Proposal prese	
or realise for research reposar prese	
(Name)	(Name)
(DRC Convener)	(HOD) Date:

## 3.12 Format for evaluation of pre-submission draft (3 Pages)

## BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, CAMPUS DEPARTMENT OF

	Dated:
Го: Prof./Dr	
Sub: Review of Draft Ph. D. Thesis by Doctoral Advisory C	Committee
Dear Sir/Madam,  I request you to kindly review the enclosed draft thesis being s	sent herewith an
favor me with your comments and suggestions at your earliest convenie	nce but not later
than 3 weeks. Based on your comments, we will be asking the candidate t	o present his/her
work before the DAC and DRC members at a mutually convenient date.	The draft thesis
is submitted by the following candidate.	
Name of Candidate ID No	
Name of Supervisor(s)	
<u> </u>	
	DRC Convener)
Objectives, Scope and Limitations	
1. Are the objectives clearly spelt out?	Yes/No
2. Are the objectives based on in-depth literature review?	Yes/No
3. Does the thesis clearly mention scope and limitations of research?	Yes/No
Literature Survey	
4. Is the literature survey up-to-date and exhaustive?	Yes/No
5. Has researcher referred international/national journals of repute?	Yes/No
6. Are the research gaps clearly identified?	Yes/No
Methodology	
7. Is the methodology adopted described exhaustively?	Yes/No
8. Has the researchers mentioned all data sources?	Yes/No
9. Is the research methodology adopted up-to-date?	Yes/No

Results and Discussions	
10. Are the outcomes of research discussed at length?	Yes/No
11. Has the candidate come out with knowledge addition in the	Yes/No
area of research?	
12. Has the candidate come out with publications in	Yes/No
international/national journals of repute?	
13. Has the candidate presented his work in	Yes/No
international/national conferences?	
Conclusions and Future Scope of Work	
14. Are the conclusions clearly spelt out?	Yes/No
15. Has the candidate mentioned specific contributions	Yes/No
to the field of research?	
16. Has the candidate mentioned future scope of work?	Yes/No
Literature References	
17. Is the citation of references done in standard format?	Yes/No
18. Are all the references cited in the text?	Yes/No
19. Are the references relevant and adequate to the work?	Yes/No
<b>Documentation of Thesis</b>	
20. Is the flow of writing logical?	Yes/No
21. Has the candidate made sections/subsections to explain his work?	Yes/No
22. Are the figures/tables presently neatly and clearly with	Yes/No
proper and consistent captions?	
23. Is the list of tables, figures, symbols/acronyms given in the thesis?	Yes/No
24. Has the candidate attached a proper acknowledgement?	Yes/No
25. Are the appendices appended properly to the thesis?	Yes/No
26. Has the candidate appended list of papers published/presented	Yes/No
on the thesis?	

and his supervisor (about one page each) towards the end of the thesis?

Yes/No

27. Has the candidate included brief biography of himself

Mention corrections required in the thesis in space given below or attach				
additional sheet:				
Comments on draft thesis:				
[ ] Approved for pre-submission seminar				
[ ] Approved for pre-submission seminar with minor revisions				
[ ] Needs revision and resubmission				
(Name and Signature of the reviewer with date)				
(realise and Signature of the reviewer with date)				

## **3.13** Format for forwarding the thesis

## BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI,

CA	MPUS
DEPARTMENT OF	
	Date:
To,	
Dean/ Associate Dean, AGSRD,	
BITS Pilani, campus.	
We are forwarding herewith the thesis of	ID No.
for your kind perusal a	and necessary action. We assure you that
necessary formats and guidelines have been	followed in making the documents.
Further, we have checked that examiners w	ill be available. Documents attached (for
each candidate):	
<ol> <li>Three copies of spiral bound, double side examiner).</li> <li>Three copies of the synopsis</li> <li>Thesis submission original fee receipt give</li> <li>Form AGSRD/Thesis/1 (2 copies)</li> <li>Form AGSRD/Thesis/2 (2 copies)</li> <li>Copy of the title approval form submitted</li> <li>Reports of DAC members on pre-submis</li> <li>Notice for pre-submission presentation</li> <li>Semester evaluation forms</li> <li>Soft copy of thesis (as single pdf file) at</li> <li>List of potential examiners (at least 7 af</li> </ol>	ven by SWD, BITS Goa Campus d. sion seminar nd synopsis in CD
(Name)	(Name)
(DRC Convener)	(HOD)
Date:	

31

# 3.14 Format for forwarding continuation of fee waiver and / or Institute fellowship BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, K K BIRLA GOA CAMPUS

	DEPARTMENT	OF	
		Date:	
To,			
Associa	ate Dean, AGSRD,		
BITS P	ilani, K K Birla Goa c	campus.	
Institute	e fellowship for follow	n the recommendations for continuation of fee wait wing candidates for your kind perusal and necessary for these candidates are attached herewith.	
Sr. No.	ID. No	Name of the candidate	
1			
2			
	!		
(Name)	<u> </u>	(Name)	
(DRC C	Convener)	(HOD)	
Date:		$(\Pi \circ \mathcal{D})$	

3.15 Format for recommending continuation of fee waiver and / or Institute Fellowship (performance rating to be done by supervisor and HOD/ Instructor-incharge and discussed in DRC meeting)

## BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI, K K BIRLA GOA CAMPUS

## ACADEMIC GRADUATE STUDIES & RESEARCH (Ph. D. PROGRAMME) DIVISION

RECOMMENDATION FOR CONTINUATION OF FEE WAIVER AND/ OR INSTITUTE FELLOWSHIP

Name of	research scholar:						
ID No.							
Departm	ent:						
	ance rating (kindly rest performance):	ate by putting tick ( ) in	n the app	ropriate	box. 1	is lowe	st and
Sr. No.	Activity		1	2	3	4	5
1	Performance in Ph.	D. work					
2	Performance in teach	ching work allotted					
Recommendation:  1. Tuition fee waiver:  2. Institute Fellowship  Reason for recommendation/ remarks:							_
(Name)	(Name) (Name)						
(DRC C	(DRC Convener) (Supervisor(s)) (HOD)						
Date:							

3.16 I	Forma	t for recommend	ling extension of ti	me limit for submi	ission of thesis (to
be sul	bmitte	ed subsequent to	completion of 5 year	ars after Ph. D. qu	alifying
exam	inatio	n)			
BIRL	A INS	STITUTE OF TE	ECHNOLOGY AN	D SCIENCE	
			PILANI,	CAMPUS	
		DEPAR	RTMENT OF		
	RECO	MMENDATION FOR	EXTENSION OF TIME I	LIMIT FOR SUBMISSIC	ON OF THESIS
					Date:
To,					
Dean/	Assoc	ciate Dean, AGSR	RD,		
BITS	Pilani,	·	_campus.		
We a	re for	warding herewit	h the recommenda	ntions for extension	on of time limit for
		<u> </u>			perusal and necessary
action	. The	request letters for	r these candidates d	uly forwarded by	their supervisor(s) are
attach	ed he	rewith. The pro	gress of these car	ndidates has been	evaluated by DAC
memb	ers.				
Sr.	ID.	Name of the	Name of the	Extension	Expected date of
No.	No	candidate	supervisor(s)	requested upto	thesis submission
(Name	e)				
(1 141111	~ <i>/</i>			(Name)	
(DRC	Conv	ener)		(HOD)	
Date:					

## 3.17 Format for submission of approved list of examiners in sealed envelop

To, Dean	raduate Studies & Research Divis		examiners in scarca curverop		
DRC of	Department, BITS F	Pilani,	campus, in a meeting held on		
rev	riewed the examiners list submitte	ed by the	Ph.D. Supervisor.		
Name of the			Affiliation:		
candidate					
Name of Sup	ervisor		Affiliation:		
Name of co-			Affiliation:		
supervisor					
Title of Thes	is				
in which the	tee recommends following person thesis is submitted. Vital informa aminers is enclosed.	ns as exa	miners, who are working in the area ag with list of publications of		
S.No.	Name		Affiliation		
1					
2					
3					
4					
5					
6					
7					
8					
Name and sig	gnature of DRC members:				
1					
3					
5		6			

#### 3.18 Format for Vital information of examiners

(To be submitted by the Supervisor. Should contain information on at least 7 thesis examiners approved by DRC) Full name, with title Contact info: Email address Phone no, with country, city codes Postal address, complete with pin code Highest degree, complete with Year, Discipline, University, City: Degree, with year University Specialization, with sub-specialization Current position: Employer Position(s) Responsibility(ies) Research specialization, with sub-specialization Post-PhD experience: Teaching Research, development or innovation Publications (numbers only): Total, books Total, chapters in books Total, in peer-reviewed journals published abroad Total, in peer-reviewed journals published in India Total, in peer-reviewed conferences held abroad Total, in peer-reviewed conferences held in India List below 4 to 8 recent, representative publication relevant to thesis topic (complete with authors, title, journal, publisher, vol. no., year, page nos.: 2 3 4 5 6 Signature of the HOD Signature of the Supervisor Signature of the DRC Convener Name Name Name

## 3.19 Format for any changes in place of work, topic of research and/or supervisor

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE PILANI,	CAMPUS
DEPARTMENT OF	

		Locale of				Topic of		Reason for
S.	Name of the	Work		Supervi	sor	Resea	arch	change
No.	Candidate							
	& ID No.	From	То	From	То	From	То	
1								
2								
3								

(Name)	(Name)
(DRC Convener)	(HOD)
Date:	Date: