Ph.D. Guidelines (Effective for the Batch 2020 onwards)

Passed by BOG vide Agenda No. BOG/45/5, dated: November 18, 2024

PDPM

Indian Institute of Information Technology, **Design and Manufacturing Jabalpur**

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Preamble:

This document summarizes the rules and regulations for the award of the Ph.D. degree of the PDPM Indian Institute of Information Technology, Design and Manufacturing, Jabalpur. For the award of the Ph.D. degree it is mandatory that the candidate files at least one patent/ design registration out of the Ph.D. work (not applicable for the students registered with NS and LA disciplines) and publish at least one paper in the SCI/SCIE/SSCI/SSCIE indexed journal (Q1-ranking) or two papers in the SCI/SCIE/SSCI/SSCIE indexed journal (Q2-ranking).

1. Admissions:

Admissions to the Ph.D. program will be carried out based on the recommendation of the selection committee, Chairperson DPGC, Dean Academic and approved by the Director. The selection committee will be constituted by the Head of the Discipline and approved by the Dean Academic.

Admissions to the Ph.D. program will be offered under the following categories:

- I. FULL TIME with Institute financial Support
 - a. Institute Assistantship (IA)

II. FULL TIME without Institute Financial support

- a. Semi Govt. Fellowship Award (FA) (MeitY, CSIR, UGC, DAE, DST, DBT, NBHM, etc.)
- b. Sponsored Candidates (SW)
- c. Quality Improvement Program (QIP)

Admission to foreign students will be offered under this category only.

III. PART TIME

- i. Institute Staff (IS), for Institute Staff of IIITDM Jabalpur
- ii. Project Staff (PS), for Project Staff of IIITDM Jabalpur
- iii. External candidates, sponsored by recognized R&D organizations/ industry (EX)
- iv. Special Ph.D. programme for Working Professionals (SWP)

1.1 Eligibility for Admissions

a) A minimum of 60 percent marks OR a CPI/CGPA of 6.0 (on the scale of 10.00) shall be required at the Master's level qualifying examination (M.Tech./ M.E. /M.Des., etc.) as the specified minimum for admission in a Ph.D. programme for the concerned disciplines. Please see the table below for the eligibility criteria for each discipline.



PDPM Indian Institute of Information Technology, Design and Manufacturing Jabalpur

Ph.D. (Name of	Minimum Qualifications*	Other Essential Requirement
the Discipline) Ph.D. in	ME/M Tech in (CS/ CSE/ IT/	Over11: Control
Computer Science and Engineering	M.E./M.Tech. in (CS/ CSE/ IT/ CE/ CST/ CT/ CSA or in any CS related Subjects like AI/ Software Systems/ Computing/ Machine Learning, etc.) with B.E./ B.Tech.	Qualified GATE in Computer Science and Information Technology (CS) or Engineering Sciences (XE) or CSIR/UGC-JRF
Ph.D. in Electronics and Communication Engineering	M.E./M.Tech. in (EE/ ECE/ PC/ ICE/ MT) or in any EE or ECE related subjects with B.E./ B.Tech.	Qualified GATE in Electrical Engineering (EE) or Electronics and Communication Engineering (EC) or Instrumentation (IN) or Biomedical Engineering (BM) or Engineering Sciences (XE)
Ph.D. in Mechanical Engineering	M.E./M.Tech. in (ME/ PI/ IPE/ AE/ MT/ SM) or in any ME or PIE related subjects with B.E./B.Tech.	Qualified GATE in Mechanical Engineering (ME) or Production and Industrial Engineering (PI) or Engineering Sciences (XE) or Aeronautical Engineering (AE)
Ph.D. in Design	Master's degree in Design (M.Des.), Technology (M.Tech.) and Architecture (M.Arch.) with B.E./ B.Tech./ B.Des./ B.Arch.	Qualified GATE/CEED
	Master's degree in Fine Arts, Drawing, Painting and Architecture. However, such candidates must hold B.E./B.Tech./ B.Des./ B.Arch. degree	NET or similar National Eligibility Test
Ph.D. in Natural Science (Physics and Mathematics)	M.Sc./M.Phil. in Physics or Mathematics or relevant area	Qualified GATE or CSIR/UGC-JRF
Ph.D. in English	M.A./M.Phil. in English	Qualified GATE or CSIR/UGC-JRF
Ph.D. in Smart Manufacturing	M.E./M.Tech. in (ME/ PI/ IPE/ AE/ MT/ SM/ ECE/ ICE/CSE) or in any ME or PIE or ECE or CSE related subjects with B.E./ B.Tech.	Qualified GATE in Computer Science and Information Technology (CS) or Electrical Engineering (EE) or



	Electronics and
	Communication Engineering
	(EC) or Instrumentation (IN)
	or Mechanical Engineering
	(ME) or Production and
	Industrial Engineering (PI)
	or Engineering Sciences
	(XE)

^{*}Minimum duration for such masters' programme shall be two years or the candidate must have completed Integrated Master's Degree or Dual Degree program

1.2 Admission Categories

I (a) Institute Assistantship (IA)

The students having qualified GATE/ CEED/ CSIR/UGC-JRF score will only be admitted under this category. The students admitted under this category are entitled to financial support (Teaching Assistantship), as per the Ministry of Education (MoE) norms. Further, the student is required to assist 8 hours of work per week assigned by the Discipline.

II (a) Fellowship Award (FA)

The fellowship award will be awarded by various Govt./ Semi Govt. agencies. The candidates will be admitted to the category if they have financial support from the Govt./ Semi Govt. agencies such as CSIR, UGC, DAE, DST, DBT, NBHM, MeitY, Digital India, ARDB, AERB, DAE, etc. The candidates under this category may be assigned a teaching assignment per week by the Discipline, as per the requirement of the concerned fellowship agency.

II (b) Sponsored Candidate (SW)

These candidates are sponsored by the Govt. recognized R&D organizations/ industries listed with NSE or SEBI for doing research work in the Institute. Candidates are expected to be relieved for full time research work at the Institute for a minimum period of three years. Students admitted under the category will not receive any financial support from the Institute.

II (c) Quality Improvement Program (OIP)

These candidates are sponsored by their Institutes for doing research work and admitted through the QIP scheme of the AICTE. Candidates are expected to be relieved for full time research work at the Institute for a minimum period of three years. Students



b) Such students must have qualified the GATE/CEED/ (CSIR/UGC-JRF) in the last 10 years only.

admitted under the category will not receive any financial support from the Institute.

III (a) Institute Staff (IS)

This category is only for the persons employed as Institute Staff at IIITDM Jabalpur and the candidate should have worked in the Institute for at least 2 years on a regular position at the time of admission.

III (b) Project Staff (PS)

This category refers to the candidates working as JRF/SRF in a sponsored project undertaken by the faculty of the Institute.

- a. All JRF and SRF appointed in the sponsored research projects must register for the Ph.D. under the supervision of the PI and co-PI of the project.
- b. A duly constituted committee as per the norms of the project funding agency must select them.
- c. Such candidates may be converted to regular Ph.D. students (IA category) based on the performance at the end of the project duration. The condition for a maximum of three and half years including the JRF/SRF period will be applicable for giving assistantship/fellowship.
- d. The PS shall perform the tasks assigned by the PI of the project.

III (c) External (EX)

This category refers to a candidate employed in a Govt. recognized R&D organization/industry listed with SEBI or NSE/BSE and having adequate research facilities. The Chairperson Senate shall approve such organizations. There shall be two sub-categories in this:

- a. Candidates who are local (that is they are able to attend all classes, labs, etc. on a regular basis) and have been employed as professionals in an establishment/organization/ institute. Such candidates shall not be having any bounding of the residence requirement.
- b. Candidates who are non-local (that is they are not able to attend all classes, labs, etc on a regular basis) and have been employed as professionals in an establishment/ organization/ institute approved by the Senate. The research work leading to the Ph.D. degree by such students may be carried out largely in the parent organization of the candidate under a local supervisor from the organization approved by the Senate but with the overall guidance provided by a faculty member (Institute Supervisor) of the Discipline in which she/he is registered. Such candidates are required to be residents of the institute till they complete the course work and pass the comprehensive examination.

The Institute shall not be providing any assistantship/ fellowship to such a student.



III (d) Special Ph.D. Programme for the working Professionals

The person employed in defense or railway establishment or a company/industry having turnover of Rs. 100 crores with relevant research facility or more at an executive position and have 5 years or more experience in a company is eligible for admission under this category. For the persons employed in defense organizations, the minimum experience requirement will be waived but applications of such candidates must be properly forwarded by their parent organizations.

Following conditions will apply:

- a. Such candidates will be recommended by their parent department and approved by the discipline committee of the concerned discipline for the Ph.D. admission.
- b. The requirement of GATE/CEED will be waived for such candidates.
- c. Such candidates are required to carry out the course work along with the regular Ph.D. students at the Institute.
- d. Most of their research work will be carried out at their parent organization only.
- e. For such candidates' residence requirements will be waived. Further, they will be given a waiver for teaching pedagogy course but they need to fulfill all other requirements of Ph.D. programme.
- f. The candidates will have a supervisor from the Institute and one external co-supervisor from the concerned establishment. The external co-supervisor must be a Ph,D. degree holder or have relevant research experience of 10 years or more.
- g. An MoU will be signed with all establishments/ units for the purpose.

The Institute shall not be providing any assistantship/ fellowship to such a student.

1.3 Admission to foreign students:

The Institute will be admitting the students of the foreign nation through

- a. Study in India Program
- b. DASA scheme
- c. Institute level counselling

For such candidates the requirements of mandatory GATE/CEED/JRF and other qualifying exams may be relaxed. He/she must have cleared TOEFL/ IELTS/ Duolingo. The candidates may be admitted at any time.

The Institute shall not be providing any assistantship/ fellowship to such a student.

1.4 Direct Admission to Ph.D. after B.Tech.

Students who are currently in their final year in any of the Centrally Funded Technical Institutions (CFTIs) will only be eligible for admission under this category. To be eligible

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for admission under this category, a candidate is required to have a minimum CPI of at least 8.0 CPI or equivalent (on a scale of 10) at the end of the seventh semester under OPEN and OBC or EWS categories. For SC/ST category students, the minimum CPI requirement will be relaxed to 7.0. A qualified and valid NET/ GATE/ CEED score is mandatory in this case. They shall be admitted through the same regular admission process as specified for the regular Ph.D. students. Such students will be considered under the Institute Assistance category.

1.5 Other General Information for admission

- a) Relaxation for reserved category in the eligibility requirements shall be as per Govt. of India norms.
- b) In case of external, sponsored, special Ph.D. and part time categories, candidates shall have regular employment and shall be required to apply through the proper channel (the employer or her/his authorized signatory). Such candidate shall have served for at least two years in a reputed R&D establishment/ organization/ academic institution/ company associated with design, development and/or manufacturing of engineering products.
- c) The institute reserves the right to keep the seats vacant if suitable Ph.D. candidates are not available.

1.6 Conversion of category

A student may apply for conversion of categories (among IA, FA, SW, EX) through RPC, as per the guidelines given below. The Chairperson Senate on the recommendation of the DPGC and the Dean Academic may give approval for such conversion. The guidelines for conversion are as under

- i) A Ph.D. student can convert the category after comprehensive examination with the recommendation of the supervisor, DPGC, Dean Academic and approval of the Chairperson Senate. The student should fulfill all the requirements of the category where he wants to convert. No conversion will be made to Institute Assistantship from any other category except for the project staff category.
- ii) Ph.D. External- Self Supported

Ph.D. students in the regular category who got a job offer can get relief from the programme as a special case while keeping their registration alive on payment of required fees every semester with the consent of thesis supervisor(s), recommended by the DPGC and the Dean Academic and approved by Chairperson Senate if they have completed the following requirements

- Minimum residential requirements
- Required Course Work
- Comprehensive Examination
- First Progress seminar with proper direction of research
- The candidate should have applied for the job through proper channels



(recommended by Ph.D. supervisor(s) and on the approval of Convener APCS). Copies of the same should be enclosed at the time of application.

- The candidate must submit a copy of the offer letter from his future employer at the time of application.
- The student must submit a no objection letter from his future employer at the time of application.
- The change of category shall be approved as per the recommendation of an Evaluation Board.
- The Evaluation Board of a Doctoral student shall consist of RPC members and a member of DPGC
- The student must appear for a progress seminar before the Evaluation Board in each semester.

2. Residence requirement

- 2.1 The Institute's programmes are essentially residential ones and unless otherwise exempted/ permitted by Dean Students, every student shall be required to reside in, and be a boarder of a Hall of residence, to which he/she is assigned.
- 2.2 A student registered under sponsored and fellowship award category shall be required to stay for the required duration as specified by the Institute and the sponsoring organization must specifically undertake to relieve him/her for the said period.
- 2.3 Students registered in the EX category (non-local) will be required to stay in the campus at least as long it takes to
 - i. Complete the course work and pass the comprehensive examination and
 - ii. Get the approval of the Chairperson, Senate on a written proposal (prepared in consultation with his supervisor and co-supervisor) outlining the work proposed to be done in his thesis.
- 2.4 Students registered under the EX category (local) and part time working professional will not be required to stay in campus but they need to attend all the regular classes, labs, seminars and exams as per the need of their programme.

3. Academic session

- 3.1 The academic session of the Institute normally begins in the first week of August every year and ends at the end of July. It is divided into three parts: Two regular Semesters and a Summer Term. The summer term is defined only for undergraduate programmes. For the Ph.D. programmes, there is no summer term and Semester II continues until July. The mid-sem recess is not applicable to Ph.D. students.
- 3.2 The exact dates of all the important events, such as orientation, registration, late registration, the commencement of classes, adding and dropping of courses, submission of documents, examinations, submissions of grades, conversion of I-grades, vacations, mid-semester recess, etc., during the Academic Session shall be specified in the



Academic Calendar of the Institute duly approved by the Senate. The academic calendar is normally brought out before the beginning of a calendar year

4. Registration and Physical Reporting

a) A Ph.D. student needs to register in all the semesters, except during the semester break or semester leave, till the submission of a Ph.D. thesis for evaluation on the specified date of physical reporting by paying the Institute Fees.

b) A student needs to pre-register for the next semester courses and seminars on the dates specified in the academic calendar of the Institute every semester except the break.

- c) It is mandatory for all students to physically report on the first day of reporting as laid in the academic calendar. If for some valid reason a student fails to report, she/ he needs to register late after paying late registration fees. However, if a student seeks prior permission to report late on valid grounds, the Dean Academic may allow her/ him to register late without paying the late registration fees till the date of late registration as mentioned in the academic calendar.
- d) Registration in Audit course:
 - i. The Institute encourages students towards extra learning by auditing for an additional number of courses.
 - ii. Adding and dropping of an audit course is permitted only up to the last date of adding/dropping of courses, as given in the Institute's Academic Calendar.
 - iii. Grades when obtained B or above for courses registered for as audit courses shall be displayed on the Grade Sheet of the student for the semester. Grades, when below B will not be displayed on the grade sheet provided the student does not get an "F" grade in the course. However, the grades obtained in the courses registered as audit courses shall not be counted for the calculation of the Semester Performance Index (SPI) or the Cumulative Performance Index (CPI).

5. Course work:

- a) The student needs to complete a minimum of three courses of advanced level as a mandatory requirement in their first semester. Out of the three courses, one course should have a focus on the Research Methodology. The other two courses will be from the research field of Ph.D. as advised by the supervisor/DPGC. In case a student has already completed a course on research methodology during his/her Master's program, they will be given relaxation from the course having a focus on research methodology but have to opt for some other course.
- b) In addition, every Ph.D. student has to successfully complete a course on pedagogy of 8 weeks from Swayam anytime during the program.
- c) The Senate allows the students to opt for advanced level courses from Swayam or Coursera in case a discipline is unable to float the courses. The approval for opting for such courses will be given by the Chairperson Senate on the recommendation of the DPGC and Dean Academic.
- d) The minimum required CPI from the course work is 7.0. In case a student is not able to achieve a CPI of 7.0 his academic program will be automatically dropped.



- e) The courses of the Ph.D. must be graded on 10 point scale and includes A+, A, B+, B, C+, C, D+, D and F.
- f) The seminar and teaching pedagogy course will be evaluated as "S" (satisfactory) or "X" (unsatisfactory) grades.
- g) Ph.D. students will be permitted to register in courses on foreign language communication skills such as Japanese, German or French, as per the availability of foreign language teachers on an audit basis.

6. Attendance during Course Work

- a) Minimum 75% attendance is required in courses.
- b) A course of a student will be dropped if the student fails to secure a minimum of 75% of attendance in the total classes / labs held in that course. The student will be marked "CD" grade in the grade sheet in such a case.
- c) In special circumstances, relaxation may be permitted to the student in attendance, up to 60 % by the Chairperson, Academic Senate on medical or other valid grounds. The Institute doctor must approve the medical certificate produced by the student.
- d) The course instructor will maintain the attendance record regularly and inform the students who fail to satisfy the criterion of 75% of attendance each month through the course web page / general (written) notice.

7. Cancellation of semester registration

Absence for a period of four or more weeks at a stretch or in total during a semester shall result in automatic cancellation of the registration of a student from all the courses in that semester.

8. Minimum credits requirements for the award of Ph.D. Degree:

	Ph.D. [after Masters'	Ph.D. [after B.Tech./	
	programme]	B.E./ B.Des.]	
Minimum total number of credits	15	30	
Minimum number of credits through the course work including research methodology	09	24	
Minimum number of credits through Progress Seminar after the comprehensive examination	04	04	
Pedagogy Course	02	02	

9. Appointment of Supervisor and Research Progress Committee

- a) There will be a Discipline Post Graduate Committee (DPGC) for each discipline. DPGC will consist of the Head of the discipline as the Chairperson and four senior members of the discipline. The Head of the concerned discipline will constitute DPGC.
- b) The DPGC will be guiding a Ph.D. student in deciding the courses and supervisor(s), after she/he takes admission in the Institute.



- c) DPGC will also be monitoring the progress of a student until she/ he decides on a supervisor.
- d) A Ph.D. student is required to propose her/his supervisor from the discipline in the first semester of his program on the advice of the DPGC. Normally, preference will be given to the choice of the student in the selection of supervisor within the constraints of the Institute.
- e) In the case of doctoral students, Supervisor(s) will propose members of the RPC (Research Progress Committee). The Chairperson DPGC will forward the application for the registration of supervisor(s) and RPC to the Dean Academic, who will be the approving authority for the same.
- f) DPGC/ Dean Academic may also add one or two members to the RPC, if required. The RPC will consist of Supervisor(s), at least two faculty members from the discipline and one faculty member from another discipline.
- g) During the period in which the student has not decided the supervisor, Head of the concerned Discipline or his nominee will be forwarding all applications of the student related to leave, assistantship or other such matters.
- h) A student may add another supervisor. The other supervisor may be from any discipline of the Institute or any Institute/ industry within India or outside India. For adding the other supervisor, the student will submit a request to the Dean academic through her/his supervisor. Such applications will be recommended by the DPGC to the Dean Academic for final approval.
- i) A student shall not normally have more than two supervisors at any given time.
- j) If a student's supervisor proceeds on long leave or resigns/retires or otherwise ceases to be a faculty member of the institute, the supervisor has the responsibility to appoint a co-supervisor or a supervisor in consultation with the student. Nevertheless, in such a case, the supervisor is required to get approval from the Dean Academic for the change. In this case, as a special case, the number of supervisors may exceed from two if an external supervisor already exists. In this case the entire responsibility of the student will lie with the co-supervisor or the new supervisor, as the case may be.
- k) In exceptional cases, a Ph.D. student may be permitted to change supervisor/cosupervisor on the recommendation of RPC after obtaining the consent of
 - a) the present supervisor/co-supervisor and
 - b) the proposed supervisor/co-supervisor.

10. Joint supervision

The Institute encourages joint supervision of Ph.D. students. Under joint supervision, supervisors from both institutions (IIITDM Jabalpur and any other Institute) will jointly guide the Ph.D. student to obtain the Ph.D. degree from PDPM IIITDM Jabalpur by satisfying the requirements and quality standards as per the rules and regulations of the

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Institute.

Following are the requirements for the joint supervision:

- a. A Ph.D. student may interact and work with an approved external Supervisor in a collaborating organization. Students shall require permission from the Dean Academic of PDPM IITDM Jabalpur.
- b. Such students shall be required to register in each semester as per the registration procedure of IIITDM Jabalpur.
- c. The students are expected to follow the rules of the collaborating institution in case they visit the collaborating Institute but shall continue to be governed by the rules and regulations for the award of Ph.D. degree of the IIITDM Jabalpur.
- d. The student and his/her supervisor will remain in continuous touch with the external supervisor.
- e. Such students are permitted to register as non-degree/visiting students in an Institute other than IIITDM Jabalpur and may transfer the credit. Transfer of credits will be decided on a case-by-case basis by the Chairperson Senate.
- f. Financial Support The student will be eligible for fellowship support from the IIITDM Jabalpur (the affiliating Institute). Further any travel by the student to the other Institute (from where the other advisor is affiliated) and all related expenditure have to be borne by the student.
- g. When working with the supervisor from outside the Institute, the IP rights will be as decided between the supervisor(s) (internal and external), and the sponsoring agency, if any. Any such arrangement shall be done with the concurrence of the Director of PDPM IIITDM Jabalpur, and shall not interfere with the ability of the student to write his/her thesis and publish the results of the work.

10.1 Role of the Joint Supervisor:

- a. Monitoring and evaluation of the progress of the students in collaboration with supervisor and RPC committee
- b. Guiding the student for her/his research work. Advising her/him so that she/he can complete the research work.
- c. In case need be and if a facility is available at Joint Supervisor Institute, the joint supervisor will help the student in conducting the experiments.
- d. Encourage students for publication of the work, IPR filing and thesis writing.

11. Comprehensive examination:

a) Students registered in the Doctoral programme must pass a Comprehensive Examination designed to test the overall comprehension of the student in subjects relevant to his/her area of research. A student can appear in the Comprehensive Examination only after



he/she has completed the minimum course requirements and satisfied the requirement of the minimum specified CPI.

- b) Students must appear for the comprehensive examination within 4 months after the completion of the course work. Any deviation from this will require special approval from the Chairperson Senate on the recommendation of the Chairperson DPGC and the Dean Academic.
- c) The mode of Comprehensive Examination will be oral and focused on the fundamentals related to the research area of the student and plan of research.
- d) The Comprehensive Examination Board of a Doctoral student shall be the same as his/her RPC. The thesis supervisor of the student shall be the Convener of the Comprehensive Examination Board. The oral examination will be conducted in open mode.
- e) The dates for oral examination will be decided by the committee and will be intimated to the academic office through Chairperson DPGC. Any changes in the Comprehensive Examination Board will require approval from Chairperson Senate through the Chairperson DPGC and the Dean Academic.
- f) A student shall be considered to have passed the Comprehensive Examination on the recommendation of the Comprehensive Examination Board and approval of the Dean Academic.
- g) The convener of the Comprehensive Examination Board shall be responsible to send the report of the Comprehensive Examination to the Dean Academic for approval through the Chairperson DPGC. The comprehensive report must include RPC members' recommendations on the area of research, fundamentals of the student in the area of research and related areas, problem identification, plan of the research and milestones to be completed, and suggestions for improvement.
- h) Any dispute in the opinion of the Comprehensive Examination Board shall be put up before the Chairperson Senate through the Chairperson DPGC and Dean Academic. The decision of the Chairperson Senate will be final and will be binding to all.
- i) If a student fails in the Comprehensive Examination in his/her first attempt, the same Board that was constituted earlier unless otherwise changed by the Dean Academic on the recommendation of the DPGC shall conduct a second Comprehensive Examination. A student shall be recommended for termination if he/she fails to pass the Comprehensive Examination even after two attempts. All such cases shall be brought to the notice of the Senate.

12. Progress Seminar

- a) Progress seminar carries 2 credits each and is required to be registered by all the Doctoral students in each semester of their programmes before the successful completion of the open seminar.
- b) The progress seminar will be evaluated by the RPC committee as "Satisfactory (S)" or unsatisfactory (X)".

13. Inadequate Academic Performance and Termination of Programme

A student who is not able to get the requisite CPI of 7.0 or got an 'X' grade in the progress seminar is considered a deficient student:



- a) A deficient student may be allowed to continue in the programme, by issuing a warning, if
 - i) Her/ his CPI at the end of the first semester is below 7.0 but more than 6.5. Such student has to fulfill the requirement of minimum CPI of 7.0 at the end of II semester

or

- ii) She/ he gets an "X" grade in the progress seminar.
- b) The programme of a Ph.D. student will be terminated, if

i) Her/his CPI at the end of the first semester is below 6.5

or

ii) Her/ his CPI at the end of the second semester is below 7.0

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iii) the RPC of the student recommends 'X' grades in the progress seminar for two consecutive semesters. In such a case the student will have an option to change the supervisor and submit a request for the change of supervisor to the Chairperson Senate with the consent of the new supervisor. The Chairperson Senate will form a committee to review the case and the committee will submit its report to the Chairperson Senate. The Chairperson Senate will be the final authority to take the decision for the continuation of the programme of the program. If the Chairperson Senate accepts the appeal, the old supervisor will not have any claim on the work done by the student. (Modified in the 46th Senate meeting)

or

iv) is absent without authorized leave for a major part of the semester

v) involves herself/ himself, in indisciplinary act, in violation of the code of conduct, and Students Advisory Committee of Senate makes a recommendation to that effect.

Such students will be required to leave the Institute with immediate effect without getting any degree.

- c) A student whose programme is either terminated on account of inadequate academic performance or terminated otherwise has the right to appeal to the Chairperson, Senate for reconsideration through the Dean Academic with a justified reason for her/his poor academic performance.
- d) The Senate shall take a final decision after considering all the available inputs. However, the Senate shall not entertain any further appeal for review unless substantial additional information is brought to its notice.



14. Academic leaves

14.1 For the PS/FA category

For the students admitted under the PS and FA category, the leave will be granted as per the rules of the sponsoring agency.

14.2 For other categories:

14.2.1 Short Leave

Applications for any kind of short leave should be addressed to the Head of the respective discipline for approval. Leave usually must not be availed without prior approval of the Head of the respective discipline. In addition, if a student is going out of campus on leave, she/he must inform the Hostel/concerned authorities. Following leaves are allowed to student

a. Casual Leave:

A student can avail a maximum of 8 days casual leave in a year for a valid reason.

b. Medical Leave:

A student can avail a maximum of 15 days leave on medical grounds in a year. Permission to grant leave on medical grounds (without assistantship) exceeding 15 days in a year is to be submitted to the Dean, Academic through Head of the respective discipline. A student who remains on authorized leave of absence due to ill health is required to submit a certificate from a Registered Medical Practitioner (verified by Institute's Medical Officer) to the effect that she/he is sufficiently cured and is fit to resume her/his studies.

c. Vacation Leave:

Maximum of 15 days in a year is allowed to a Ph.D. student during the mid-semester recess or winter/summer vacations of UG students.

d. Temporary Withdrawal / Semester Leave

A student is not normally allowed to withdraw from the academic programme temporarily and is expected to complete her/his studies without any break. However, for bonafide reasons and/or in exceptional circumstances, a student may be allowed to withdraw temporarily on leave of absence or semester leave at the discretion of Dean (Academic) on the recommendation of Head Discipline for an extended period. Such leave of absence(s) shall ordinarily not exceed two semesters with or without break during the entire period of the academic programme. Except for medical reasons, the



Semester Leave shall not be granted unless the student has completed at least 2 semesters in the programme.

e. Maternity/Paternity Leave

A married student may avail of Maternity/Paternity Leave as per policy laid down by the government of India from time to time. If supported by a proper medical certificate, leave up to 6 weeks may also be granted to the married female students against miscarriage including medical termination of pregnancy. An absence against maternity/paternity leave beyond the permissible period shall normally entail financial loss.

15. Permission to visit for research at other institution

In order to encourage a student to broaden her/her horizon and gain course/work experience, she/he may be permitted to proceed to other academic institutions/ industry/ research labs in India or abroad as a non-degree student.

- a. Such leave will be granted by the Chairperson Senate on the recommendation of the Dean Academic and Head of the Discipline through Supervisor. The student must have completed the comprehensive examination.
- b. Such students will be given assistantship provided he/she does not receive any fellowship from the organization.
- c. Such students may be allowed to spend up to two semesters in any academic institution of repute/ research lab/ industry in India or abroad with the prior permission of the Chairperson Senate.
- d. Such a student shall make an application to the Dean Academic through the Head of the Discipline giving details of the proposed programme and shall submit a statement of purpose with sufficient information about the institution where she/he has chosen to spend time as a non-degree student along with possible credit transfer.
- e. Dean Academic shall take recommendations of APCS for credit transfer and will place the application to the Chairperson Senate for approval.

16. Open Seminar

- a) Before proceeding to finalize the thesis, each Doctoral student shall be required to deliver an Open Seminar.
- b) A student shall become eligible to give an open seminar after completion of all academic requirements for the Doctoral Programme including thesis work.
- c) A draft copy of the thesis should be submitted by the student through his/her supervisor to the academic office before the approval for the open seminar.
- d) The thesis supervisor/ programme coordinator shall constitute a committee for the open seminar. The committee shall comprise of



- i. RPC members of the student
- ii. One nominee of the Dean Academic.

The committee shall be approved by the Dean Academic.

- e) The open seminar, which will be delivered to the faculty and students of the Institute, shall deal with research work done by the Doctoral candidate with the objective of obtaining comments and criticism, if any, which may be incorporated in his/her thesis before its submission. The final decision of incorporation of the suggestion will be decided by the open seminar committee.
- f) A student must submit the thesis within three months of the open seminar failing which he/she must give the open seminar again.

17. Thesis Submission for evaluation

- a) A Doctoral candidate shall be allowed to submit the thesis within the stipulated time (currently three months from the open seminar) after successful completion of the open seminar.
- b) The thesis can be submitted for evaluation only if at least one patent/ design registration is filed from the Ph.D. work (not applicable for the students registered with NS and LA disciplines) and at least one paper in the SCI/SCIE/SSCI/SSCIE indexed journal (Q1-ranking) or two papers in the SCI/SCIE/SSCI/SSCIE indexed journal (Q2-ranking). A PhD student should be mandated to get at least 01 patent filed during his PhD for the award of degree. If student fails to get a patent filed during his 05 years and if there are hurdles in filing of his patent the case be referred to a committee who will give its recommendation in this regard whether the proposal is patentable or not and the student be awarded a degree or not.
- c) It will be the duty of the student submitting the thesis to check the thesis against possible plagiarism.
- d) Doctoral thesis for evaluation shall be submitted to the Dean Academic or nominee through the supervisor. The thesis should be forwarded by the Chairperson DPGC.
- e) Following are required to be submitted along with the thesis:
 - i) A soft copy of the synopsis of 6-7 pages
 - ii) Soft copy of the thesis
 - iii) A softbound hard copy of the thesis
 - iv) A panel of examiners
- f) Date of the thesis submission will be considered as the date on which the thesis along with documents in point (iv) are received by the office of the Dean Academic.
- g) The panel of examiners must consist of names of
 - i) at least 4 examiners from the top 400 QS/Times ranked Institutes outside India and



- ii) at least 4 examiners from India.
- h) The Chairperson Senate has the right to add/ appoint examiners of his/her choice, if needed.
- i) The panel must be forwarded by the Chairperson DPGC and the Dean Academic.

18. Thesis evaluation

- a) The panel of examiners submitted by the thesis supervisor will be placed before the chairperson Senate by the Dean Academic for approval of experts.
- b) The thesis will be sent to two experts (one from India and one from outside India) for evaluation. The Chairperson Senate may add new name(s) from the related field in the panel.
- c) Reports of Doctoral thesis evaluation from the examiners, received in the Academic Section of the Institute, shall be placed before Dean Academic who shall categorize them in one of the following three categories:

Category I

If an examiner suggests corrections regarding punctuation, grammar, spelling or language, the report shall be considered of Category I. In such a case, thesis supervisor(s) may use his/her/their discretion regarding the incorporation of such suggestions.

Category II

If an examiner points out minor technical mistakes, raises some queries or suggests modifications but does not imply that the acceptance of the thesis is subject to removal of these defects to the examiner's satisfaction, the report shall be considered Category II. In such a case, the supervisor shall send the revised thesis along with the student's response to the queries raised to the RPC of the student.

Category III

If an examiner raises technical points or suggests modifications, which must be answered/ carried out to the examiner's satisfaction before the thesis is accepted the report shall be considered of Category III. In such a case, the supervisor shall send the student's response to the queries raised by the examiner to the Dean Academic along with the revised thesis within three months from the communication received from the Dean Academic. The revised thesis along with the response/rebuttal to the queries will be sent to the examiner with a request to respond within six weeks. If the examiner's response is not received within this period, a reminder shall be sent and if no reply is received within the next six weeks, further action will be initiated.

Category IV

If one of the examiners out rightly rejects the thesis, the matter shall be referred to the Chairperson Senate for deciding the further course of action.



In all cases of revision, the revised thesis (both highlighted and previous copy of the thesis) along with the responses to the comments/ suggestions will be sent to a committee consisting of the DPGC and supervisor(s). The committee must give its recommendation within two weeks of receiving the revised thesis. The committee must certify that the changes made in the thesis and responses to the examiner's query are well incorporated.

d) If both the examiners reject the thesis, the thesis shall be out rightly rejected and the program of the student will be terminated without the award of the degree.

19. Thesis Defense

- a) Defense of the Doctoral students shall be carried out by a defense board consisting of the supervisor(s), RPC of the student and one external examiner nominated by the Chairperson Senate.
- b) The board will be proposed by the thesis supervisor through the Chairperson DPGC to the Dean Academic. The form for the defense examination board must be accompanied with the consent of the RPC and rebuttal/ response along with the revised thesis and certification of the DPGC, if any.
- c) The name of the external examiner will be approved by the Chairperson Senate on the recommendation of the Dean Academic.
- d) Once the board is approved, the constitution of the board will be communicated to the thesis supervisor by the Dean Academic.
- e) The supervisor will contact the external examiner and will fix up the date of the defense.
- f) Once the date is finalized the defense date and time will be communicated to the discipline office, academic office for record and an invitation will be sent to all the faculty and students with the title of the thesis and abstract. This communication will be done by the discipline office.
- g) The defense of a thesis shall be required to be necessarily conducted within six months from the date of receiving the report of all the examiners'. If the concerned student fails to appear for the defense within this period, her/ his programme would be deemed to be terminated with the permission of the Chairperson Senate.

20. Final thesis submission

After a successful defense, the student will submit a synopsis, a hardbound copy and a soft copy of the final thesis to the library after incorporating changes suggested by the committee, if any, and approval of the Dean Academic. The thesis supervisor shall authenticate that all the suggestions of the Thesis Defense Board have been incorporated in the revised copy.



21. Minimum Academic Requirements for the award of the Ph.D. degree

A student enrolled in the Doctoral programme shall formally become eligible for the award of a Ph.D. degree after he/she has:

- a) completed the minimum credit requirements of each of the following
 - i. Course work
 - ii. Progress Seminars

AND

b) have at least the minimum required CPI of 7.0 in course work

AND

c) must have successfully defended her/his thesis and submitted her/ his final thesis

AND

d) Satisfied all the additional requirements specified by the Discipline and approved by the Senate, if any

AND

e) Satisfied all the requirements specified in Institute Ordinances and by the Senate.

AND

f) Satisfied the requirement of **Patent Filing** as mentioned in Clause 17 (b) of this manual.

22. Minimum and Maximum Duration of a Programme

- a) The minimum duration for completion of Ph.D. degree shall be of 4 semesters and for Doctoral students directly admitted to Ph.D. programme after B.Tech. shall be of 6 semesters.
- b) The minimum duration for completion of Doctoral programmes under part time category shall be of 6 semesters.
- c) The maximum duration under which the Doctoral programme is to be completed, irrespective of the category of the student, shall be 6 years. In exceptional cases, the Senate is empowered to give an extension.

23. Financial Assistance from the Institute Funds

a) Students admitted under the Institute Assistantship Category shall be eligible for the

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Institute Assistantship.

- b) Amount of the Institute Assistantship for Ph.D. students shall be as per the directive of the Ministry of Education (MoE) and may change from time to time
- c) All Ph.D. Institute Assistantship holders shall be required to assist the Institute by carrying out the specified work assigned to them. The work to be assigned shall be as per guidelines of MoE and shall be monitored by the Chairperson DPGC or his/her nominee(s).
- d) A student under the IA category will be receiving the assistantship for three and half years only. In exceptional cases, the Chairperson Senate may extend the period to a maximum of four years on the valid ground.
- e) If any Ph.D. scholar takes withdrawal within 1st (First) year he/she will be entitled to 50% assistantship (assistantship towards the TA work) only. At the time of quitting the program, he/she must reimburse back the excess assistantship (50% towards research work) to the Institute.
- f) Λ student under academic warning will not be eligible for an assistantship in the semester.
- g) The enhancement of the assistantship from the JRF category to the SRF category will be recommended by the DPGC committee based on the progress of the student. The student must have published at least one paper in the SCI/SCIE/SSCIE indexed journal.

24. Discipline

It is expected that the student must follow the guidelines of the institute to maintain ethics and standard including academic honesty and student discipline as separately laid down by the Senate, failing which necessary action may be taken against the student.

