

**NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR  
WEST BENGAL, INDIA**

**50<sup>TH</sup> SENATE MEETING  
DATE: 18<sup>TH</sup> MAY, 2018  
TIME: 10.00 AM  
VENUE: SENATE ROOM**



**MINUTES**

The meeting was attended by the following members:

- |  |   |                       |
|--|---|-----------------------|
| 1. <b>Prof. Anupam Basu</b><br>Director,<br>NIT Durgapur   | : | <b>Chairman</b>       |
| 2. <b>Mr. B. Bhattacharya</b><br>Alumni Representative   | : | <b>Invitee Member</b> |
| 3. <b>Prof. S. Chattopadhyay</b><br>Dept. of Biotechnology<br>NIT Durgapur                             | : | <b>Member</b>         |
| 4. <b>Prof. A. Dey</b><br>Dept. of Biotechnology<br>NIT Durgapur                                       | : | <b>Member</b>         |
| 5. <b>Dr. D. Dasgupta Mandal</b><br>HOD, Dept. of Biotechnology<br>NIT Durgapur                        | : | <b>Member</b>         |
| 6. <b>Prof. B.P. Mukhopadhyay</b><br>Dept. of Chemistry<br>NIT Durgapur                                | : | <b>Member</b>         |
| 7. <b>Dr. D. Sukul</b><br>HOD, Dept. of Chemistry<br>NIT Durgapur                                      | : | <b>Member</b>         |
| 8. <b>Prof. A. K. Sadhukhan</b><br>Dept. of Chemical Engineering<br>NIT Durgapur                       | : | <b>Member</b>         |
| 9. <b>Prof. T. Mandal</b><br>Dept. of Chemical Engineering<br>NIT Durgapur                             | : | <b>Member</b>         |
| 10. <b>Prof. P. Pal</b><br>Dept. of Chemical Engineering<br>NIT Durgapur                               | : | <b>Member</b>         |
| 11. <b>Prof. P. Gupta</b><br>Member Secretary, Senate<br>Dept. of Chemical Engineering<br>NIT Durgapur | : | <b>Member</b>         |
| 12. <b>Dr. S. Dutta</b><br>HOD, Dept. of Chemical Engineering<br>NIT Durgapur                          | : | <b>Member</b>         |
| 13. <b>Prof. K. C. Ghanta</b><br>Dept. of Chemical Engineering<br>NIT Durgapur                         | : | <b>Member</b>         |
| 14. <b>Dr. R. P. Nanda</b><br>HOD, Dept. of Civil Engineering<br>NIT Durgapur                          | : | <b>Member</b>         |
| 15. <b>Prof. S. Saha</b><br>Dept. of Civil Engineering<br>NIT Durgapur                                 | : | <b>Member</b>         |

16. <b>Prof. D.K. Singha Roy</b>	:	<b>Member</b>
Dept. of Civil Engineering		
NIT Durgapur		
17. <b>Prof. K. Bhattacharya</b>	:	<b>Member</b>
Dean (P&D)		
Dept. of Civil Engineering		
NIT Durgapur		
18. <b>Prof. A. Das</b>	:	<b>Member</b>
Dept. of Civil Engineering		
NIT Durgapur		
19. <b>Prof. P. Ray</b>	:	<b>Member</b>
Dept. of Civil Engineering		
NIT Durgapur		
20. <b>Prof. V.K. Dwivedi</b>	:	<b>Member</b>
Dept. of Civil Engineering		
NIT Durgapur		
21. <b>Prof. S. Bhattacharya</b>	:	<b>Member</b>
Dept. of Civil Engineering		
NIT Durgapur		
22. <b>Prof. G. Sanyal</b>	:	<b>Member</b>
HOD, Dept. of Computer Science & Engg.		
NIT Durgapur		
23. <b>Dr. A. Dutta</b>	:	<b>Member</b>
HOD, Dept. of Management Studies		
NIT Durgapur		
24. <b>Prof. G.K. Mahanti</b>	:	<b>Member</b>
Dept. of ECE		
NIT Durgapur		
25. <b>Prof. A. K. Bhattacharjee</b>	:	<b>Member</b>
Dept. of ECE		
NIT Durgapur		
26. <b>Prof. B. B. Maji</b>	:	<b>Member</b>
Dept. of ECE		
NIT Durgapur		
27. <b>Prof. S. Kundu</b>	:	<b>Member</b>
Dept. of ECE		
NIT Durgapur		
28. <b>Prof. R. Ghatak</b>	:	<b>Member</b>
HOD, Dept. of ECE		
NIT Durgapur		
29. <b>Prof. N. K. Roy</b>	:	<b>Member</b>
Dept. of Electrical Engineering		
NIT Durgapur		
30. <b>Prof. S. Ghosh</b>	:	<b>Member</b>
Dept. of Electrical Engineering		
NIT Durgapur		
31. <b>Prof. S. Banerjee</b>	:	<b>Member</b>
Dept. of Electrical Engineering		
NIT Durgapur		

- |   |   |               |
|---|---|---------------|
| 32. <b>Dr. P. Acherjee</b>  | : | <b>Member</b> |
| HOD, Dept. of Electrical Engineering<br>NIT Durgapur                        |   |               |
| 33. <b>Prof. S. P. Ghoshal</b>  | : | <b>Member</b> |
| Dept. of Electrical Engineering<br>NIT Durgapur                             |   |               |
| 34. <b>Prof. S. S. Thakur</b>   | : | <b>Member</b> |
| Dept. of Electrical Engineering<br>NIT Durgapur                             |   |               |
| 35. <b>Prof. A. Gangopadhyay</b>  | : | <b>Member</b> |
| Dean (F&W)<br>Dept. of E&ES<br>NIT Durgapur                                 |   |               |
| 36. <b>Dr. K. Adhikari,</b>   | : | <b>Member</b> |
| HOD, Dept. of EES<br>NIT Durgapur   |   |               |
| 37. <b>Prof. P. P. Sengupta</b>   | : | <b>Member</b> |
| Dept. of HSS<br>NIT Durgapur  |   |               |
| 38. <b>Dr. S. Kar</b>   | : | <b>Member</b> |
| HOD, Dept. of Mathematics<br>NIT Durgapur                                   |   |               |
| 39. <b>Prof. I. Basak</b>   | : | <b>Member</b> |
| Dean (Academic)<br>Dept. of Mechanical Engineering<br>NIT Durgapur          |   |               |
| 40. <b>Prof. B. Halder</b>  | : | <b>Member</b> |
| Dean (Students' Welfare)<br>Dept. of Mechanical Engineering<br>NIT Durgapur |   |               |
| 41. <b>Prof. N. Banerjee</b>  | : | <b>Member</b> |
| Dean (AAO)<br>Dept. of Mechanical Engineering<br>NIT Durgapur               |   |               |
| 42. <b>Prof. A. N. Mallick</b>  | : | <b>Member</b> |
| HOD, Dept. of Mechanical Engineering<br>NIT Durgapur                        |   |               |
| 43. <b>Dr. S. Pramanik</b>  | : | <b>Member</b> |
| HOD, Dept. of Metallurgical & Materials Engineering<br>NIT Durgapur         |   |               |
| 44. <b>Prof. M. Roy</b>   | : | <b>Member</b> |
| Dept. of Management Studies &<br>HOD, Dept. of HSS<br>NIT Durgapur          |   |               |
| 45. <b>Prof. A. K. Ganguly</b>  | : | <b>Member</b> |
| Dept. of Metallurgical & Materials Engineering<br>NIT Durgapur              |   |               |
| 46. <b>Prof. A. K. Meikap</b>   | : | <b>Member</b> |
| Dean (R & C)<br>Dept. of Physics<br>NIT Durgapur                            |   |               |

47. **Prof. P. Kumbhakar**

Dept. of Physics

NIT Durgapur

:

**Member**

48. **Ms. Tulika Chowdhury**

:

**Student Nominee – PG**

Dr. Maitree Bhattacharya, Mr. S. Chatterjee, Ms. Mousumi Ghose, Ms. Gargi Mitra, Prof. M. C. Majumder, Prof. K. Basu, Prof. A. K. Saha, Prof. K. S. Ghosh and the student nominee (UG) could not attend the meeting and were granted leave of absence.

The Chairman welcomed the Senate members to the meeting and requested Member Secretary, Senate to present the agenda of the 50<sup>th</sup> Senate meeting.

**Item No.50.1: Confirmation of the Minutes of the 49<sup>th</sup> Senate Meeting**

The clarification sought by Prof. P. Pal of Chemical Engineering Department was furnished to the satisfaction of the Senate. The minutes of the 49<sup>th</sup> Senate meeting were confirmed by the Senate.

**Item No. 50.2: Action Taken Report**

The Senate of the Institute noted The Action Taken Report.

**Item No. 50.3: To ratify the resolutions of the UGAC and PGAC meeting held jointly on 16/05/2018**

The Senate approved/ratified the resolutions of the above UGAC and PGAC meetings with the following amendments.

- The Academic Calendar of Academic Year 2018-2019 was approved (Annexure I).
- The punishment for adopting unfair means in examinations may range from cancellation of the examination paper to back paper with a decrease of two letter grades. The academic disciplinary committee was empowered to take a decision based on their discretion.
- The 2016-2018 batch of M. Tech students in Information Technology and Software Engineering will continue to receive the grade card as before. But they shall get the degree certificates as M. Tech. in Information Technology (Department of Computer Science & Engineering) and Software Engineering (Department of Computer Science & Engineering) respectively as in the last year. A supplementary certificate will be issued to them explaining the change in the department name in the degree certificate. The first semester grade card of the 2017-2019 batch will be reissued with Computer Science and Engineering as the department name for these two M. Tech. programs.

**Item No. 50.4: To consider the issues related to the PhD studies**

The Senate resolved the following.

- The Senate approved the registration of 10 candidates for PhD program (Annexure II).
- The Senate congratulated 13 candidates and their supervisors (Annexure III) for successfully completing all requirements for the award of PhD degree and approved the award of PhD degree to the candidates in the next convocation.
- Application for the change of PhD Supervisor of Mr. Ram Chandra Barik (Reg. No. NITD/PhD/CS/2017/00938) and addition of Dr. R. N. Barman as a co-guide was approved.
- Addition of Dr. Achintya Kumar Pramanik as member of DSC of Mr. Shambhu Kumar Mahato (Roll No. 16ME1101) were approved.
- Applications for extension of the time of registration for PhD of the following candidates were approved.
  - Monalisha Mishra (Roll No. 16/CA/1503) - by 06 months
  - Saibal Sarkar (Roll. No. 16/CA/1504) - by 06 months
  - Avijit Sarkar (16/MS/1505) - by 06 months
  - Vinay Kumar Shaw (16/MS/1504) - by 06 months
  - Pranay Kumar Singh (16/MS/1101) - by 06 months
- Applications for the extension of the PhD registration period of the following candidates were approved.
  - Soma Sarkar (Reg. No. NITD/PhD/CH/2013/00389) – by 01 year
  - Subhendu Rarat (Reg. No. NITD./PhD/CSE/2013/00400) – by 01 year
  - MD. Alamgir Hossain (Reg. No. NITD/PhD/CSE/2013/00399) – by 06 months

- Souvik Kumar Ghosh (Reg. No. NITD/PhD/MS/201300402) – by 01 year
- Jatirmoy Samanta (Reg. No. NITD/PhD/MS/2013/00396) – by 01 year
- Mrinmoy Sarkar (Reg. No. NITD/PhD/ECE/2013/00404) – by 01 year
- Sambaran Ray (Reg. No. NITD/PhD/EE/2013/00407) – by 01 year
- The change of the title of PhD Thesis of the the following candidates were approved
  - Sriparna Roy (Reg. No. NITD/PhD/EE/2014/00562)
  - Sourav Biswas (Reg. No. NITD/PhD/CY/2016/00807)
  - Rohit Sharma (Reg. No. NITD/PhD/EC/2016/00811)
  - Anup Kumar (Reg. No. NITD/PhD/ME/2014/00517)

It was resolved that for continuous absence or unsatisfactory progress of a candidate in the doctoral studies, the student shall be issued warning letters following which stern action may be taken if no improvement is observed. The remaining items were approved by the Senate.

**Item No. 50.5: To consider the revision in PhD regulation**

The Senate deliberated on the PhD regulations in detail and approved the revised curriculum (Annexure IV).

The proposal from NPIU dated May 02, 2018 related to the enrolment of the Assistant Professors (Temporary) engaged under TEQIP III in the PhD program at the Institute was accepted by the Senate (category J). They will be guided by the revised PhD regulation of the Institute. Their admission will be subject to the availability of the suitable supervisor(s) and endorsement by the concerned department and shall not require an admission test. The tuition fees of the candidates in categories G, H, I and J shall be Rs 20,000 per semester.

The qualifying degree criteria for eligibility for admission in different categories of scholars shall be decided by the respective DRPC, who may incorporate flexibility as required. In the next round of admission, the Institute PhD research scholars (category A) should be allocated in an equitable manner to the junior faculty members, up to the rank of Associate Professor, as supervisor.

A committee comprising of Prof. P. Pal (CH), Prof. S. Ghosh (EE), Prof. P. Kumbhakar (PH) and Dr. A. Modak (HS) will be constituted to explore the UGC guidelines and suggest the measures to be incorporated into the PhD regulations.

**Item No. 50.6: To consider the revision in the CPDA norms**

The Senate recommended the norms suggested by the expert committee for consideration by the Board of Governors.

**Item No. 50.7: To consider the revised curricula and syllabi for B. Tech, Integrated M. Tech. and Integrated M. Sc. programs**

The departments presented the salient features of their revised curricula and syllabi that were finalized by the respective DAC in presence of the external experts. The departments like CS, MS, and HS who were yet to finalize the same, shall conduct the DAC meeting with the external experts urgently.

As requested by some departments, the Senate approved the revision of the curricula further accommodating 11-13 core departmental courses and 5-6 departmental electives. The number of theory courses in a semester must not exceed 6. The departments were requested to explore the possibility of sharing common core/elective theory courses, with the students of other departments. The hard and soft (Word) copies of the revised curricula and syllabi must be submitted to Dean (Academic) by June 10, 2018.

Dean (Academic) shall accommodate an additional common course on Engineering Graphics-II/Machine Graphics within the first two semesters. Departments of Mechanical and Civil Engineering and Workshop, in a joint DAC meeting, shall finalize the syllabi for the common courses offered by them in the first year and submit the same to Dean (Academic). Departments of Biotechnology and Chemical Engineering shall, in a joint DAC meeting, finalize the curriculum and syllabi for the 9<sup>th</sup> and 10<sup>th</sup> semesters along with the total credit points for the dual degree M. tech. program and submit it to Dean (Academic).

Chairman, Senate was empowered by the Senate to approve the curricula and syllabi for B. Tech., dual degree M. Tech. and Integrated M. Sc. after discussion with Dean (Academic).

**Item No. 50.8: To consider re-introduction of admission test conducted by the Institute for the resultant vacant M. Tech. seats after the conclusion of all rounds of CCMT**

The Senate resolved that the admission test for M. Tech. program would be conducted by the Institute after the conclusion of all rounds of central CCMT counselling, including the national spot round. The admission test shall be conducted for the remaining vacant seats only in respective categories. Both GATE (provided they were not allotted any seat through CCMT)/Non-GATE candidates shall be eligible for M. Tech. programs, but no fellowship shall be made admissible to the students admitted through this route. The eligibility criteria for the candidates shall be as follows.

- (i) 60%/ 6.5 CGPA for GATE-qualified candidates
- (ii) 70%/7.5 CGPA (for B. Tech. or equivalent) and 60%/6.5 CGPA (M. Sc.) for non-GATE candidates
- (iii) 60% in the 10+2 level examination

A relaxation of 5%/0.5 CGPA shall be applicable for the SC/ST candidates.

The selection will be made by the respective department based on 30% weightage in Class XII marks, 30% weightage on the qualifying degree marks and 40% weightage on the written admission test. The minimum eligibility marks for selection shall be 40% in the written test.

**Item No. 50.9: To consider the report of an expert committee on MSW program offered by the department of HSS**

It was resolved to continue the MSW program offered by the HSS department as recommended by the expert committee. The revised curriculum and syllabus for the program as submitted by the Expert committee was referred to the department of HSS for quick observations to be submitted to Dean (Academic) by June 25, 2018. Chairman, Senate was empowered by the Senate to finalize and approve after discussion with the department and Dean (Academic). Action shall be initiated by Dean (Academic) for the admission to MSW in the academic session 2018-19.

**Item No. 50.10: To consider the SRCC regulations of the Institute**

The members were requested to submit their comments by May 31, 2018 on the regulations which had been circulated to them as a part of the Agenda Notes. Chairman, Senate was empowered by the Senate to finalize and approve after discussion with Dean (R&C). Prof. Apurba De (BT) and Prof. P. Pal (CH) were selected as the Senate nominees in the Advisory committee. Dr. C. Koley (EE) and Dr. D. Mandal (EC) were nominated by the Director in the committee.

**Item No. 50.11: To consider the regulations for the Continuing Education Cell**

The members were requested to submit their comments by May 31, 2018 on the regulations which had been circulated to them as a part of the Agenda Notes. Chairman, Senate was empowered by the Senate to finalize and approve after discussion with Chairman (CEC). Prof. N. K. Roy (EE) and



Dr. S. Dutta (CH) were selected as the Senate nominees in the Advisory committee. Dr. Bibhas Sen (CS) and Dr. Jayati De (EE) were nominated by the Director in the committee.

**Item No. 50.12: To consider the proposal for setting up Ashok Sen Design & Innovation Centre to be funded by the alumni**

The proposal was approved by the Senate.

**Item No. 50.13: To consider the curricula and syllabi of the proposed M. Tech. program in "Water Quality and Pollution Treatment"**

Further documents as sought by the UGAC-PGAC in its meeting held on May 16, 2018 shall be submitted to Dean (Academic).

**Item No. 50.14: To inform the Senate of the MoUs signed**

The Senate was informed of the MoUs.

**Item No. 50.15: Any other matter with the permission of the chair**

There being no further items, the meeting was declared closed with a vote of thanks to the chair.



**Prof. Anupam Basu  
Director  
& Chairman, Senate  
NIT Durgapur**



**Prof. Parthapratim Gupta  
Professor, Chemical Engineering dept.  
& Member Secretary, Senate  
NIT Durgapur**

Place: NIT Durgapur  
Date: 23.05.2018

**NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR  
INDIA****ACADEMIC CALENDAR FOR THE SESSION 2018-2019**

(For B. Tech/Dual Degree/Integrated M. Sc., PG and PhD Programme)

As approved by the Senate on 18/05/2018 (50th meeting)

ODD SEMESTER, 2018 - 2019

Sl. No	Events	Important Dates
1	Odd Semester(2018-19) payment of Registration fee for B. Tech/Dual Degree/Integrated M. Sc, PG and Ph.D. Programmes except 1st Semester	by July 13, 2018
2	Commencement of classes for B. Tech/DD/Intg. ( 3rd , 5th, & 7th Semesters) M. Tech ( 3rd & 5th Sem); MCA (3rd & 5th Sem) , MBA, M. Sc, MSW (3rd Sem)	July 09, 2018
3	Last date for online submission of revised marks of Even Semester (Regular) Examinations, 2018-19 (other than Final Semester)	July 12, 2018
4	Publication of Corrigendum results for Even Sem. (Regular) Exam, 2017 - 18 (other than Final Semester)	July 17, 2018
5	Semester Registration fee payment with additional fee for all programmes	July 23-27, 2018
6	Even Semester (Supplementary) Examinations 2017 -18 (other than Final Semester)	July 30 - August 08, 2018
7	Commencement of classes for 2018-19 session B. Tech/ Integrated M. Tech//Integrated M.Sc (1st Semester)	July 30, 2018
8	Commencement of classes for 2018-19 session M.Sc (1st Semester)	July 30, 2018
	Commencement of classes for 2018-19 session M. Tech (1st Semester)	July 30, 2018
	Commencement of classes for 2018-19 session MBA (1st Semester)	July 30, 2018
	Commencement of classes for 2018-19 session MSW (1st Semester)	July 30, 2018
	Commencement of classes for 2018-19 session MCA (1st Semester)	July 30, 2018
9	14th Convocation	To be notified later
10	Last date for online submission of marks for Even Semester (Supplementary) Examinations 2017-18	August 14, 2018
11	Publication of Results for Even Semester (Supplementary) Examination 2017-18	August 20, 2018
12	Mid-term Assesment/Examination of Odd Semester 2018-19	September 10 - 15, 2018
13	Semester registration (online)	September 17 -20, 2018
14	Festival break for students (Except Students' with Fellowship/Stipend)	Oct 15 - 26, 2018
15	Festival Vacation for faculty members	Oct 15 - 26, 2018
16	Classes after Festival break (All programmes)	Oct 29 - Nov 16, 2018
17	Odd semester Regular Examination 2018-19 (All programmes)	Nov 19 - Dec. 04, 2018
18	Semester break for students (Except Students' with Fellowship / Stipend)	December 05 - 31, 2018
19	Last date for online submission of marks for all Courses (All programmes)	December 16, 2018
20	Publication of Results of all programme for Odd Semester (Regular) Examination 2018-19	December 21, 2018
21	Winter vacation for Faculty members	December 24 - 31, 2018



# NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR INDIA

## ACADEMIC CALENDAR FOR THE SESSION 2018-2019

(For B. Tech/Dual Degree/Integrated M. Sc., PG and PhD Programme)

As approved by the Senate on 18/05/2018 (50th meeting)

EVEN SEMESTER, 2018 - 2019

Sl. No	Events	Important Dates
1	Even Semester(2018-19) payment of Registration fee for B. Tech/Dual Degree/Integrated M. Sc, PG and Ph.D. Programmes	by January 04, 2019
2	Commencement of classes for all programmes	Jan 01, 2019
3	Even Semester Registration fee payment with additional fee for all programmes	Jan 14 - 18, 2019
4	Odd semester (Supplementary) Examinations (all programmes) 2018-19	Jan 21 - 31, 2019
5	Annual Sports	February 02, 2019
6	Semester registration (online)	February 11 - 15, 2019
7	Last date for online submission of marks for Odd Semester (Supplementary) Examinations 2017 -18 (For all programme)	March 06, 2019
8	Result for Odd Semester (Supplementary) Examinations 2018-19 (for all programmes)	March 14, 2019
9	Mid-Term Assessment /Examination of Even Semester 2018-19	Feb. 18 - 23, 2019
10	Even Semester (Regular) Examinations (all programmes), 2018-19	Apr 22 - May 11, 2019
11	Last date for online submission of marks for Even Semester (Regular) Examinations 2017 -18	May 24, 2019
12	Summer vacation for students (Except Students with Fellowship / Stipend)	May 13 - July 05, 2019
13	Summer vacation for Faculty Members	May 21 - June 28, 2019
14	Result for Even Semester (Regular) Examinations 2018-19	May 31, 2019
15	Final semester (Supplementary) Examination 2018-19 of all programmes	June 07 - 14, 2019
16	Last date for online submission of marks for final Semester (Supplementary) examinations 2017 -18	June 20, 2019
17	Publication of Results for final Sem (Supplementary) Exam, 2018-19	June 27, 2019

Registration and Classes of B. Tech/Dual Degree/Integrated M. Sc, PG, and Ph.D. programmes for odd semester (2018 -19 Session) will commence from July 08, 2018 (Monday).





## ANNEXURE II

## NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR

LIST OF CANDIDATES FOR PhD REGISTRATION (APPROVED ON 50<sup>th</sup> SENATE MEETING DATED ON 18.05.2018)

DATED: 18.05.2018

SL.NO	NAME	DEPARTMENT	SUPERVISOR
1	MAINAK RANJAN CHAKI	MS	1) DR. G. BANDYOPADHYAY
2	SAMIRAN SINHA ROY	MS	1) DR. A. GHOSH, 2) 2) DR. G. BANDYOPADHYAY
3	RITWIK DAS	MM	1) DR. S. PRAMANIK, 2) 2) DR. M. K. MONDAL
4	KANKANA SEAL	PH	1) DR. SOUMEN BASU, 2) 2) DR. M. K. MANDAL
5	ANANDA RABI DHAR	ME	2) DR. S.S. ROY, ME 3) DR. N. MANDAL, CAMP, CSIR-SMERI, DURGAPUR
6	RANASHREE DAS	ME	3) DR. I. BASAK, 4) DR. S. S. ROY
7	AMAN ARORA	ME	3) DR. S. S. ROY
8	KUSH KUMAR DEY	CE	1) DR. V.K. DWIVEDI, 2)DR. S. MISHRA, WRM & RT,CSIR-AMPRI, BHOPAL
9	PRIYANKA SARKAR	BT	1) PROF APURBA DEY
10	SUBHASREE MAJUMDAR	BT	1) DR. DALIA DASGUPTA MANDAL

**NATIONAL INSTITUTE OF TECHNOLOGY DURGAPUR**

**LIST OF PHD AWARDEE (APPROVED ON 50<sup>th</sup> SENATE MEETING DATED ON 18.05.2018)**

**DATED: 18.05.2018**

<b>SI. NO.</b>	<b>REGN. NO</b>	<b>DEPARTMENT</b>	<b>CANDIDATES</b>	<b>NAME OF THE SUPERVISORS</b>	<b>TITLE OF THE THESIS</b>	<b>DATE OF AWARD</b>
1	NITD/PHD/M/2011/00298	MATHEMATICS	SATYA MANDAL	1) DR. S. SARKAR (MONDAL), 2) DR. A. GHOSH, IEST, SHIBPUR	Analysis and Optimization of Coal Mine Production and Operations Management System	26.03.2018
2	NITD/PHD/ME/2014/00488	MECHANICAL ENGINEERING	BIBHUTI BHUSAN NAYAK	1) DR. D. CHATTERJEE, 2) DR. A. N. MULLICK	Numerical Study on the Thermo-Fluidic Transport of Fly Ash- Water Slurry in Horizontal Pipelines	06.04.2018
3	NITD/PhD/CC/2015/00613	COMPUTER SCIENCE & ENGINEERING	SATYA BHUSHAN VERMA	1) DR. C. SARAVANAN	Analysis and Modelling of Palmprint Verification System	14.04.2018
4	NITD/PHD/MS/2013/00423	MANAGEMENT STUDIES	BANHI GUHA	1) DR. GAUTAM BANDYOPADHYAY	Forecasting of Scenario of Indian Financial Market using Operations Research Techniques	18.04.2018
5	NITD/PHD/MS/2013/00448	MANAGEMENT STUDIES	NAVEEN ARORA	1) DR. NEELOTPAUL BANERJEE	A study of evolution, growth and decline of small brands of apparels in India	19.04.2018
6	NITD/PhD/HSS/2014/00552	DOCTOR OF PHILOSOPHY IN ENGLISH, DEPARTMENT OF HUMANITIES & SOCIAL SCIENCES	SANJUKTA BANERJEE	1) Dr. S. K. RAI	Retelling of Hindu Mythology in Contemporary Indian English Fiction: A Critical Study	23.04.2018
7	NITD/PHD/CHE/2015/00585	CHEMICAL ENGINEERING	MADHUMANTI MONDAL	1) DR. G. HALDER, 2) DR. M. K. MANDAL	Isolation and Characterization of Microalgae from Eastern Coal Mines for Biodiesel Production under Different Nutritional Modes	23.04.2018
8	NITD/PHD/M/2014/00556	MATHEMATICS	TANUSRI SENAPATI	1) DR. LAKSHMI KANATA DEY	Some Types of Fixed Point Theorems and Their Applications	25.04.2018
9	NITD/PHD/ME/2014/00475	MECHANICAL ENGINEERING	ATUL VASANT KARANJKAR	1) PROF N. BANERJEE	Free Vibration Analysis of Hat Sectioned Structures for Damage Detection	02.05.2018
10	NITD/PhD/EE/2015/00601	ELECTRICAL ENGINEERING	SANTU KUMAR GIRI)	1) PROF. S. BANERHEE	Some Studies on Control and Modulation Strategies for Neutral-Point-Clamped Converters Addressing Capacitor Voltage Balancing	03.05.2018
11	NITD/PHD/ME/2012/00332	MECHANICAL ENGINEERING	ABHIJIT MAHAPATRA	1) DR. S. S. ROY, 2) PROF. D. K. PRATI HAR, IIT KHARAGPUR	Multi-body Dynamic Modeling and Simulation of Six-legged Robots Maneuvering over varying Terrains	04.05.2018

12	NITD/PHD/M/2014/00551	MATHEMATICS	ANGSHU KUMAR SINHA	1) DR. A. PAL, 2) DR. A. RANA	Restricted Domination Problems on Graphs	09.05.2018
13	NITD/PHD/ECE/2012/00365	ELECTRONICS & COMMUNICATION ENGINEERING	SUDIPTA DAS	1) DR. D. MANDAL, 2) DR. R. KAR, 3) PROF S. P. GHOSAL	Novel Directivity Formulation and its Application in Low Sidelobe Radiation Pattern Synthesis Problems for Antenna arrays	17.05.2018



# **Regulations for PhD Program**

(Effective from the academic session 2018-19)



**National Institute of Technology Durgapur**

## **1.0. Introduction**

1.1. The Institute offers doctoral research program leading to the degree of Doctor of Philosophy (PhD).

1.2. Notwithstanding any of the clauses provided in the Regulations, the Senate can exercise its powers to amend/interpret/implement decisions and actions concerned with academic matters.

1.3 A joint PhD degree may be awarded by NIT Durgapur and another premier academic institution in India or abroad with which NIT Durgapur has MoU to this effect. However, each such case shall have to be approved by the respective Senate.

1.5. All the norms and guidelines of the UGC/AICTE will be covered in the PhD program at NIT Durgapur. (UGC Regulations, 2016; The Gazette of India, July 5, 2016, Part III, Section 4)

1.6. The Board of Governors of the Institute may, on the recommendation of the Senate, change any or all parts of the Regulations at any time.

1.7. The medium of communication, instruction, examination, seminars and the defense of PhD thesis will be English.

## **2.0. Admission**

**2.1. Status of research scholar:** The status of the candidates admitted to the PhD program shall be classified under any one of the following categories:

- A. Full-time research scholar with Institute Scholarship
- B. Full-time research scholar with financial support from Government programs (sponsored by DST/CSIR/UGC, etc.)
- C. Full-time research scholar selected in externally sponsored projects in the Institute
- D. Full-time research scholar under QIP/ EFIP scheme
- E. Full-time foreign research scholar admitted through Government of India
- F. Part-time research scholar from the Institute (NIT Durgapur) Faculty/ Staff
- G. Full time sponsored research scholar from Government/ Semi-Government/ other highly reputed organizations/academic or research institutions
- H. Part-time sponsored research scholars from reputed industries (Industry Research Program)
- I. Part time research scholars from academic/ research institutions
- J. Part time sponsored research scholars under Government of India schemes like TEQIP, etc. as approved by the Senate.

Beside above categories, admission of research scholar from foreign institution/organization shall be made as per laid down terms and conditions in MoU with respective institute / organization.

The PhD degree awarded to all categories of students shall be treated as the same and equivalent.

## **2.2. Eligibility for Admission**

The minimum qualification required for admission to PhD program is one of the following:

### 2.2.1. Minimum Eligibility Criteria for Admission to Full Time Ph.D. Program of NIT Durgapur

<b>Qualifying Degree*</b> (for relevant discipline)	<b>General/ OBC</b>	<b>SC / ST</b>	<b>National Eligibility Test Qualifications</b>
M. Tech./ M.E./ M. Arch/ M. Pharm / equivalent / MBA/ PGDBM/ PGDM	6.5 CGPA or 60% marks	6.0 CGPA or 55% marks	<p>Category A: Post graduate degree in basic science with NET/GATE qualification or Graduate degree in Professional course with NET/GATE qualification or Post graduate degree in Professional courses. (F. No. 17-2/2014-TS.I dated 2<sup>nd</sup> March, 2015)</p> <p><b>List of NET Qualifications:</b></p> <p>SIR-UGC, GATE, JAM, GPAT, DBT-JRF, JEST, ICMR, ICAR, NBHM, Bioinformatics National Certification Examination etc.</p> <p>(OM No. SB/S9/2-01/2015 dated 07.01.2015)</p> <p>However, these qualifications will have to be relevant to the qualifying degree of the candidate concerned.</p> <p>The candidate must have a valid GATE / NET.</p> <p>Category B, C, D and E: As per the terms and conditions of the funding agency.</p> <p>Other categories: Not mandatory</p>
M. Sc./ M. Com./ MBBS/ BDS	6.5 CGPA or 60% marks	6.0 CGPA or 55% marks	
B. Tech/ B.E./ MCA/ B. Arch/ B. Pharm	7.5 CGPA or 70% marks	7.0 CGPA or 65% marks	
MA	6.0 CGPA or 55% marks	5.5 CGPA or 50% marks	
CA/ ICWAI/ CS with a graduation degree	55% marks	50% marks	

\*All the degrees will be from an institute / university recognized by UGC/AICTE/MHRD. The preceding qualifying degrees of the candidates required for admission shall be decided by the respective DRPC.

2.2.2. Scholars under categories C and F must submit a no-objection certificate from the Institute / PI of the project respectively during admission. They shall work for the PhD program without affecting their normal duties.

2.2.3. Research scholars of categories G, H, I and J shall submit a Sponsorship / No-objection certificate, as applicable, from the employer during admission. In case the candidate joins a new organization, submission of a fresh NOC obtained from them is mandatory.

2.2.4. Deleted.

2.2.5. Mere possession of required degree and a good academic record does not guarantee admission to a candidate for the Ph.D. program. Apart from academic record, the DRPC will take into consideration the research aptitude, ability to work in a team, subject interest, availability of supervisors, facilities in the department and the research focus of the department while selecting candidates to the Ph.D. program through a pre-defined process.

### **2.3. Residential Requirement:**

2.3.1. Normally all full-time candidates admitted to the PhD program will be required to stay in the Institute till they complete all assigned work and submit thesis. However, for full-time candidates sponsored from Government / Semi - government / major industry with established R&D facilities, the DRPC may recommend to reduce the minimum residential requirement to one year or higher (for completing the course work and formulating the research problem).

2.3.2. If a full-time sponsored candidate intends to carry out a major part of his research work in his place of employment, s/he must convince the DRPC at the time of selection that adequate research facilities and research tradition exist in his organisation. While taking the decision DRPC will examine all the documents presented to it regarding adequacy of the R&D facilities available in the sponsoring organisation. These documents have to be furnished by the candidate during the time of interview. In general major Central Govt. (CSIR, DRDO, DAE, ISRO, CDRC etc.) labs, research organisations, industries (public or private) with established R&D facilities are taken as organisations with adequate facilities. Regarding recognition of other organisations the DRPC has to make a recommendation on the basis of the material available to it to the Director through Dean (Academic) for approval. In every case, the Senate will decide the residential requirement.

2.3.3 The part-time candidates of categories H, I and J are mandated to have contact with the supervisor(s) for discussion and research in the Institute for at least 90 days a year in a single/multiple visits.

### **2.4. Admission procedure:**

2.4.1. Admission of scholars under categories A and B shall be made once in each semester as per a pre-decided schedule indicating the total number of seats available. Dean (Academic) will publish the admission notice on the Institute website. The departments will screen the applications based on pre-defined criteria sent by the Academic Section and prepare the shortlist. They will conduct admission tests (for category A), followed by shortlisting based on pre-defined criteria, if needed, and viva voce, and select the candidates on the basis of overall academic performance, written test and viva voce. The department will send the list of selected candidates to the office of the Dean (Academic). One expert from other department, selected from a panel of experts nominated by Director, will act as an observer in the viva voce.

2.4.2. Admission of scholars under categories C shall be made once in each semester along with the scholars under categories A and B. The candidate shall submit the application through the Dean (R&C) in the prescribed format of Sponsored Research and Consultancy Cell (SRCC) on recommendation of concerned PI and Head of the Department. The selection procedure will be the same as category A.

2.4.3. Admission under categories F, G, H, I and J shall be made once in every academic year, during Odd Semester only.

2.4.3.1. The admission under categories F, H and J shall be made directly subject to fulfillment of eligibility criteria fixed by the respective departments, and submission of requisite documents and no-objection/ sponsorship certificate. The admission shall be subject to the availability of suitable supervisor(s) and the endorsement by the department.

2.4.3.2 Admission of candidates under categories G and I shall be made against the admission notice on the Institute website. The departments will conduct admission tests and viva voce, select the candidates on the basis of overall academic performance, written test and viva voce and send the list of selected candidates to the office of the Dean (Academic). Dean (Academic) shall publish the selection list on the Institute website. The candidates need to produce a sponsorship / No objection certificate in the prescribed format of the Institute during the admission test. For the category I, a Board of external examiners shall be constituted by the Chairman, Senate for the selection process.

2.4.4. Admission of research scholar from foreign institution/organization shall be made as per laid down terms and conditions in MoU with respective institute / organization during the odd Semester only.

2.4.5. Applications of candidates shall be received by the office of Dean (Academic) and forwarded to the departments for screening. Dean (Academic) shall publish the short-list of the candidates screened by the departments on the Institute website along with the date, time and venue of the admission test and viva voce.

2.4.6. Dean (Academic) shall publish the selection list on the Institute website. All communication related to the admission procedure shall be made through the Institute website [www.nitdgp.ac.in](http://www.nitdgp.ac.in) only. Regular reservation policy of the Government of India shall apply.

2.4.7. All selected candidates will fill in the admission form (vide *Annexure - I*) and submit an undertaking that s/he would abide by all rules and regulations and codes of conduct of the Institute.

2.4.8. Respective departments shall be responsible for the selection of research scholars.

## **2.5. Withdrawal from Residency**

2.5.1. A sponsored student, pursuing PhD by staying on campus, can become non-resident by taking withdrawal from the program. She/he may return to his place of work on completion of residential requirement, provided that such a scenario was mentioned in his application for admission and the student has a co-supervisor from his place of employment. The minimum period of work will be extended by one year, except when the student is employed in a superior R&D organization and is engaged in full time research on the same topic as his PhD works. The Deputy Registrar (Academic) will issue a withdrawal order.

2.5.2. In case of students, who secure a new job or otherwise wish to move outside the institute and end their doctoral program prematurely, need to refund any scholarship received.

## **3.0. Supervisors**

3.1. The assignment of Ph.D. students to supervisor(s) by DRPC and constitution of Doctoral Scrutiny Committee (DSC) following enrollment/admission of the Ph.D. students will be made

within a period of fifteen days from the date of enrollment. Chairperson (DRPC), in consultation with the supervisor/co-supervisor(s), shall constitute the DSC (vide *Annexure - II*). The supervisor/co-supervisor(s) shall finalize the broad (tentative) title of the research topic of a selected candidate after mutual discussion.

3.2. All supervisors/co-supervisors of PhD program shall be at least in the rank of Assistant Professor or equivalent having a PhD degree. If a person from outside the Institute, not satisfying these criteria, is proposed to be a co-supervisor, the matter shall be referred to the Senate for decision.

3.3. The maximum number of research scholars that one supervisor can supervise, at any point of time, is eight. The candidates who have already submitted the thesis will not be included for the purpose.

A faculty member shall not supervise more than 8 PhD research scholars at any point of time. For the calculation of the number, 50% weightage will be considered for the part-time candidates and for joint supervision.

3.4. There can be one supervisor and maximum one co-supervisor for a research scholar from the Institute, with maximum one additional co-supervisor from outside.

3.5 The supervisor/co-supervisor must be a regular faculty member of the Institute belonging to the department in which the research scholar will be registered for doctoral studies.

3.6. The co-supervisor(s) may be from the same department of the Institute or other departments / outside.

3.6.1. A person from abroad satisfying the qualification criteria may become a co-supervisor. NIT Durgapur will have, however, no financial responsibility, whatsoever, in the research visits, if any, required for the collaborative research.

3.6.2. Deleted.

3.6.3. Co-supervisors from other institutions/ organizations shall submit curriculum vitae, a consent letter and a no-objection certificate from the employer during formation of DSC, if they do not have MoU with NIT Durgapur.

3.7. Any change in supervisor/co-supervisor shall have to be recommended by the DSC and forwarded to the office of Dean (Academic) for approval of Senate.

3.7.1. Change of supervisor/co-supervisor under exceptional circumstances shall be permitted on the recommendation of the DSC, subject to the consent of the research scholar, the present supervisor/co-supervisor and the proposed supervisor/co-supervisor. However, the candidate shall not be permitted to present synopsis seminar within one year from the date of change of supervisor/co-supervisor.

3.7.2. Addition of co-supervisor shall be permitted on the recommendation of the DSC, subject to the consent of the research scholar. However, the candidate shall not be permitted to present synopsis seminar within one year from the date of addition of supervisor/co-supervisor.

3.8. When a supervisor leaves the Institute permanently or temporarily for a period exceeding 6 months, the DSC shall appoint a new supervisor for the research scholar before his/her departure.

3.9. Deleted.

3.10. The DSC may consider continuation of the original supervisor on his/her return to the Institute as one of the supervisors.

3.11. A supervisor/co-supervisor after superannuation shall continue to act as the co-supervisor. However, if the research scholar has no supervisor from the department in which s/he is registered, one faculty member of the same department shall be made the supervisor after consultation with the superannuating supervisor and the research scholar. In case of the candidate already presented synopsis seminar successfully, no additional supervisor shall be necessary.

#### **4.0. Semester Registration**

4.1. A student enrolled in the PhD program will be required to register every semester along with endorsement of satisfactory progress by the DSC (vide *Annexure-IV*) and by paying tuition fees and other Institute dues the Semester registration is different from Academic registration. The DSC shall approve a report on the progress made by the scholar at the end of each semester and submit along with the registration form.

4.2. Sponsored students who have been sanctioned withdrawal also need to do semester registration. They may, however, be permitted to send registration form by post to their supervisor, who will present them to the Academic Section through the HOD.

4.3. Failure to do semester registration within the stipulated dates as per Academic Calendar will result in termination of studentship, which in a very special case can be restored by the Senate on consideration of all circumstances, payment of additional fines and extension of thesis submission date.

4.4. It shall be the responsibility of the student to bring any deviation in his status in matters of course work, registration, withdrawal etc. to the attention of Dean (Academic) at the time of semester registration, if s/he has not done so earlier.

4.5. A student may be exempted from semester registration by Dean (Academic) / Director if s/he submits thesis within 30 days of scheduled semester registration. However, the student will lose his fellowship (if any) during the said period. If s/he fails to submit the thesis within 30 days, s/he must do the semester registration before the thesis is accepted for evaluation.

#### **5.0. Registration**

5.1. Every student enrolled in the Ph.D. program is given provisional registration soon after his enrolment. The provisional registration defines:

- (a) The broad area of research and
- (b) The course work to be carried out by the student.

The student continues to work for close to a year before his research plan is properly formulated.

5.2 A Ph.D. student, provisionally registered, will be formally registered for the degree of Ph.D. on completion of following steps:

- (a) The candidate has successfully completed all assigned course works,
- (b) Worked out a road map of the program and submitted a formal work plan to the DSC and
- (c) Delivered an open seminar to the satisfaction of the DSC.

5.3. Subsequent to obtaining a favourable recommendation from the DSC, the PhD registration fee, as applicable at the time, shall be paid by the candidate. The date when the candidate deposits the PhD registration fee shall be treated as the date of registration.

5.4. The registration of PhD candidates may be approved by Chairperson, Senate and be ratified by the Senate in its subsequent meeting.

5.5. Candidates should normally present the registration seminar not later than two years from the date of admission, failing which the registration shall be cancelled.

5.6. Any change in the title of PhD work shall have to be approved by the DSC not later than three months before the date of submission of the final synopsis of the PhD thesis. The same shall be notified to the office of Dean (Academic).

## **5.0 Course Work**

5.1. Course work is compulsory for all students enrolled for Ph.D. program including those with Master Degree in the same discipline.

5.2. All Ph.D. scholars are required clear a course in Research Methodology. The DSC will prescribe additional postgraduate level courses. A fresh M. Tech./equivalent student (degree awarded within the past five years) shall be assigned up to 12 credits of course work in addition to Research Methodology. Candidates with B. Tech/M. Sc/ MA/ MCA/ older M. Tech etc. shall be assigned up to 16 credit courses excluding Research Methodology. While this is a general guideline, the DSC may decide on more credits to be completed. Online courses like MOOCS, etc. shall also be considered.

5.3. Deleted

5.4. All candidates admitted to the Ph.D. programs shall be required to complete the coursework prescribed by the DSC within the first two semesters.

5.5. The research scholars will take courses based on the recommendation of the supervisor/co-supervisor(s) and approved by the DSC. The list of courses to be taken by a research scholar during a particular semester shall be endorsed by the DSC and informed to the PG & Research Cell ( Academic Section) within seven days from the start of the semester or within seven days from the date of admission. In case a course is taken from another department, it is to be endorsed by the Head of the concerned department.



5.6. Ph.D. students enrolled in courses are subject to the same regulations as applicable to other students in the courses with regard to attendance, discipline, assessment and grading.

5.7. The concerned teachers shall forward the grades of the research scholar at the end of a semester to the Associate Dean (A&E) for publication of results.

5.8. They must pass each of these courses with at least C grade in a 7-point scale / equivalent. A student shall get maximum three chances to pass a course assigned by the DSC.

## **6.0. Submission of Thesis**

6.1. The research scholars of all categories shall normally submit their PhD thesis within a period of five years from the date of registration for the PhD program. However, for satisfactory reasons, the period may be extended, not exceeding two consecutive terms of one year each. The extension shall have to be recommended by the DSC. In case, no extension for registration is applied for, the registration shall automatically stand terminated at the end of the above-stipulated period.

6.2. A research scholar shall submit his/her PhD thesis not earlier than two years from the date of registration for the PhD program under normal circumstances.

6.3. Prior to submission, when the thesis is nearly ready and can comfortably be submitted within three months the candidate will submit the synopsis of the thesis [typically 10 pages including tables, graphs and references] and present a seminar to an open audience, which will include members of DSC. Soft and hard copies of the thesis should be submitted to the members of the DSC at least one week before the date of the seminar.

6.4. The DSC shall assess the work through a pre-synopsis submission seminar in presence of all supervisor/co-supervisor(s). It is mandatory that all the supervisor/co-supervisor(s) are present during the seminar. The DSC should confirm that the student has completed the required number of courses. The student shall respond to the suggestions of every DSC member. If and when the DSC is satisfied with the extent of work done and the quality of the thesis the candidate will be allowed to submit the thesis. The DSC shall forward one hard copy, signed by the student and the supervisor/co-supervisor, and a soft copy of the synopsis of the PhD thesis along with recommendations (vide *Annexure - VI*) to the office of Dean (Academic).

6.5. The scholar must have at least two papers published / accepted for publication based on his/her doctoral research in a SCI/SSCI/AHCI / Scopus/ Web of Science journal and preferably two paper presentations in conferences/seminars before the submission of the dissertation/thesis for adjudication, and produce evidence for the same in the form of presentation certificates and/or reprints.

6.6. A general format and guidelines (*Annexure - XII*) prepared from the Academic Section of NIT Durgapur shall be used for writing PhD thesis.

6.7. Plagiarism check shall be made for PhD thesis to satisfy maximum permissible match of 20% excluding publications of the research scholar and corresponding supervisor/co-supervisor(s). The plagiarism check certificate should be included in the thesis.

6.8. The thesis examination fee, as applicable at the time, shall be deposited, subject to completion of all formalities.

6.9. The research scholar shall submit two copies of the PhD thesis with soft cover for the external examiners to the office of the Dean (Academic) within three months from the date of successful pre-synopsis seminar. The soft copy of the thesis shall be emailed to Dean (Academic). After successful defense of the thesis and incorporation of revision as per the comments of the examiners, the candidate shall submit one hardbound copy of the final version and a soft copy of the PhD thesis to the office of Dean (Academic).

6.10. Electronic copies of the theses should be posted on Institute web site for wide distribution.

### **7.0. Examination of PhD Thesis [*applicable to all students*]**

7.1. The DSC shall prepare and submit two panels of five external examiners each in the area of the submitted research work each from India and abroad, to Dean (Academic) in hard and soft copies, for the appointment as external examiners of the thesis. The list must include the name, designation, affiliation, full postal address, telephone number, email IDs and webpage address of the examiners. The examiners should be selected by the DSC from amongst the eminent faculty members or experts, Professors / Associate Professors/ Retired Professors / Emeritus Professors, and researchers with Ph.D. in institutes / universities / research laboratories / industries of repute. The area of his/her specialization is to be mentioned explicitly along with a hyperlink to his/her web page. In the list of examiners from abroad, there shall be at least three experts not of Indian origin. There should not be any conflict of interest in the selection of the panel of examiners.

It shall also include the name and registration number of the research scholar, thesis title, the department registered and the name of the supervisor/co-supervisor(s) etc. (vide *Annexure - VII*). Director as the Chairperson of the Senate shall select one external examiner each from India and abroad from the recommended panel.

7.2. It is expected that the DSC submits the panels of examiners immediately after the synopsis seminar to the Dean (Academic), so that the consent of examiners is obtained before submission of the thesis.

7.3. Dean (Academic) will arrange to dispatch the synopsis to the external examiners by email. On receipt of their acceptance to become the external examiner of the PhD thesis, the Academic Section will arrange to dispatch the thesis to them by post. The soft copy of the PhD thesis shall also be sent through email, if examiner (s) so desires. Normally, the examiner will be required to submit the evaluation report within six weeks.

7.4. Deleted.

7.5. When a thesis is unanimously accepted by the board of examiners for the award of the PhD degree (vide *Annexure - VIII*), the scholar shall be required to defend the work in an open seminar followed by a viva-voce conducted in presence of the external examiner from India, DSC members and other interested persons (vide *Annexure - IX*). It is not mandatory for the co-supervisors from abroad to be present during the viva voce. In case the Indian external examiner is not able to attend the seminar and viva-voce, Director shall appoint an alternate examiner for the purpose from the existing panel of external examiners from

India. The defence of the thesis shall be held after at least three weeks from the date of dispatch of the thesis.

7.6. If an external examiner does not respond within three weeks from the date of dispatch of the synopsis or within three months from the date of dispatch of the thesis, Director may select an alternate name from the recommended panel of Experts as the external examiner. The examiners may be reminded of sending the report of the thesis after two months of dispatch of the thesis.

The examiners may send the report on the thesis by email and / or post with a “confidential” label on the mail.

7.7. If a thesis in the present form is not found to be acceptable by any one of the external examiners for award of the PhD degree and is likely to be accepted after revision in line with the modifications suggested by the external examiners in their report, the research scholar must re-submit the thesis incorporating the suggested amendments within three months from the date of the earlier decision of the DSC.

7.8. If a thesis is recommended by one external examiner for the award of the PhD degree but is rejected by the other external examiner, the thesis may be sent to another examiner. The DAC, if needed, may submit a fresh panel of external examiners. The research scholar may submit another copy of the thesis after depositing an additional thesis examination fee, as applicable at the time.

7.9. If a thesis is rejected by both the external examiners, the research scholar may submit a fresh thesis after a period of one year from the date of the decision. The thesis examination fee of as applicable at the time, shall be deposited again before the submission of the thesis. The DAC will recommend a fresh panel of five external examiners in the area of the submitted research work each from India and abroad for appointment as external examiners of the thesis.

## **8.0. Defense of Ph.D. work:**

8.1. The Dean (Academic) shall invite the examiners, on approval of Chairman, Senate.

8.2. Open Ph.D. seminars and viva will be conducted at respective departments in presence of DSC members.

8.3. Recommendations of the external examiner and DSC will be forwarded to the Dean (Academic) for its onward submission to the Chairman, Senate.

## **9.0. Award of Degree**

9.1. On the recommendation of the Doctoral Scrutiny Committee, the Senate or the Chairperson, Senate (when the Senate is not sitting early) shall decide whether the candidate should be awarded the degree of Doctor of Philosophy. If the Chairperson, Senate has approved the award of degree, the award needs to be confirmed by the Senate.

9.2. Deleted

9.3. A provisional degree certificate will be issued to the scholar on successful defense of the thesis and approval of Chairperson, Senate. The final degree certificate will be issued in the

convocation or by any other mode approved by the Senate. The date of the defense examination shall be the effective date of award of degree and will be mentioned in the provisional certificate and degree certificate.

9.4. Any deliberate false statement or plagiarized text will lead to summary disqualification, in addition to other punitive measures commensurate with the offence. Degrees, even after being awarded, may be revoked if gross violation of academic ethics is established.

#### **10.0. Fellowship [*applicable to all students*]**

10.1. Institute doctoral fellowships shall be governed by the rules of MHRD. When the number of Institute fellowships is limited; they will be distributed among different departments by the Director on recommendation of Dean (Academic). Generally, the number of fellowships will be proportional to the faculty strength, but changes can be made to ensure that the positions are filled to the extent possible.

10.2. In case of students awarded a scholarship by an external agency or from a research project operating in the Institute; the provisions specified by the sponsor shall govern the rules.

10.3. Deleted

10.4. Deleted

10.5. Deleted.

10.6 The scholarship for the category A students shall normally be given initially for a period of three years, which can be renewed on year-to-year basis on satisfactory performance upto a maximum period of 5 years (including project fellowship, if any) / tenure of the research scheme. The scholarship shall, however, automatically be terminated after the date of PhD thesis defence or 5 years from the date of enrollment whichever is earlier.

10.7. Enhancement in rate of fellowship, after two years of enrollment, may be considered on successful assessment by the DSC and submission of report (vide **Annexure X**) to the Dean (Academic) towards satisfactory progress in the research activity. The student will submit a summary of the progress of the work to the Chairperson, DSC through the supervisor/co-supervisor(s) and deliver an open seminar. In case the recommendation of the DSC is not favourable, the candidate may deliver a fresh seminar after six months from the previous one for consideration of enhancement in scholarship. Enhancement of scholarship shall be effective from the date of successful enhancement seminar.

10.8. Deleted.

10.9. If a student with Institute fellowship fails to complete registration formalities within 24 months of enrollment, payment of fellowship will be suspended (with permanent loss) till registration formalities are over.

10.10. All research scholars with fellowship (Institute sponsored / Externally funded, including UGC/CSIR/DST, etc.) will be required to assist the Department in teaching activity (sessional, laboratory etc.) and other academic activity for upto 8 hours per week; the quantum of such contribution being decided by the administration from time to time.

10.11. Change of fellowship, other than project fellowship (due to completion of project duration), shall not be permitted.

### **11.0. Leave rules [*applicable to all students*]**

11.1. A research student, except when granted withdrawal by the Institute must attend to his work on a whole time basis. The departments will maintain attendance record of the student. The DSC will examine the attendance record of students, and if it is found unsatisfactory, will recommend extension of minimum duration for submission of thesis, deregistration or termination of studentship, as it thinks fit.

11.2. Research scholars other than Institute employee are eligible to enjoy 30 days leave as and when necessary in a calendar year.

11.2.1. Request for the sanction of any type of leave, formal application should be addressed to the HOD which should usually be recommended and forwarded by the supervisor before availing any leave excepting exigencies.

11.2.2. The HOD and his/her office would take care of the leave applications and approvals. The same office would also keep the records of the leave as usual and submits the attendance report to the appropriate authority for scholarships or other grants. The HOD may refer appropriate cases to the Dean (Academic) to issue leave certificate, as and when required, and to settle and dispute or cases of exigency.

11.2.3. Leaves of research scholars under CSIR/UGC/DST sponsored research schemes and other categories will be governed by the rules of the bodies, which provide financial support.

11.2.4. In case of medical leave, the Institute Medical Officer must endorse the medical certificate.

11.2.5. Maternity and child care leave are applicable to female student only. A female student is entitled to avail maternity leave for a maximum of 180 days and childcare leave for a maximum of 60 days once during the tenure of their studentship. If availed, the loss of days due to these leaves may be augmented by extending their registration period, by the same number of days, on the basis of written prayer from the scholars to the Dean (Academic) with due recommendation of DSC.

11.2.6. There will be no loss of scholarship/fellowship for the female students availing the maternity and childcare leave but the total time period of scholarship will remain same and will not be extended.

11.2.7. In all cases, an application for medical/maternity leave must be accompanied by all relevant medical papers - prescriptions, admission and discharge reports, diagnostic reports, medicine purchase slips etc.

11.2.8. All leave application must be filed within 3(three) working days after joining.

11.2.9. Absence without sanctioned leave will entail loss of financial assistantship for the period of absence and may result in the termination of the students' program.

11.3. There shall be no summer or winter vacation for research students.

11.4. For part of a year, the entitlement will be on pro-rata basis.

11.5. In matter of course work, leave rules applicable to other program will also be applicable to PhD students.

## **12.0. Miscellaneous**

12.1. All seminars and viva voce for the PhD program shall be open house, with a notice normally circulated to all departments of the Institute at least seven days in advance.

12.2. All seminars; pre-registration, enhancement and pre-synopsis seminars must be conducted within a maximum period of one month from the date of application by the candidate, subject to concurrence of the DSC.

12.3. If the DSC finds the performance of the research scholar unsatisfactory, it will give at least two warnings (in writing) to the candidate. If there is no improvement in her/his performance even after the warnings, the DSC may recommend termination of the PhD program for the scholar through DRPC for approval of the Senate.

12.4. The Institute may revise the fee structure from time to time.

12.5. The list of documents, which need to be submitted at various stages of Ph.D. program starting from the time of admission are listed in *Annexure- XIII*.

12.6. External co-supervisors will submit a no objection certificate (vide *Annexure- XIV*) from their organization and willingness certificate (vide *Annexure- XV*) from their end during formation of DSC or at a time when appropriate.

## **13.0. Termination of Studentship [applicable to all students]**

The studentship of a Ph.D. scholar may be terminated by the Senate on exceptional grounds. They are:

- Recommendation of Institute's Disciplinary Committee.
- Failure to do semester registration.
- Failure to complete registration within two years from the date of enrollment.
- Poor progress as noted by DSC. Such a decision may be implemented only after approval of the Senate.
- Prolonged absence (exceeding two months) from the Institute without prior intimation.

## **14.0. Transition issues**

These revised regulations shall come into effect from Odd-Semester, 2018-19. Students enrolled prior to this date shall be generally covered by the regulation in vogue at the time of their enrollment. However, some of the clauses in the present regulation shall be applicable to them where these are specifically mentioned. The final decision on each specific issue will be taken by the Senate (or Chairman Senate on its behalf), on case-to-case basis.

## 15.0. Exceptions

Notwithstanding anything stated in the rules, the Senate can make special provisions and exceptions depending on the merit of a case. Such cases shall not be cited as precedence in future occasions of similar nature, because two situations appearing similar may not be identical.

In emergency situations, the Director in capacity of the Chairman Senate, can exercise powers of the Senate and discharge the functions of the Senate. Such decisions must be reported to the Senate at its next meeting.

## 16.0: Committees / Functionaries

The following committees shall be constituted for the research program.

### 16.1: Research Academic Committee (RAC)

16.1.1: Constitution:

I. Dean (Academic)	- Chairperson
II. Dean (R&C)	- Members
III. Chairman of all DRPCs	- Members
OR	
Any one faculty (with Ph.D.) nominated by Chairman of respective DRPCs	
IV. One representative with Ph.D. degree from industry / R&D organization	- Member
V. Associate Dean (A&E)	- Member
VI. Deputy Registrar (A&E)	- Convener

16.1.2: Functions:

- i. To consider the recommendations of the DRPC on matters relating to research program and to make suitable recommendations to the Senate
- ii. To ensure that all norms and regulations pertaining to research programme are strictly followed
- iii. To make periodic review of ordinances, regulations and instructions pertaining to research program and to recommend to the Senate any modification thereof
- iv. To review the academic performance and make suitable recommendations to the Senate regarding the award of degrees
- v. To conduct at least one meeting each semester and send the proceedings to Secretary, Senate
- vi. The quorum for each meeting will be ten.

### 16.2 Departmental Research Program Committee (DRPC)

16.2.1 Constitution

- i. Head of the Department - Chairperson  
(In case, Head of the department does not possess PhD degree, the Director shall nominate Chairperson)
- ii. All faculty members of the department having PhD degree - Members

- iii. One Professor from a premier national academic institution / one expert from industry / R&D organization with PhD degree - Member

#### 16.2.2: Functions

- i. To ensure academic standard and excellence of the PhD program offered by the department
- ii. To assign the supervisor/co-supervisor(s) to the research scholar in consultation with the Scholar and the supervisor/co-supervisor(s)
- iii. To conduct admission test/ interview
- iv. To consider any general matter related to the research program of the department and propose change in policy pertaining to the PhD program.
- v. The external expert to be present in the non-routine DRPC meetings where policy decisions are recommended.

### 16.3 Doctoral Scrutiny Committee (DSC):

#### 16.3.1: Constitution

i.	Chairperson (DRPC)/ A senior Faculty member of the Department (if Chairperson is a supervisor/co-supervisor)	- Chairperson
ii.	Two faculty members of the department having PhD degree	- Members
iii.	One faculty member in the rank of Professor/ Assoc. Professor having PhD from other department of the institute degree, preferably having interest in related area of research	- Member
iv.	Concerned supervisor/co-supervisor(s) for the research scholar	- Member(s)

#### 16.3.2: Functions

There shall be a Doctoral Scrutiny Committee for each Ph.D. scholar. The Supervisor shall be the Convener of this Committee. This Committee shall have the following responsibilities:

- i. To review the research proposal and finalize the topic of research;
- ii. To guide the research scholar to develop the study design and methodology of research and identify the course(s) that he/she may have to do.
- iii. To periodically review and assist in the progress of the research work of the research scholar.
- iv. A research scholar shall appear before the DSC once in six months to make a presentation of the progress of his/her work for evaluation and further guidance. The six monthly progress reports shall be submitted by the DSC to the Academic Section before each Semester registration.
- v. In case the progress of the research scholar is unsatisfactory, the DSC shall record the reasons for the same and suggest corrective measures. If the research scholar fails to implement these corrective measures, the DSC may recommend with specific reasons for cancellation of the registration of the research scholar.
- vi. To conduct registration, enhancement and pre-synopsis seminars, viva voce.
- vii. To act as the examiners in the above seminars and viva voce.
- viii. To oversee and advise on all matters related to the PhD work of the candidate



## **16.4. Supervisor/co-supervisor:**

### 16.4.1: Functions:

- i. To assign a topic for research to the research scholar in consultation with the Scholar
- ii. To recommend the courses to be taken up by the research scholar
- iii. To provide or arrange for facilities to carry out research and supervise the research scholar for the entire research studies
- iv. To monitor the progress of the research scholar.
- v. To report to the DSC the performance of the student at the end of each semester
- vi. To recommend a panel of PhD thesis external examiners to DSC.
- vii. To forward all applications of the research scholar working under him to the DRPC

## **16.5. Central Admission Committee (CAC)**

### 16.5.1: Constitution

- |                            |            |
|----------------------------|------------|
| i. Dean (Academic)         | - Chairman |
| ii. Chairman of all DRPCs  | - Members  |
| iii. Associate Dean (A&E)  | - Member   |
| iv. Deputy Registrar (A&E) | - Convener |

### 16.5.2: Functions

To prepare the final list of the selected candidates based on the selection lists prepared by the departments and communicate it to the office of Dean (Academic).

## **17.0 Guidelines for Utilization of Contingency Grant for attending National/International Conference/Lab visit etc.**

The following guidelines shall be applicable for all research scholars (except sponsored candidates):

17.1 The financial assistance shall be provided to a research scholar in different heads as follows for attending National/International Conferences within India:

<b>Head</b>	<b>Eligibility</b>	<b>Remarks</b>
Registration Fee	Maximum upto Rs. 5000	On production of fee receipt
Travel	Train(AC III Tier)/AC Bus (by the shortest route)	As per actuals on production of ticket. In case the scholar travels by flight or any other mode, the reimbursement should be actual subjected to an upper ceiling of 3- tier AC Train fare.
Local Travel	Auto/Bus	As per actuals subjected to an upper limit of Rs 100 per day on production of bills/self-certification

Lodging	Hostel/Guest House/Hotel for the conference days plus one day each prior to and after the conference days	Actuals subjected to a ceiling of Rs 1000 per day
Per diem	The conference days plus one day each prior to and after the conference days	Rs. 250 per day (No bills required)

17.2 Maximum two conferences can be attended in a calendar year subjected to availability of contingency grant.

17.3 A research scholar will be given the support provided he/she continues to be a student for at least three months after attending the conference.

17.4 The scholar has to obtain an approval from competent authority before attending the conference and should submit settlement of financial assistance granted by the Institute (by listing all the expenses incurred in an orderly manner and duly enclosing all supporting documents) within ten days to the Academic Section.

17.5 In case the purpose of the travel is for data collection/lab visit for conducting experiments, the scholar will be permitted to travel within India, subjected to availability of contingency grant, and the entitlements will be the same as that of conference travel within India.