

Ph.D. PROGRAMME: REGULATIONS - 2023

PREAMBLE

The Ph.D. Regulations - 2023 of Karunya Institute of Technology and Sciences (KITS) is drafted based on the UGC Ph.D. Regulation 2022. This regulation is mainly intended to operationalize the UGC Regulation in the most effective manner in KITS.

1. ELIGIBILITY

1.1. A Master's degree from any recognized university or any other qualification recognized as equivalent thereto in the fields of study notified from time to time by KITS. Minimum eligibility is 60% marks or equivalent CGPA (Cumulative Grade Point Average) in the Master's degree. However, 5% relaxation will be given to the candidates belonging to scheduled caste / scheduled tribe, differently abled, senior officials of reputed industries and accomplished professionals.

OR

1.2. A Bachelor's degree from any recognized university or any other qualification recognized as equivalent thereto in the field of STEM and any field of Agriculture, notified from time to time by KITS. Minimum eligibility is 80% marks or equivalent CGPA (Cumulative Grade Point Average) in the Bachelor's degree, preferably with a GATE score or exceptional professional experience after the Bachelor's degree.

1.2.1. Graduates having work experience of equal to or less than five years will be permitted to register under the Full-Time category

1.2.2. Graduates having work experience of over five years will be permitted to register under the Part-Time category.

2. CATEGORIES OF Ph.D. CANDIDATES AND PLACE OF RESEARCH

2.1. There shall be three categories of Ph.D. candidates as listed:

2.1.1. **Full Time (FT):** All approved candidates who pursue full-time study and research in KITS shall belong to this category. The project staff/associates at KITS, pursuing Ph.D. programme, shall also come under this category.

2.1.2. **Part Time – Internal (PTI):** All approved candidates who are employed in KITS and actively involved in the relevant area of teaching, research or development as part of their regular work shall belong to this category.

2.1.3. **Part Time – External (PTE):** Candidates working in an industry involved in R&D activities or working in any academic institution accredited by NAAC / NBA / ABET or research organizations recognized by KITS, and who are permitted to pursue Ph.D. programme in this institution while continuing in their job, shall belong to this category. While such candidates shall pursue research in their place of employment, they are expected to report to their respective supervisors as and when required.

2.2. Research Outside KITS:

During the Ph.D. programme, for reasons approved by the Doctoral Committee (DC), a candidate may be permitted to spend a maximum of one year in an institution or on a project approved for the purpose, outside KITS for carrying out research in areas related to the topic of research. The conditions for this will be laid down by the Research Advisory Council (RAC) from time to time.

3. DURATION OF THE PROGRAMME

3.1. The duration of the programme and minimum time for submission of the thesis after the date of registration for different streams of candidates shall be as per the table given:

| Qualifying Degree | | Full time | Part Time |
|-------------------|---|-----------|-----------|
| A | Master's degree in Engineering/ Agriculture/Veterinary Sciences/Medicine, etc. | 3 years | 4 years |
| B | Master's degree in Science (Research) / M.Phil. in Arts / Science / Humanities / Management | | |
| C | Master's degree in Arts / Science / Humanities / Management / Education | | |
| D | Bachelor's degree in Engineering/ Agriculture/Veterinary Sciences/Medicine, etc. | 4 years | 5 years |

3.2. In all the above categories, the maximum period for completing the Ph.D. programme shall be six years. In exceptional cases, the maximum period shall be extended by half a year at a time, a maximum of four times based on the recommendation of the DC. This is subject to the approval of RAC.

3.3. A candidate can avail of a break in study for medical/any other valid reason during the study. This period will not be counted as part of the minimum/maximum period.

4. ADMISSION PROCEDURE

4.1. Candidates aspiring to register for a Ph.D. degree shall apply in the prescribed proforma through the proper channel, wherever applicable in response to the advertisement by KITS.

4.2. All eligible applicants will be called for a written/online test and an interview. The admissions will be based on the merit list which is prepared considering consistent academic and research records, and the performance in the entrance test and interview. The cut-off for selection will be fixed from time to time but in no case less than 55%.

- 4.3. The eligible candidate will be issued a provisional admission letter by the Admission Office of KITS.
- 4.4. Provisional admission will be given in the beginning only after paying the fees and submission of all original certificates as required by KITS.
- 4.5. Candidates shall be admitted to the programme only at the beginning of the semester. The candidate shall continue to pay the prescribed annual fees, as fixed at the time of registration.
- 4.6. The candidate shall pay the fees at the beginning of every semester, to keep the Ph.D. registration valid until the thesis is submitted. If a candidate fails to do so within the permissible dates of payment of fees, the registration shall be withdrawn and the candidate's name removed from the rolls after referring to the supervisor.
- 4.7. Within a week of admission, the Department/Division Research Committee (DRC) along with all approved research supervisors of the Department/Division will allocate supervisors for each candidate and the same will be approved by the Head of the Department/Division (HoD) and a copy sent to the Registrar and Dean of the School for subsequent ratification by the RAC.
- 4.8. The letter confirming the registration will be issued after the candidate successfully defends at the comprehensive viva-voce. The date of registration shall be the date on which the Zeroth DC is held.

4.9. Transfer Policy:

- 4.9.1. A Ph.D. scholar, who has registered under another university and wishes to transfer his Ph.D. registration to KITS, shall produce a 'no objection certificate' (NOC) from the University/Department/Division concerned.
- 4.9.2. The Admission Office shall forward the application form along with NOC to the

Department/Division for scrutiny and action. The DRC shall interview the scholar and verify his/her credentials, subject knowledge, extent and quality of research work carried out and submit the recommendation to the Registrar through the Dean of the respective School and the Director (Research and Consultancy).

4.9.3. Upon granting admission, the HoD shall appoint the supervisor based on the expertise in the area of research concerned. The supervisor shall constitute DC as per the existing norms. The DC shall recommend the minimum/maximum period of completion and the number of credits that can be transferred if the scholar has already completed the coursework. The recommendations of DC shall be validated by the office of the Director (Research and Consultancy) and the same shall be submitted for approval to the Chairman, RAC.

5. SUPERVISORS AND NUMBER OF CANDIDATES

5.1. Recognition:

Recognition as a supervisor for guiding a Ph.D. scholar will be accorded by the Chairman, Academic Council (AC) based on an application in the prescribed format and on the recommendations of the RAC, provided the applicant possesses the following:

5.1.1. A Ph.D. degree in the relevant or an allied area of research in which he/she proposes to guide the candidate;

5.1.2. A minimum of two publications in the relevant or an allied area of research in a refereed journal (with Scopus index/Web of Science) or one patent;

5.1.3. He/she shall have completed one year after the award of the Ph.D. degree with one publication in a journal with a Scopus index after the award of Ph.D.;

5.1.4. He/she shall have applied for research funding from the government or reputed private institutions as the Principal Investigator (PI);

- 5.1.5. He/she shall have a minimum of three years of service left at the institute.
- 5.2. An updated and approved panel of recognized supervisors for the Ph.D. programme at KITS shall be maintained by the Office of the Director (Research and Consultancy). Faculty members of KITS, who have specialized in interdisciplinary research domains, shall register themselves in more than one Department/Division as supervisors by applying to the respective DRC. The DRC shall examine and recommend the application to the RAC for necessary approval and include the concerned in the panel of recognized supervisors of the Department/Division.
- 5.3. All categories of Ph.D. candidates shall be required to work under a recognized supervisor of KITS. The scholars can also have a joint supervisor, either from the same Department/Division or from another Department/Division or from another Institution, depending on the nature of the research work undertaken.
- 5.4. In the case of PTE scholars, there shall be a coordinator from the organization where the candidate proposes to do the research, if the research involves experiments and/or data collection as specified by DC.
- 5.5. When the supervisor of a candidate happens to be away from KITS on other assignments for more than six months, he/she may continue to guide the candidate, but a joint supervisor from KITS shall be officially nominated by the DRC considering the research capabilities, background and willingness, as per Section 5.1 of this Regulation, in consultation with the supervisor.
- 5.6. If the supervisor is terminated from the service, his/her recognition as supervisor stands cancelled and a mandatory NOC to change the guide shall be submitted by the outgoing supervisor.
- 5.7. When a supervisor resigns from KITS, he/she shall forfeit his/her claim as a research guide unless otherwise recommended by the Chairman, RAC, considering all relevant factors.

5.8. All recognized supervisors shall comply with the code of conduct of KITS for supervisors and shall submit an undertaking to that effect.

5.9. Provision for Changes:

5.9.1. Change of Supervisor:

The research scholar may write to the HoD, in case a change of supervisor is essential. The DRC will scrutinize the request and send its recommendations to the HoD. If DRC approves the request, a new supervisor is assigned with the required credentials as per Section 5.1. The HoD shall appoint the new supervisor after getting an NOC from the previous supervisor. This shall subsequently be ratified by the RAC. In such cases, the DC can also be reconstituted by the new supervisor with the approval of the HoD after obtaining an NOC from the previous DC members (External and Internal).

5.9.2. Change of Category:

The FT research scholars may change the category from FT to PT and vice-versa depending on valid grounds. The research scholar shall write a letter to the HoD along with the recommendations of DC. In such cases, the duration of the programme shall be pro-rated by the Office of the Director (Research and Consultancy). Changing the category from FT to PT is possible only after six months from the date of registration. The change shall subsequently be ratified by the RAC.

5.10. Number of Candidates:

An eligible Professor/Associate Professor/Assistant Professor can supervise up to eight/six/four Ph.D. Scholars, respectively, at any given time. In addition to this, a supervisor can act as a joint supervisor for not more than two candidates.

6. DOCTORAL COMMITTEE

- 6.1. There shall be a DC for every scholar to monitor the progress of research work.
- 6.2. The supervisor shall furnish a panel of three experts from outside KITS with a doctoral degree in the field of the proposed research, from the faculty members of a University / affiliated college/experts from R&D Department/Divisions/national laboratories/any other relevant laboratories, from which one expert will be selected by the HoD.
- 6.3. The HoD will select a second expert from KITS based on an internal panel list submitted by the supervisor.
- 6.4. The supervisor of the scholar shall be the convener of the DC.
- 6.5. The joint supervisor, wherever applicable, shall also be a member of the DC.
- 6.6. In the event of the supervisor of KITS leaving the University temporarily or permanently, the joint supervisor or another faculty member nominated by the HoD shall be the Convener.

7. PRESCRIPTION OF COURSEWORK AND COMPREHENSIVE VIVA-VOCE

7.1. Course Work:

- 7.1.1. The DC of the candidate shall meet within thirty days of admission and prescribe the coursework for the candidate.
- 7.1.2. Four courses at the PG level and literature review are mandatory, for all scholars. The prescribed courses must be offered under any approved programme of KITS and should not have been studied by the scholar during his/her undergraduate/postgraduate programme. The coursework along with the literature survey shall be recommended by the DC in its Zeroth meeting.

- 7.1.3. Research Methodology and Research and Publication Ethics are mandatory courses for all scholars, among the four courses prescribed by the DC. If a research scholar has already completed the research methodology course at the M.Phil./M.S. programme, he/she may be exempted from registering for the same but he/she has to study another course instead of it, as recommended by the DC.
- 7.1.4. The FT scholars are required to attend class work for a minimum of 2 courses and fulfill the requirement of 85% attendance. All the PT scholars are expected to register their courses with the Controller of Examinations (CoE) as per the guidelines.
- 7.1.5. Every student has to undertake coursework for a minimum period of one semester for subjects at the PG level being offered under any approved programme of KITS as recommended by the DC.
- 7.1.6. No change in the courses prescribed shall be made without the prior approval of the DC.
- 7.1.7. The scholars are required to register for courses including the literature survey within 15 days after the commencement of any semester.
- 7.1.8. Every student shall acquire a minimum CGPA of 6.0 for the prescribed courses, failing which the scholar shall reappear for the examination(s) in one or more courses in which the scholar has scored low grades to acquire the minimum required CGPA, except in the case of the literature survey.
- 7.1.9. As part of the course work, at the end of the semester, every scholar is required to submit an extensive literature review report and present it in a seminar for which four credits are assigned under the practical/laboratory category. The presentation shall be comprehensive and exhaustive and will be open to all faculty and research scholars of the Department/Division and shall be attended by the DC members.

7.2. Comprehensive Viva-voce:

- 7.2.1. Comprehensive viva-voce shall be conducted after the completion of coursework and literature review but within 18 months of the date of registration.
- 7.2.2. Comprehensive viva-voce shall be conducted by internal DC members.
- 7.2.3. The course code for comprehensive viva-voce will be CV3991.
- 7.2.4. The scholar can proceed further with his/her research work, only if his/her performance in the comprehensive viva-voce is found to be satisfactory.
- 7.2.5. If the scholar's performance in the comprehensive viva-voce is found to be unsatisfactory he/she may be given one more chance for reappearance. His/her Ph.D. registration will be cancelled if he/she fails on the second attempt.

8. MONITORING THE PROGRESS OF CANDIDATES

8.1. Submission of Progress Report and Fee Receipt:

- 8.1.1. Every PT/FT research scholar of KITS shall submit the progress report of the previous semester and the fee receipt of the current semester on or before the fifth working day of every semester, till the submission of the thesis.
- 8.1.2. If a scholar fails to do so on or before the fifth working day of every semester, a reminder notification will be sent from the Research Office through email to submit the progress report and fee receipt before the fifteenth working day with a late fee of Rs.500/-.
- 8.1.3. A scholar, who fails to respond to this, will be put on 'out-of-rolls' on the sixteenth working day. Subsequently, for re-joining the course, the scholar will have to pay the re-admission fee of Rs.1000/-. There will not be any extension in

the minimum or maximum duration of submission of the thesis instead of the period in which the student was 'out-of-rolls'.

8.1.4. If the scholar fails to respond throughout the semester to clear his 'out-of-rolls' by paying the fee and submitting the progress report, the registration of the scholar shall be automatically cancelled at the end of the semester.

8.2. Discussion with Supervisor:

8.2.1. Each FT scholar shall meet and discuss with his/her supervisor(s) at least once a week and report the progress of the research work. The scholar has to be present in KITS every working day and carry out the required work related to his/her Ph.D. programme.

8.2.2. The PTI scholars shall meet and discuss with his/her supervisor(s) at least once in a month and report the progress of the research work.

8.2.3. The PTE scholars shall meet and discuss with his/her supervisor(s) at least once in two months and report the progress of the research work if they are working far away from KITS.

8.2.4. The PTE scholars shall meet and discuss with his/her supervisor (s) at least once in six months and report the progress of the research work if they are working aboard.

8.2.5. All PTE scholars shall submit the NoC from their current employers every year on or before 31st July.

8.3. The supervisor shall arrange DC meetings with the external member once during the Zeroth meeting, followed by one during the literature survey and finally another during the Synopsis submission. If required, DC meetings other than those specified above can be conducted with the external member through video conferencing. The supervisor

shall send the minutes [Proforma VIIa] of the DC meeting along with the progress report to the HoD and a copy to the office of Academic Research. Irregularities in conducting DC meetings and submission of progress reports shall lead to the cancellation of registration of the candidate.

9. CANCELLATION OF REGISTRATION

The registration of a candidate, whose progress is either not satisfactory or who has exceeded the maximum period stipulated for the Ph.D. programme, or who fails to respond as given in section 8.1.4., shall be cancelled by the RAC based on the recommendation of the DC.

10. SYNOPSIS OF THESIS

10.1. On satisfactory completion of the research work and after the successful completion of all prescribed courses, seminar on literature survey, and the comprehensive viva-voce, the candidate shall submit six copies of the synopsis of the Ph.D. work to the DC through the supervisor. The earliest date for the submission of the synopsis shall be six months before the expected date of submission of the thesis as per the norms. However, the thesis can be submitted only after the completion of the specified minimum period.

10.2. The synopsis shall be submitted only after the research scholar has fulfilled the following:

Clause I

10.2.1. At least two papers are either published or accepted for publication in a refereed international journal (indexed in Scopus / Web of Science)

and

10.2.2. At least two papers are presented in international conferences conducted by institutions of national importance or other premier institutions (copy of the certificate endorsing the presentation shall be produced for record)

OR

Clause II

10.2.3. At least one patent is filed and published (through KU - IPR Cell)

and

10.2.4. One paper is published in a refereed international journal (indexed in Scopus / Web of Science)

OR

Clause III

10.2.5. At least one patent is licensed for technology transfer to an industry

and

10.2.6. One paper is published in the proceedings of an international conference

10.3. The viva-voce on synopsis shall be conducted by the DC in the presence of all faculty members and research scholars of the Department/Division concerned. After a satisfactory presentation of the research work reported in the synopsis, the DC shall forward a copy of the revised synopsis including the feedback based on the viva-voce to the Office of the Academic Research along with the panel of examiners (to be made available confidentially). There shall be three examiners each in three different panels: i) from outside India; ii) from outside Tamil Nadu, Pondicherry and Kerala; and iii) from within Tamil Nadu, Pondicherry and Kerala.

11. SUBMISSION OF THESIS

11.1. The thesis has to be checked for similarity using the plagiarism software as specified by the University from time to time, and the generated report signed by the supervisor and the HoD and submitted along with the thesis. The permissible limit of similarity is 20% excluding those reflecting the works of the author of the thesis under consideration.

11.2. The thesis shall be prepared in the format prescribed by KITS highlighting the original research work of the candidate leading to the discovery of new facts, methods or techniques or correlation of facts already known (analytical, experimental, etc.),

demonstrating a quality as to make a definite contribution to the advancement of knowledge. The candidate's ability to undertake independent research and appropriately present the findings with actual accomplishments of the work has to be plainly stated and honestly appraised.

- 11.3. The thesis shall be scrutinized by a senior faculty of the Department/Division concerned, nominated by the HoD who will assess the overall layout, contents and the quality of presentation of the thesis. The deviation, if any, shall be rectified by the scholar in consultation with the supervisor and the same shall be approved by the HoD.
- 11.4. Three copies of the thesis shall be prepared and submitted to the Office of Academic Research following the format and style prescribed. The thesis shall be submitted within six months of the approval of the synopsis by the DC. Under no circumstances, the submission of the thesis can be delayed. However, under extraordinary circumstances, an extension of two months may be permissible with the recommendations of the DC.
- 11.5. The thesis shall include a certificate from the concerned supervisor (and joint supervisor/coordinator, if any) to the effect that the thesis is a record of the bonafide research work carried out by the candidate under his/her/their supervision and guidance and that the work reported in the thesis has not been submitted elsewhere for a degree or diploma.
- 11.6. Instructions to candidates for submitting synopsis and thesis shall be laid down by the Office of Academic Research from time to time and the same shall be followed by the scholars.
- 11.7. Fee shall be paid by the candidates on an annual basis, till the submission of the thesis; the candidate shall submit a 'no dues' certificate from all concerned to the office of Academic Research. The Office of Academic Research will submit the thesis to the CoE for evaluation.

12. THESIS EVALUATION

12.1. The thesis shall be referred to two examiners from panels (i) and (ii/iii) (refer to section 10.3), as nominated by the Vice-Chancellor, from the names recommended by the DC.

12.2. The examiners are expected to send the evaluation report, in the prescribed format, within two months from the date of receipt of the thesis.

12.3. The examiner shall include in his/her report an overall assessment, placing the thesis in one of the following categories:

12.3.1. Recommended for the award of the degree of Doctor of Philosophy: highly commended/commended.

12.3.2. Revision required:

12.3.2.1. Revised thesis to be resubmitted.

12.3.2.2. Revised thesis not to be resubmitted.

12.3.3. Rejected.

12.4. The examiner shall give a report of about 300 words indicating the standard attained in case the recommendation is 12.3.1, the nature of revision in case the recommendation is 12.3.2 and the reasons in case the recommendation is 12.3.3.

12.5. If both the examiners recommend the thesis for the award of the degree, the thesis shall be provisionally accepted. Any minor revision, modification, etc., suggested by the examiners shall be carried out before the oral examination.

12.6. If both the examiners recommend rejection, the thesis shall be rejected and the registration of the scholar stands cancelled.

12.7. If one examiner recommends the award of the degree, while the other recommends rejection, then the thesis shall be referred to the third examiner, as nominated by the

Vice-Chancellor, from the panel of examiners. If two of the three examiners recommend the award, the thesis shall be provisionally accepted. If two of the examiners recommend rejection, the thesis shall be rejected and the registration of the scholar stands cancelled.

12.8. If any examiner recommends revision of the thesis, the candidate shall be permitted only once to revise and resubmit the thesis within 6 months and the revised thesis shall be referred to the same examiner only in the following contexts:

12.8.1. When the examiner recommends new experiments and major modifications involving new methodology, and also

12.8.2. The examiner insists on sending the thesis back to him/her after revision for offering his final recommendation which shall only be either recommended for the award or rejection.

12.8.3. In case, the examiner does not insist on sending the thesis back to him, the thesis shall be referred to the supervisor to ascertain the corrections carried out in the thesis as suggested by the examiners.

12.8.4. The supervisor shall study the report of the examiners and accordingly send a consolidated report to the CoE. The CoE, based on the approval of the Vice-Chancellor, shall constitute an oral examination board, within two months from the receipt of the reports from the supervisor.

12.9. Individual cases, not covered in the above clauses, shall be referred to the Vice-Chancellor. On reasons deemed fit, the Vice-Chancellor shall refer the matter to RAC, which in turn shall refer it to the Board of Management (BoM), if necessary.

13. ORAL EXAMINATION

13.1. The Oral Examination Board shall consist of:

13.1.1. Chairman (to be nominated by the Vice-Chancellor)

13.1.2. Indian Examiner (who evaluated the thesis) or any other Examiner (nominated by the Vice-Chancellor)

13.1.3. The Supervisor

13.1.4. Joint Supervisor / Coordinator (if any)

13.2. The viva-voce shall be conducted in KITS as an “open defense type” examination. The decision of the Board of Oral Examiners shall be final.

14. AWARD OF Ph.D. DEGREE

If the Board constituted for oral examination recommends, the candidate will be awarded the Ph.D. degree with the approval of BoM.

15. PUBLICATION OF THESIS

15.1. Papers arising out of the thesis may be published by the candidate.

15.2. The thesis as a whole shall not be published by the candidate without the specific approval of the competent authority.

15.3. The abstract of the thesis will be uploaded onto the internet by the CoE.

15.4. The same copy of the thesis in CD ROM duly certified by the Research Supervisor shall also be submitted to the Office of Academic Research immediately for depository with UGC and uploading in INFLIBNET.

16. THE ACT OF PLAGIARISM

16.1. In the case of research scholars, who have copied a dissertation/thesis/book for Ph.D. degree, his/her thesis shall be forfeited and his/her research registration shall be terminated in KITS and he/she shall be debarred from registering for any other programme in this institution.

16.2. For the abetment of the above-mentioned action, the recognition of his/her supervisor shall be withdrawn for a period of 5 years and he/she shall be debarred from acting as a guide of scholars for any of the research programmes of KITS for five years.

17. POWER TO MODIFY

Notwithstanding anything contained in these regulations, the BoM reserves the right to modify any of the above-said regulations from time to time.