

PART-II PROCEDURES

R.1.0 Registration

a) New Students

All new students should report at the institute on the day as specified in the offer of admission, along with the documents specified therein.

New students, awaiting the results of the qualifying examination, will be allowed to register provisionally on the submission of an undertaking. In case a student registers after the last date of addition/deletion of courses, s/he cannot register for course credits in that semester. However, the duration for completing the candidacy requirements shall be counted from the date of admission to the Ph.D. programme.

b) Current Students

All current students are required to register every semester till they submit the thesis. The registration process involves:

- Filling a prescribed Course Detail Form (before candidacy)/Progress Report (after candidacy)
- Depositing prescribed fee and dues, if any.

If a student is likely to submit her/his thesis within two weeks from the date of registration, s/he need not register in that semester. If a student wishes to stay in the campus after submission of thesis, s/he will need to register. Students on authorized leave, may register through their thesis supervisor.

c) Change of Registration from M.Tech./IDD to Ph.D.

Students pursuing M.Tech./M.Arch./MURP/ IDD/ IMT programmes of IIT Roorkee with CGPA not less than 8.50 may opt for a lateral entry to the Ph.D. programme. This option can be availed after completing two semesters of M.Tech./M.Arch./MURP, or after completing all theory courses of IDD/IMT.

d) Change of Registration from Full-time to Part-time Programme

If a student wishes to join an organization, s/he can request for change of her/his status to part-time, provided that all requirements for candidacy have been completed. The Dean of Academic Affairs can approve the request on the recommendation of DRC/CRC.

(e) Change of Registration from Part-time to Full-time Programme

If a part-time student has secured an authorized leave for the intended duration of stay (not less than one semester) from her/his parent organization, s/he can request to change status from part-time to full-time.

R.1.1 Joining Departments/Centres and constitution of SRC

The following process should be followed for initiating the Ph.D. programme:

- a) All new candidates should report to the Head of department/centre. The departments/centres shall send the list of new candidates who have joined in a semester to the Academic Affairs office.
- b) The thesis supervisor(s) (refer section A.5) shall propose the Student Research Committee (SRC) which shall comprise of three members and the supervisor(s). One of these three members shall be proposed as the Chairperson SRC. The proposed Chairperson SRC should have supervised at least one Ph.D. at IIT Roorkee. The SRC members must have requisite expertise and may be drawn from any department, CFTI or from industry. Retired experts can also be considered. If required, the SRC meetings may be conducted through video conferencing.
- c) Once SRC has been approved by the Head of Department/Centre, the SRC will recommend to the Chairperson DRC/CRC the courses which the candidate shall register for. The approvals of the Head, Chairperson DRC/CRC will be communicated to the Academic Affairs office for record.
- d) If thesis supervisor is not assigned, the DRC/CRC shall prescribe the courses to be registered.

R.2.0 Supervisor

R.2.1 Thesis Supervisor

Every candidate shall have a thesis supervisor from the institute. The supervisor can be:

- i) Any full time faculty member holding Ph.D. degree with minimum 3 years of service remaining.
- ii) Visiting faculty/Emeritus Fellow/Scientific Officer/ full-time faculty member with less than 3 years of service remaining, holding Ph.D. degree, can supervise a Ph.D. student jointly with a faculty member as defined in (i) above.
- iii) Co-supervisor can be from outside the institute, if recommended by the DRC/CRC.
- iv) There can be at most three supervisors with not more than one from outside the institute.

The DRC/CRC may evolve specialization-wise guidelines for assigning thesis supervisors to candidates with institute assistantship. There will not be any limit on the number of research scholars which can be concurrently supervised by a faculty member subject to the condition that the research scholars with institute assistantship can be at most eight (solo and joint supervision included).

R.2.2 Addition of a Supervisor

Addition of a supervisor may be approved by the Head of Department/Centre on the recommendation of the SRC. A co-supervisor will be added if the sole supervisor of a student ends his/her formal association with the institute. If a sole supervisor proceeds on leave, the Chairperson SRC will assume the administrative role of the supervisor.

R.2.3 Request for change of supervisor by a research student

The DRC/CRC can consider the request for a change of supervisor, with the consent of the current supervisor and the proposed supervisor. In case this consent is not forthcoming, the issue may be referred to a three-member committee comprising of the Head of Department/Centre, Chairperson DRC/CRC and Chairperson SRC. The committee shall make every effort to salvage the academic programme of the student while ensuring due credits to the current supervisor in publications, patents and thesis. The Head will send the name of new supervisor to the DoAA for record.

R.3 Course Credit Requirements

R.3.1 Minimum CGPA and Probation

Candidates shall register for all the courses recommended by the SRC and earn a minimum of 7.00 CGPA. Technical Communication, Communication skills, Language course and Project shall not be counted towards the minimum course credits and the calculation of CGPA. The candidate should secure an AP grade for an audit course.

A candidate with less than 7.00 CGPA shall be allowed to take up more courses in the following semester while keeping the maximum duration for completing candidacy requirements unchanged. *Ph.D. students are allowed to take additional courses as credit courses even after completion of the candidacy. The CGPA will be calculated considering the minimum number of courses which satisfy the credit requirements as per the Rule R.3.3 (Table-1).* **(By Chairman Senate, on the recommendations of 40th IRC dated 08.08.2020)**

R.3.2 Relaxation in Course Credit Requirement

Candidates with extra course credits in qualifying degree, or relevant experience post qualifying degree as enumerated below can request for relaxation in course credits. The SRC may recommend such requests for the consideration of the DoAA. In no case shall the reduced credits requirements be less than the credits requirements as stated for candidates admitted with M.Tech./M.Arch./MURP degree.

R.3.2.1 B.Tech. with Minor Specialisation / Honours Courses

Relaxation in course credit requirements, up to a maximum of 12 credits, may be considered for candidates who have completed B.Tech. degree with Minor specialisation / Honours departmental courses. The SRC should examine the courses claimed as extra P.G. level credits with respect to the contact hours and content. Minimum theory courses to be taken up by a candidate shall be as specified for candidates with M.Tech. degree.

R.3.2.2 Master's Degree

Relaxation in course work requirement may be considered if a candidate registers in Ph.D. programme within two years from the completion of respective Master's degree.

- a. Candidates who have completed the M.Tech. / IDD / M.Sc. / M.Arch. / MURP / MBA / IMS / IMT programme from IIT Roorkee can request for relaxation of a maximum of

9 P.G. level credits earned during those programmes (other than project, dissertation and labs) towards fulfilment of his/her course requirement for the Ph.D. programme on the recommendation of the SRC and approval of the DoAA, provided these credits were in excess of the minimum requirement for earning the said degree.

- b. Full exemption from course credits is admissible for candidates who have completed M.Tech./M.Arch./MURP/M.Sc./MBA from IITs, IISc, IISERs, or IIMs with CGPA 8.50 or more on a 10 point scale and are admitted in the relevant stream or discipline.

R.3.2.3 Admitted with Extensive Professional Experience

The credit requirements as recommended by the SRC can be completed in the form of Project for Professionals (08 credits)/ Thesis for Professionals (16 credits) and NPTEL PG courses/Self-study PG courses, along with a course seminar. The project/ thesis credits can be completed across the semesters, within the stipulated period of candidacy (Item No. 81.13, 81st Senate dt: 08.01.2020). There is no minimum residency requirement for such candidates.

R.3.3 Course Credit Requirements

Minimum course credit requirements are given in Table 1 below:

Table 1: Minimum Course credit requirements for candidacy to Ph.D. programme

S. No	Qualification	Credit Requirements	Remarks
1.	M. Tech., M. Arch./MURP, or equivalent	Minimum 9 credits of P.G. level theory courses	a. All candidates need to register 02 additional credits for Seminar.
2.	M.Sc/M.A./M.B.A. or equivalent, admitted to Science/ HSS/ Management department	Minimum 12 credits of P.G. level theory courses	b. Candidates can take at most one self-study theory course/ NPTEL course of P.G. level as approved by DAPC.
3.	B.Tech. or equivalent, or M.Sc. or equivalent, admitted to any one of the engineering departments/ centres	Minimum 24 credits of P.G. level theory courses	

(By Chairman Senate, on the recommendations of 42nd IRC dated 07.11.2020)

R.4 Candidacy for Ph.D.

Once a candidate completes the required course and seminar credits with a CGPA of at least 7.00, s/he shall be admitted to candidacy for Ph.D. after she/he clears a comprehensive examination and her/his research proposal is accepted by the SRC. The comprehensive examination is designed to test the comprehension of student in the broad subject area of research. The syllabus for comprehensive examination shall be defined by the SRC.

Departments/Centres shall have clearly defined procedure regarding the format and evaluation of the comprehensive examination in respective specializations. Candidate can avail up to a maximum of two attempts to clear the comprehensive examination. The report on the candidacy will be communicated by the SRC to the DoAA for consideration.

The maximum duration for completing candidacy requirements shall be as follows:

- (a) For candidate with M.Tech./M.Arch./MURP or equivalent degree and M.Sc./ M.A./ M.B.A. or equivalent admitted to Science /HSS/ Management department: 18 months.
- (b) For candidate with B.Tech./M.Sc. or equivalent admitted to Engineering discipline: 24 months.

In case a candidate is unable to complete the candidacy requirement within the stipulated period, a three months extension can be given by DoAA and a further three months extension may be given by IRC.

R.5 Performance Monitoring

All full-time and part-time Ph.D. candidates (students who have completed candidacy requirements) shall register every semester for 12 credits (6 units), or 8 credits (4 units) respectively of thesis work to be evaluated by the thesis supervisor(s). For each unit, the grade earned shall be either [S]atisfactory/[U]natisfactory. A warning will be issued to a student as soon as s/he accumulates 6 unit U grades. If a student accumulates 12 unit U grades, then her/his programme will be terminated. *Performance of a student in the semester in which the candidacy is approved shall be based on the units. (Item No. 39.2.6, 39th IRC dated 13.06.2020)*

Ph.D. student shall submit a progress report and deliver a seminar once every year. The report should include the work done so far and highlight the progress made in the one year period since the last seminar. The SRC shall record its evaluation of the progress and communicate it to the Academic Affairs office. Half-Yearly progress reports will be considered by the SRC without any presentation by the student.

R.6 Submission of Thesis

The minimum duration and the publications required for thesis submission shall be as per the rules in force at the time of admission.

For the addition of a co-supervisor in a thesis, his/her period of association with the thesis should be at least 18 months.

R.6.1 Minimum Duration for Thesis Submission

The minimum working period for the submission of thesis is two years from the date of candidacy. For part-time students the minimum working period shall be 3 years from the date of candidacy.

R.6.2 Maximum Duration for Thesis Submission

The maximum period for the submission of thesis shall be five years from the date of initial registration for full-time students and six years from the date of initial registration for part-time students. If a student has converted his/her status from full-time to part-time before the expiry of five years, the maximum duration for thesis submission shall be as per a part-time student.

The DoAA may extend this limit by six months on the recommendation of SRC. Further extension by six months may be considered by the IRC.

The supervisor(s) shall convene a meeting of the SRC when the research work is complete, the student has earned at least 24 units S thesis grades and a draft of the thesis is ready. At this stage, it is expected that the student has already published (or, accepted for publication) at least two papers out of which at least one paper should be in a peer reviewed journal of repute, or in some select disciplines it could be in the proceedings of an international conference of repute as endorsed by the SRC. If the SRC deems fit, it may recommend submission of thesis even in the absence of required publications. However, such cases shall be reported to the Senate.

The student shall submit a draft copy of the thesis to the SRC members at least 7 days prior to the scheduled meeting. The student will present his/her research work to the SRC and if the SRC approves it for submission, it will send its recommendation to the DoAA along with a list of potential examiners. The supervisor may check their availability before the SRC meeting. The examiners on the panel should be established researchers from all over the world.

The student should submit the thesis within four months of the SRC meeting.

R.7 Evaluation and Defense of Thesis

The thesis shall be sent to three examiners for evaluation and the student shall be asked to defend his/her thesis in front of the Oral Defense Committee (ODC), if any two out of three examiners recommend acceptance of the thesis. The ODC shall consist of the Head of Department/Centre (or nominee), Chairperson SRC, the external examiner and supervisor(s). Before the thesis defense, the student shall consider the comments of the examiners and submit a detailed response for the consideration of the ODC. In case major revisions are required, the revised thesis should be submitted within one year. The ODC shall communicate its recommendations to the DoAA.

The external examiner can participate in the viva-voce examination through a digital communication medium with the prior approval of the DoAA.

Evaluation of a thesis shall be as per the rules in force at the time of submission of the thesis.

R.8 Leave, Assistantship and Withdrawal

R.8.1 Leave Rules

A full-time student should be present in the campus except when on authorized leave. S/he will be entitled to casual leave for 8 days, vacation leave for 15 days and 15 days leave on medical grounds, per year. Once during the entire programme, the Head of Department/Centre may sanction, on the recommendation of the thesis supervisor, additional leave of maximum 15 days. A student is entitled to Assistantship/Fellowship for the sanctioned leave period including periods of maternity leave (180 days) and paternity leave (15 days).

Duty leave up to a maximum of one year in the entire duration of the programme may be granted by the Head of Department/Centre for field trips, to visit other institutions, and to present paper(s) in Seminars/ Conferences/ Workshops. Requests for duty leave for more than one year will be considered by the IRC.

R.8.2 Assistantship

Assistantship/Fellowship shall be released on the recommendation of the supervisor and Head of Department/Centre.

R.8.3 Withdrawal from Semester

A student can seek withdrawal from a semester on medical grounds, or under exceptional conditions beyond her/his control. Request on medical ground shall be supported by documents issued by the institute hospital, or issued by a certified medical practitioner and vetted by the institute Chief Medical Officer. Such requests shall be considered by the DoAA.

In case a student wishes to temporarily withdraw from her/his Ph.D. Programme, s/he may do so only after candidacy, on the recommendation of SRC and approval of the DoAA. Temporary withdrawal may be granted for up to one year (two semesters). Further extensions may be considered by the IRC.

The period of temporary withdrawal will not be counted, when counting the number of semesters completed by the student in the programme.

R.9 Cancellation of Registration

Registration of a student may be cancelled if:

- (S)he is found to have falsified any document at any point of time;
- (S)he fails to register in a semester;
- (S)he fails to meet the minimum required academic performance;
- (S)he is found to be involved in a major act of misconduct.