



INDIAN INSTITUTE
OF TECHNOLOGY
PALAKKAD

**Regulations for
MS/PhD Program IIT Palakkad
(Applicable for students from August 2021 batch onwards)**

Revised M.S. and Ph.D. Regulations (July 19, 2021)

(Applicable for students from August 2021 batch onwards)

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Ph.D. ORDINANCES AND REGULATIONS

ORDINANCES

- O.1 A candidate who has qualified for the award of Master's degree of this institute or of a recognized institute or university in the discipline as prescribed in the regulations approved by the Senate is eligible to apply for the Ph.D. programme of the institute.
- O.2 A candidate who has qualified for the award of four year Bachelor's or integrated Master's Degree in Engineering/Technology/Sciences with exceptionally good academic background in the discipline as prescribed in the regulations approved by the Senate is also eligible to apply for Ph.D. programme in Engineering/Technology/Sciences /Humanities and Social Sciences of the institute.
- O.3 The award of the Ph.D. degree shall be in accordance with the regulations decided by the Senate of the institute.
- O.4 Every research scholar joining for the Ph.D. program will be monitored by the Doctoral Committee (DC) constituted as per the Ph.D. regulations.
- O.5 Any grievances by the scholar pursuing PhD and/or the guide will be handled by the Research Advisory Council (RAC). The RAC consists of three members including the Dean, Academics and two members nominated by the Chairperson, Senate.

REGULATIONS

R.1.Categories of Admission

Candidates will be admitted to the Ph.D. programme of the institute under one of the following categories:

Full-time students	
HTRA	With Half-Time Research Assistantship
Fellowship	With funding from agencies such as UGC, CSIR and industries
Project	With funding through a project administered by ICSR, with possibility of moving to HTRA as per institute rules.
Part-time students	

External	Sponsored by and employed in the parent industry/organisation having R&D facilities and recognized by DSIR or IIT Palakkad, or from national laboratories and CFTIs. List of institutions other than CFTIs, DSIR recognized organizations and National Laboratories, recognized by IIT Palakkad for external registration are available in Annexure V. Research scholars under the category will normally carry out part or all of his/her research work in the industry / organization / national laboratory employing the scholar under the supervision of a co-guide employed in the same organization and a guide at IIT Palakkad. The co-guide should have a PhD degree, in the absence of which a research coordinator belonging to the parent organisation should be designated.
IIT Palakkad Staff	A permanent staff member of IIT Palakkad with at least 3 years of experience at IIT Palakkad.

R.2. Eligibility

R.2.1. Qualification for Regular Full-Time Research

The minimum educational qualifications for admission to the Ph.D. programme of the institute are as follows:

2.1.1 Ph.D. in Engineering

- (a) Candidates with a Master's degree in Engineering/Technology or a Master's degree by Research in Engineering/Technology with a good academic record.
- (b) Candidates with Master's degree in Sciences with a good academic record and of exceptional merit are eligible for the relevant Engineering discipline. They should have a valid GATE score or UGC/CSIR-LS&JRF/NBHM or equivalent qualification in the relevant area tenable for the year of registration.
- (c) Candidates who have qualified for the award of four year Bachelor's degree in Engineering/Technology/Sciences with an exceptionally good academic record and valid GATE score in an eligible discipline will be considered for direct admission to Ph.D.
- (d) Candidates who have qualified for the award of four year Bachelor's or integrated Master's degree in Engineering/Technology/Sciences from a Centrally Funded Technical Institute (CFTI) with an exceptionally good academic record in an eligible discipline provided he/she has a minimum CGPA of 8 (7.5 for OBC- NCL and 7.0 for SC/ST/PwD) on a 10.0 point scale.

2.1.2 Ph.D. In Sciences

- (a) Master's degree in Engineering/Technology/Sciences with good academic record and valid GATE score or UGC/CSIR-LS&JRF/NBHM/INSPIRE/ICMR/JEST or other similar National Level Fellowships or equivalent qualification tenable for the current financial year in the relevant area.
- (b) Candidates who have qualified for the award of four year Bachelor's degree in Engineering/Technology/Sciences with an exceptionally good academic record and valid GATE score in an eligible discipline will be considered for direct admission to Ph.D.
- (c) Candidates who have qualified for the award of four year Bachelor's or integrated Master's degree in Engineering/Technology/Sciences from a Centrally Funded Technical Institute (CFTI) with an exceptionally good academic record in an eligible discipline provided he/she has a minimum CGPA of 8 (7.5 for OBC- NCL and 7.0 for SC/ST/PwD) on a 10.0 point scale.

2.1.3 Ph.D. in Humanities and Social Sciences

- (a) Master's degree in Humanities with good academic record and valid GATE score or UGC-NET/JRF or other similar National Level Fellowships or equivalent qualification tenable for the current financial year in the relevant area.
- (b) Master's degree in Engineering/Technology/Sciences with exceptionally good academic record with a valid GATE score.
- (c) Candidates who have qualified for the award of four year Bachelor' degree in Engineering/Technology/Sciences with an exceptionally good academic record and a valid GATE score will be considered for direct admission to Ph.D.
- (d) Candidates who have qualified for the award of four year Bachelor's or integrated Master's degree in Engineering/Technology/Sciences from a Centrally Funded Technical Institute (CFTI) with an exceptionally good academic record in an eligible discipline provided he/she has a minimum CGPA of 8 (7.5 for OBC- NCL and 7.0 for SC/ST/PwD) on a 10.0 point scale.

R.2.2 Institute staff members/Research scholars under QIP/Research Scholars under External Registration.

For Research Scholars in these categories, the minimum educational qualifications are the same as prescribed for full time research scholars. However, a valid GATE score or CSIR / UGC JRF or Lectureship / NBHM or equivalent qualification as applicable for regular full time research scholars shall not be required in these cases.

See Annexure IV for more details on admitting project staff for research degrees.

R.3. Selection Procedure

Eligible candidates possessing the minimum educational qualifications and satisfying

additional criteria set by the institute from time to time, will be called for an Interview and/or Test by the Selection Committees of the respective disciplines.

Based on the academic record and the performance of the candidates in the interview and/or test, the Selection Committee will recommend to the Chairperson, Senate the names of candidates found suitable for admission to the Ph.D. Programme.

R.3.1 International Students

Foreign nationals can only register as full-time scholars. Foreign nationals with degrees from Indian universities will be treated on par with Indian nationals for admission purposes. Foreign nationals with foreign degrees must meet the minimum educational requirements as given in R.2. Candidates are expected to have a good working knowledge of English.

R.4. Admission

Candidates whose selection is approved by the Chairperson, Senate will be admitted to the Ph.D. programme after payment of prescribed fees.

R.5. Guide/s

R.5.1. Allotment of Research Guide

- (a) The RAC shall decide upon the allotment of research scholars to guides. This allotment will be based on the preferences of the research scholar and of the proposed guide, and should be preferably done as soon as possible, but no later than the first enrolled semester. The BoR representative along with two other faculty members of a discipline will advise the students admitted in the discipline till advisors have been allocated.
- (b) There shall be not more than two guides for a research scholar.
- (c) A research scholar may have a co-guide from any other institute, in addition to the guide from IIT Palakkad. The co-guide thus chosen may be from another CFTI or from another recognized organisation in the area of work of the research scholar. The co-guide should hold a Ph.D., in the absence of which they may be appointed as a research coordinator. External co-guides/research coordinator will need to sign Intellectual Property Right (IPR) agreement and Non-Disclosure Agreement (NDA) as formulated by IIT Palakkad.
- (d) In case the guide goes on leave for more than three months, another faculty member of the institute needs to be identified by the guide to become an officiating guide of the research scholar. In case one of the guides resigns or otherwise ceases to be a faculty member of the institute, the RAC will appoint a new guide in consultation with the Doctoral Committee.
- (e) If the existing guide wants to appoint a co-guide at a later time, such induction of an additional guide needs to be approved by the Dean, Academics.

R.5.2. Eligibility to be a Guide

- (a) All regular faculty members of the institute.
- (b) A faculty member who is to retire within 3 years may be permitted to become a guide to a scholar only along with another faculty member as a guide, who is not likely to retire within 5 years. On retirement, the faculty member will continue to be one of the guides and will be invited to the Doctoral Committee meetings, synopsis meeting and viva voce examination.

R.6. Doctoral Committee (DC)

R.6.1 The research scholar in consultation with the guide/s will propose the Doctoral Committee within two weeks after the guide/s is allocated to the research scholar. DC will consist of the following:

- i. Research Guide/s
- ii. A minimum of two members with at least one member from within the stream and at least one from outside the stream/institute (preferably a subject matter expert).
- iii. Guide will act as a convener of the DC.
- iv. Chairperson of the DC will be nominated by the Dean, Academics from among the members who are not a guide.
- v. In case of external registrants, the co-guide/research coordinator will be invited to attend all the DC meetings.

R.6.2 Major functions of the DC

- (a) All DC members should attend the DC meetings.
- (b) The DC will meet to review the progress of the research scholar. The timeline for DC meetings has been given in R7. The DC may decide to meet in between the regular meetings as mentioned in R7 in the case of special requirements such as insufficient progress of the Research Scholar or on special requests of the guide/scholar.
- (c) The DC will also provide a grade of “Satisfactory” or “Not Satisfactory” after every meeting. Two successive “Not Satisfactory” may result in the termination of the registration.
- (d) The DC will provide suggestions for course corrections/improvements on the work done
- (e) The DC will participate in the comprehensive viva of the research scholar.
- (g) The DC will recommend and forward the Panel of thesis examiners to Dean, Academics
- (h) The DC will review the examiners report on the thesis
- (i) The DC will participate in the viva-voce.

R. 7 Timeline for DC meetings

Sl. No.	Event	Timeline
1	Zeroth DC	Should be conducted within two weeks after DC is formed. Can be conducted over email. DC will propose courses in addition to the minimum requirements (if necessary).
1	First DC meeting	Within one year of joining. In the first meeting, DC will discuss a broad area of proposed research.
2	Comprehensive examination	Within 12 months (but no later than 18 months) from the date of joining for full-time students. Up to additional six months for part time registrants. (Note: A comprehensive exam conducted within 12 months can be considered as the first DC meeting, and a separate DC meeting is not necessary).
3	Research proposal	Within 24 months from the date of joining. Up to additional six months for part time registrants.
4	Yearly DC meetings	Every year for the first 4 years. After 4 years, the DC should meet every six months.
5	Thesis submission	Between 30 months (min.) to 60 months (max.). See R.14.

R.8. Course Work

The research scholar is required to the course credits as outlined below:

- (a) Admitted with Masters Degree: Minimum 12 credits
- (b) Direct admission to PhD: Minimum 18 credits; Additional 6 credits if a student wants to get an MS+PhD degree.

The number of courses to be undergone by the research scholar over and above the minimum requirement prescribed is at the discretion of the DC. Research Methodologies seminars have to be attended by the students within the first year of the Ph.D. program.

All prescribed courses shall be at least of the postgraduate level. In case no suitable courses are available in the institute, the Chairperson, DC may allow courses of allied institutions to be taken for credit. A scholar can take a Directed Reading course upto 3 credits, which can be considered for credit requirements.

The DC may give credit to courses already undergone by the Research Scholar in the Institution or in sister institutions in the past four years, provided the course contents and the evaluation pattern are similar. Credit to courses already undergone by a Research Scholar will not be

considered if they were credited for the award of any previous degree. UG courses may be prescribed as additional courses. In all prescribed courses, the research scholar should earn a minimum grade equivalent to Grade C and maintain a minimum CGPA of 7.5 throughout the program.

R.9. Residential Requirement

In order to complete the courses and to have interactions with the guide at the institute it is mandatory that the research scholar under external registration resides at the institute for a minimum period of one semester. Over and above the mandatory requirement, the DC may recommend extended periods of residence at the institute.

R.10. Monitoring of Progress

A research scholar shall submit a detailed progress report before every DC meeting starting from the Research Proposal meeting. Scholars should submit the progress report through the guide/s to the members of DC before every meeting. This should be done well in advance (at least 2 weeks) of the DC meeting. On review/evaluation of the progress, the DC will make appropriate recommendations with regard to the research progress. Continuance of registration and continuance of Research Assistantship will be based on the recommendation of the DC. Inadequacy of effort/progress in two consecutive DC meetings can be a reason for cancellation of registration.

R.11. Comprehensive Examination

Every Ph.D. scholar shall appear for and perform satisfactorily in a Comprehensive Examination. The objective of the Comprehensive Examination is to test the general competence of the research scholar and the breadth of his/her knowledge in his/her discipline and areas related to his/her field of research.

The comprehensive examination shall be conducted by the Comprehensive Examination Committee, consisting of the DC members of the scholar and one additional member, nominated by the Chairperson, DC. The comprehensive examination shall be convened by the Chairperson, DC. The comprehensive examination shall consist of an oral examination. Discipline may propose to include a written test, in addition.

If the performance of a research scholar in the comprehensive examination in the first attempt is not satisfactory, he/she will be given one more opportunity to appear for the comprehensive examination within six months of the first attempt. If a research scholar fails to clear the comprehensive exam in two attempts, his/her registration shall be cancelled.

The Comprehensive Examination Committee shall intimate to the research scholar sufficiently in advance (say 2 months) the syllabus of the comprehensive examination, so as to enable the

scholar to adequately prepare for it.

The Ph.D. research scholars are normally expected to complete the comprehensive examination successfully within 18 months of joining the program. In exceptional cases the DC may allow a research scholar an additional 6 months to complete the comprehensive examination, with intimation to the Academic Section.

R.12. Research Proposal

After the successful completion of the comprehensive examination, there should be a detailed presentation of the Research Proposal that shall be open to all. This will be considered as the first Seminar by the research scholar. The progress by the research scholar will be evaluated in the subsequent meeting of the DC. The Research Proposal meeting of the DC shall be conducted within 24 months of joining the program. Any delay in conducting the Research Proposal meeting has to be approved by the Chairperson, DC and should be informed to the Academic Section. The research scholar shall make suitable modifications, and course corrections in the research work incorporating the suggestions of the DC in the Research Proposal meeting.

R.13. Enrolment

Enrolment in any semester defines the continuance of the research programme by the scholar and is mandatory. Other mandatory requirements such as payment of fees are also required to be fulfilled prior to enrolment. All the research scholars are required to enrol each semester on the stipulated date till the submission of thesis.

R.14. Duration for completion of research towards Ph.D.

The minimum period of study and research for regular full time research scholars at IIT Palakkad from the date of registration for the Ph.D. program to the date of submission of the thesis shall be 30 months. Research scholars should submit the thesis within a maximum of 5 years from the date of joining (excluding long leaves taken, if any). The DC may extend the period of submission of the thesis on a half yearly basis for a maximum of two years for regular full time research scholars. For research scholars in the remaining category, an additional year (a total of eight years, excluding long leaves taken, if any) may be allowed for submission of the thesis. After the stipulated period and extensions, the registration of the research scholar gets cancelled. Revoking the cancellation will be possible only with approval of the Chairperson, Senate.

R.15. Long leave from the programme

A scholar may take leave anytime from the programme. For this a written request has to be made to this effect by the scholar to the DC. Upon recommendation by the DC, the scholar may be permitted by the Dean, Academics to take leave from the programme for a semester

or longer for reasons of ill health or other valid grounds. Normally a scholar will be permitted to discontinue from the programme only for a maximum continuous period of two semesters. A letter permitting the leave will be issued by Dean, Academics. The research scholar will not be paid assistantship/fellowship during his/her period of leave, except maternity leave.

R.16. Exit from Ph.D. Programme

- (a) If a Ph.D. scholar in Engineering fails to pass the comprehensive examination in two attempts, then the scholar may be given an option to convert his/her registration from Ph.D. to M.S. programme in Engineering. Otherwise, the scholar's registration will be cancelled. The procedure for conversion is as follows:
- (i) The Ph.D. scholar has to give a written request to the DC to exercise the option for conversion of registration to the MS programme within two weeks after he/she is informed of the failure in the second attempt of the comprehensive examination.
 - (ii) The DC must give its recommendation to the Dean, Academics within a fortnight from the date of receipt of the request from the scholar.
 - (iii) Following the favourable recommendation of the DC and its subsequent approval by the Chairperson, Senate, the scholar will continue with the MS program.
- (b) If the DC, on continuous assessment, finds the scholar to be incompetent to continue research leading to his/her Ph.D. degree, then the DC may recommend for the scholar's exit from the Ph.D. programme. The procedure for conversion is as follows:
- (i) The Ph.D. scholar has to give a written request to the DC to exercise the option for conversion of registration to the M.S. programme within two weeks after the intimation by DC.
 - (ii) The DC must give its recommendation to the Dean, Academics within a fortnight from the date of receipt of the request from the scholar.
 - (iii) Following the favourable recommendation of the DC and its subsequent approval by the Chairperson, Senate, the scholar will continue with the same guide(s) for the MS program.
- (c) The Ph.D. scholar, due to valid personal reasons, may exit from the Ph.D. programme with an MS degree. The procedure for conversion is as follows:
- (i) The Ph.D. scholar has to give a written request with proper justification to the DC at least 6 months before the exit, but not before the student has completed two-and-half years (excluding the period of long leave, if any) in the programme.

- (ii) The DC must give its recommendation to the Dean, Academics within a fortnight from the date of receipt of the request from the scholar.
- (iii) Following the favourable recommendation of the DC and its subsequent approval by the Chairperson, Senate, the scholar may be awarded an MS degree if all the requirements of MS degree are completed.

In all the three cases above, if the scholar has not completed the requirements of the MS degree, then the scholar shall convert his/her registration to an MS program. In such cases, the duration of the scholar's MS programme shall not be more than 3 years from the date of joining the PhD programme. If the duration exceeds 3 years at the time of exit from the PhD program, the scholar should complete all requirements for the MS program within 6 months from the date of conversion. The award of Half Time Research Assistantship (HTRA) to the scholar, from the date of conversion, will be as applicable for the MS programme.

- (d) In case the final thesis of the PhD scholar is not commended by two external examiners, then on the recommendation of the DC, and subsequent approval by Chairperson, Senate, the scholar may be awarded an MS degree.
- (e) For a scholar pursuing PhD in Sciences, MS by Research degree may be available as an exit option. The requirements and procedure for opting for MS by Research in this case are the same as that in the MS program in Engineering.
- (f) For a scholar pursuing PhD in Humanities and Social Sciences MA by Research degree may be available as an exit option. The requirements and procedure for opting for MA by Research in this case are the same as that in the MS program in Engineering.

R.17. Cancellation of Registration

- (a) If the DC finds that the progress of the scholar is unsatisfactory over two consecutive DC meetings separated by at least six months, or if the scholar has failed to enrol, then the registration of the scholar is liable to be cancelled.
- (b) If the scholar is found to be involved in any academic malpractice, which may include (but not limited to), fabrication of results, plagiarizing, or in other forms of academic dishonesty, then the registration of a scholar may be cancelled upon the recommendation of the DC, after investigation by the disciplinary committee.
- (c) The registration of a scholar who has not submitted the thesis before the end of the maximum permissible period as listed in R.14 will be cancelled.

R.18. Submission of Synopsis and Publication of Research Output

At the time of submission of synopsis, a PhD scholar should have at least one peer-reviewed

research article published/accepted, based on their PhD research work, in avenues recognised in the respective fields.

The scholar is permitted to submit the synopsis on satisfactory completion of the prescribed courses, the comprehensive examination and research work. Prior to submission of the synopsis, the PhD scholar is required to give at least two seminar talks on the topic of his/her research. The first seminar, which can also be the research proposal, must be given within 24 months (excluding long leave, if any) from the date of joining to the program.

The second seminar should constitute the important components of the scholar's research work. This seminar is open to all within the institute and any comments/suggestions that arise from this seminar may be incorporated into the thesis, after due consideration by the student and the guide(s). A notice of the second seminar must be displayed at least one week in advance of the seminar. The intimation that the second seminar has been delivered successfully should be communicated by the Chairperson, DC to the Academic Section.

In addition, a scholar who meets the above requirements shall present his/her work before the DC in a Synopsis meeting. The synopsis, along with the first draft of the thesis, in the required format should be submitted to the DC, at least one week prior to the meeting. The DC will, if it approves the work reported in the synopsis, permit the research scholar to submit the thesis. The DC will also recommend a panel of at least four examiners from Indian institutes/universities (outside the parent institute), and at least four examiners from foreign institutes/universities to the Academic Section.

R.19. Submission of Thesis

- (a) The research scholar shall, within one month of the approval of the synopsis, submit the requisite copies of the thesis and abstract of the thesis to the Academic Section. The DC may consider and grant additional time (a maximum of three months) beyond the one month period, on request from the scholar, for valid reasons.
- (c) The guidelines for the use of anti-plagiarism software for the PhD thesis are as follows: The scholar has to submit a plagiarism-check report, endorsed by the guide(s), generated using a plagiarism check software provided by the institute. The scholar may obtain a special relief from this checking from the Dean, Academics on grounds of IP implications or National Security, if applicable.
- (d) If a research scholar submits the thesis for external review within the stipulated period, then the assistantship/fellowship may continue up to the date of successful conclusion of viva voce Examination, or completion of 5 years (excluding long leave, if any) from the date of joining,

whichever is earlier.

R.20. Panel of Examiners

- (a) The thesis shall be referred to two examiners chosen by the Dean, Academics from among the panel of examiners, recommended by the DC at its synopsis meeting.
- (b) In case, both experts chosen are Indian examiners, both will be invited for the viva-voce examination, and at least one should participate.

R. 21. Thesis Report

- (a) The examiners are expected to send the report on the thesis within two months from the date of receipt of the thesis. In case of undue delay in receiving the thesis report, Dean, Academics may appoint another examiner from the recommended list of examiners in place of the previous examiner, for evaluating the thesis.
- (b) If one of the two thesis examiners reports the thesis as not commended, the thesis shall be referred to a third examiner from the recommended panel for evaluation. If two examiners, after referral to a third examiner if necessary, report the thesis as not commended, exit provisions as in R.16 may be made available if recommended by the DC.
- (c) If an examiner suggests revisions or resubmission of the thesis after revision, the research scholar will be allowed to resubmit the thesis within the time stipulated by the DC, failing which, the revised thesis will not be accepted and his/her registration will be cancelled.
- (d) If reports of two examiners, after referral to a third examiner if necessary, declare the thesis as 'commended', the convener of the DC will arrange for the conduct of viva voce.
- (e) The soft copy of the revised thesis, the external review reports, and the response of the scholar to the review comments, should be submitted to the Academic Section for circulation to members of the DC and viva voce board prior to the viva voce examination.
- (f) After all the corrections are implemented in the thesis, the scholar will defend his/her work in an open defence that is open to the public. The viva voce board will also be part of the open defence followed by a closed door viva voce examination.

The viva voce board will be formed by the Dean, Academics. The board will consist of the guide(s), one of the thesis examiners and one internal examiner from the institute. The internal examiner, nominated by the Dean, Academics, will chair the viva voce examination. All members of the DC will be invitees to the viva-voce board. If the external examiner is unable to be physically present in the viva voce board, appropriate electronic media may be used.

R.22. Viva Voce Examination

- (a) The viva voce board will examine the scholar on his/her thesis work and evaluate his/her performance as satisfactory or otherwise. The Board may ask the research scholar to be present for a second meeting if the performance at the first meeting is not satisfactory.

- (b) If the viva voce board on the second occasion also evaluates the performance of the research scholar as unsatisfactory, the matter will be referred to the Chairperson, Senate for a decision.
- (c) The viva voce board may also recommend revision to be made in the final version of the thesis after taking into consideration suggestions of the examiners who evaluated the thesis and based on the discussion at the viva voce.
- (d) The Chairperson of the viva voce board shall forward the thesis to the academic section certifying that the revisions recommended by the viva voce board, if any, have been incorporated in the copy of the thesis along with the report of the viva voce board.
- (e) The scholar shall submit a soft copy of the final version of thesis in the standard template of the institute after the viva voce board recommends the award of the PhD Degree. A soft copy of the thesis shall be deposited to the Central Library for internal access only.

R.23. Award of the PhD Degree

If the performance of the research scholar in the viva voce is satisfactory, and on successful completion of all the thesis requirements, he/she will be awarded PhD degree on the recommendation of the Senate and with the approval of the Board of Governors of the institute.

R.24. Residual powers

In all other cases, not covered by the above Regulations, the matter will be referred to the Dean, Academics.

MASTER OF SCIENCE BY RESEARCH (MS). ORDINANCES AND REGULATIONS

ORDINANCES

- O.1 A candidate who has qualified for the award of four year Bachelor's degree in Engineering/Technology/Sciences or Master's degree in Sciences of this institute or of a recognized institute or university in the discipline as prescribed in the regulations approved by the Senate is eligible to apply for the Masters of Science by Research (MS) programme of the institute.
- O.2 The award of the MS degree shall be in accordance with the regulations decided by the Senate of the institute.
- O.4 Every research scholar joining for the MS program will be monitored by the MS Committee (MSC) constituted as per the MS regulations.
- O.5 Any grievances by the scholar pursuing MS and/or the guide will be handled by the Research Advisory Council (RAC). The RAC consists of three members including the Dean, Academics and two members nominated by the Chairperson, Senate.

REGULATIONS

R.1. Categories of Admission

Candidates will be admitted to the MS programme of the institute under one of the following categories:

Full-time students	
HTRA	With Half-Time Research Assistantship
Fellowship	With funding from agencies such as UGC, CSIR and industries
Project	With funding through a project administered by ICSR, with possibility of moving to HTRA as per institute rules.
Part-time students	
External	Sponsored by and employed in the parent industry/organisation having R&D facilities and recognized by DSIR or IIT Palakkad, or from national laboratories and CFTIs. List of institutions other than CFTIs, DSIR recognized organizations and National Laboratories, recognized by IIT Palakkad for external registration are available in Annexure V. Research scholars under the category will normally carry out part or all of his/her

	research work in the industry / organization / national laboratory employing the scholar under the supervision of a co-guide employed in the same organization and a guide at IIT Palakkad. The co-guide should have a PhD degree in Engineering/Technology, in the absence of which a research coordinator belonging to the parent organisation should be designated.
IIT Palakkad Staff	A permanent staff member of IIT Palakkad with at least 3 years of experience at IIT Palakkad.

R.2. Eligibility

R.2.1. Qualification for Regular Full-Time Research

The minimum educational qualifications for admission to the MS programme of the institute are as follows:

- (a) Candidates with a four year Bachelor's degree in Engineering/Technology/Sciences or a Master's degree in sciences with a valid GATE score in relevant discipline.
- (b) Candidates, with a good academic record, having memberships in professional bodies, approved by the MoE/UGC/AICTE, are also eligible for admission to the MS programme of their parent discipline provided they have a valid GATE score and have passed both part A and part B of the membership examinations.
- (c) Candidates who have qualified for the award of four year Bachelor's degree in Engineering/Technology/Sciences from a Centrally Funded Technical Institute (CFTI) with an exceptionally good academic record in an eligible discipline provided he/she has a minimum CGPA of 8.0 (7.5 for OBC- NCL and 7.0 for SC/ST/PwD) on a 10.0 point scale.

R.2.2 Institute staff members/Research scholars under QIP/Research Scholars under External Registration.

For Research Scholars in these categories, the minimum educational qualifications are the same as prescribed for full time research scholars. However, valid GATE score or CSIR / UGC JRF or Lectureship / NBHM or equivalent qualification as applicable for regular full time research scholars shall not be required in these cases.

See Annexure IV for more details on admitting project staff for research degrees.

R.3. Selection Procedure

Eligible candidates possessing the minimum educational qualifications and satisfying additional criteria set by the institute from time to time, will be called for an interview and/or test by the Selection Committees of the respective disciplines.

Based on the academic record and the performance of the candidates in the interview and/or test, the Selection Committee will recommend to the Chairperson, Senate the names of candidates found suitable for admission to the MS Programme.

R.3.1 International Students

Foreign nationals can only register as full-time scholars. Foreign nationals with degrees from Indian universities will be treated on par with Indian nationals for admission purposes. Foreign nationals with foreign degrees must meet the minimum educational requirements as given in R.2. Candidates are expected to have a good working knowledge of English.

R.4. Admission

Candidates whose selection is approved by the Chairperson, Senate will be admitted to the MS programme after payment of prescribed fees.

R.5. Guide/s

R.5.1. Allotment of Research Guide

- (a) The RAC shall decide upon the allotment of research scholars to guides. This allotment will be based on the preferences of the research scholar and of the proposed guide(s), and should be preferably done as soon as possible, but no later than the first enrolled month. The BoR representative of a discipline will advise the students admitted in the discipline till advisors have been allocated.
- (b) There shall be not more than two guides for a research scholar.
- (c) A research scholar may have a co-guide from any other institute, in addition to the guide from IIT Palakkad. The co-guide thus chosen may be from another CFTI or from another recognized organisation in the area of work of the research scholar. The co-guide should hold a PhD degree in Engineering/technology, in the absence of which they may be appointed as a research coordinator. External co-guides/research coordinator will need to sign Intellectual Property Right (IPR) agreement and Non-Disclosure Agreement (NDA) as formulated by IIT Palakkad.
- (d) In case the guide goes on leave for more than three months, another faculty member of the institute needs to be identified by the guide to become an officiating guide of the research scholar. In case one of the guides resigns or otherwise ceases to be a faculty member of the institute, the RAC will appoint a new guide in consultation with the MS Committee.
- (e) If the existing guide wants to appoint a co-guide at a later time, such induction of an additional guide needs to be approved by the Dean, Academics.

R.5.2. Eligibility to be a Guide

- (a) All regular faculty members of the institute.
- (b) A faculty member who is to retire within 2 years may be permitted to become a guide to a scholar only along with another faculty member as a co-guide, who is not likely to retire

within 3 years. On retirement, the faculty member will continue to be one of the guides and will be invited to the MS Committee meetings, synopsis meeting.

R.6. MS Committee (MSC)

R.6.1 The research scholar in consultation with the guide/s will propose the MS Committee within two weeks after the guide/s is allocated to the research scholar. The MSC will consist of the following:

- i. Research Guide/s
- ii. A minimum of two members, with at least one member from within the stream and at least one from outside the stream/institute (preferably a subject matter expert).
- iii. Guide will act as a convener of the MSC meetings.
- iv. Chairperson of the MSC will be nominated by the Dean, Academics from among the members who are not a guide.
- v. In case of external registrants, the co-guide/research coordinator will be invited to attend all the MSC meetings.

R.6.2 Major functions of the MSC

- (a) All MSC members should attend the MSC meetings.
- (b) The MSC will meet to review the progress of the research scholar. The timeline for MSC meetings has been given in R7. The MSC may decide to meet in between the regular meetings as mentioned in R7 in the case of special requirements such as insufficient progress of the research scholar or on special requests of the guide/scholar.
- (c) The MSC will also provide a grade “Satisfactory” or “Not Satisfactory” after every meeting. Two successive “Not Satisfactory” may result in the termination of the registration.
- (d) The MSC will provide suggestions for course corrections/improvements on the work done
- (g) The MSC will recommend and forward the panel of thesis examiners to the Dean, Academics
- (h) The MSC will review the examiners report on the thesis

R. 7 Timeline for MSC meetings

Sl. No.	Event	Timeline
1	First MSC meeting	Within one year from joining. In the first meeting, MSC will discuss a broad area of proposed research and propose courses in addition to minimum requirements (if necessary).
2	Yearly MSC meetings	Every year for the first 2 years. After 2 years, the MSC should meet every six months.
3	Thesis submission	Between 18 months (minimum) to 24 months. See R.12.

R.8. Course Work

The research scholar is required to complete a minimum of 15 credits of coursework in consultation with Guide(s) and MSC. The number of courses to be undergone by the research scholar over and above the minimum requirement prescribed is at the discretion of the MSC. Research Methodologies seminars have to be attended by the students within the first year of MS program.

All prescribed courses shall be at least of the postgraduate level. In case no suitable courses are available, the Chairperson, MSC may allow courses of allied departments/institutions to be taken for credit. A scholar can take a Directed Reading course upto 3 credits, which can be considered for credit requirements.

The MSC may give credit to courses already undergone by the research scholar in the institution or in sister institutions in the past four years, provided the course contents and the evaluation pattern are similar. Credit to courses already undergone by a research scholar will not be considered if they were credited for the award of any previous degree. UG courses may be prescribed as additional courses. In all prescribed courses, the research scholar should earn a minimum grade equivalent to Grade C and maintain a minimum CGPA of 7.5 throughout the program.

R.9. Residential Requirement

In order to complete the courses and to have interactions with the guide at the institute it is mandatory that the research scholar under external registration resides at the institute for a minimum period of one semester. Over and above the mandatory requirement, the MSC may recommend extended periods of residence at the institute.

R.10. Monitoring of Progress

A research scholar shall submit a detailed progress report before every MSC meeting. The scholar should submit the progress report through the guide/s to the members of MSC before every meeting. This should be done well in advance (at least 2 weeks) of the MSC meeting. On review/evaluation of the progress, the MSC will make appropriate recommendations with regard to the research progress. Continuance of registration and continuance of Research Assistantship will be based on the recommendation of the MSC. Inadequacy of effort/progress in two consecutive MSC meetings can be a reason for cancellation of registration.

R.11. Enrolment

Enrolment in any semester defines the continuance of the research programme by the scholar, and is mandatory. Other mandatory requirements such as payment of fees are also required

to be fulfilled prior to enrolment. All the research scholars are required to enrol each semester on the stipulated date till the submission of thesis.

R.12. Duration for completion of research towards MS

The minimum period of study and research for regular full time research scholars at IIT Palakkad from the date of joining for the MS program to the date of submission of the thesis shall be 18 months. Research scholars should submit the thesis within a maximum of 2 years from the date of joining (excluding long leaves taken, if any). The MSC may extend the period of submission of the thesis on a half yearly basis for a maximum of one year for regular full time research scholars. For research scholars in the remaining category, an additional year (a total of four years, excluding long leaves taken, if any) may be allowed for submission of the thesis. After the stipulated period and extensions, the registration of the research scholar gets cancelled. Revoking the cancellation will be possible only with approval of the Chairperson, Senate.

R.13. Long leave from the programme

A scholar may take leave anytime from the programme. For this a written request has to be made to this effect by the scholar to the MSC. Upon recommendation by the MSC, the scholar may be permitted by the Dean, Academics to take leave from the programme for a semester or longer for reasons of ill health or other valid grounds. Normally a scholar will be permitted to discontinue from the programme only for a maximum continuous period of two semesters. A letter permitting the leave will be issued by Dean, Academics. The research scholar will not be paid assistantship/fellowship during his/her period of absence.

R. 14 Relief from MS programme to take up job

An MS research scholar who gets a job offer can get relief from the programme, while keeping his/her registration alive on payment of the requisite fees every semester, on the following conditions:

A scholar who takes up a job will be relieved on request, based on the recommendations of MSC, if he/she has completed the minimum residential requirement and coursework. The renewal of the registration for every year/semester will be considered only if the MS finds the progress to be satisfactory and recommends continuance of registration.

The research scholar will not be paid assistantship/fellowship during the period of absence. The maximum allowed duration for completing the program should not exceed 4 years from the date of joining.

R.15. Cancellation of Registration

- (a) If the MSC finds that the progress of the scholar is unsatisfactory over two consecutive MSC meetings separated by at least three months,, or if the scholar has failed to enrol, then the

registration of the scholar is liable to be cancelled.

- (b) If the scholar is found to be involved in any academic malpractice, which may include (but not limited to), fabrication of results, plagiarizing, or in other forms of academic dishonesty, then the registration of a scholar may be cancelled upon recommendation of the MSC, after investigation by the disciplinary committee.
- (c) The registration of a scholar who has not submitted the thesis before the end of the maximum permissible period as listed in R.12 will be cancelled.

R.16. Submission of Synopsis

The scholar is permitted to submit the synopsis on satisfactory completion of the prescribed courses and research work. It is recommended that at the time of submission of synopsis, an MS scholar should have one peer-reviewed research article submitted, based on their MS research work, in avenues recognised in the respective fields.

Prior to submission of the synopsis, the MS scholar is required to give at least one seminar talk on the topic of his/her research. The seminar is open to all within the institute and any comments/suggestions that arise from this seminar may be incorporated into the thesis, after due consideration by the student and the guide(s). A notice of the seminar must be displayed at least one week in advance of the seminar. The intimation that the seminar has been delivered successfully should be communicated by the Chairperson, MSC to the Academic Section.

In addition, a scholar who meets the above requirements shall present his/her work before the MSC in a Synopsis meeting. The synopsis, along with the first draft of the thesis, in the required format should be submitted to the MSC, at least one week prior to the meeting. The MSC will, if it approves the work reported in the synopsis, permit the research scholar to submit the thesis. The MSC will also recommend a panel of at least four examiners from IIT Palakkad or outside to the Academic Section.

R.17. Submission of Thesis

- (a) The research scholar shall, within one month of the approval of the synopsis, submit the requisite copies of the thesis and abstract of the thesis to the Academic Section. The MSC may consider and grant additional time (a maximum of three months) beyond the one month period, on request from the scholar, for valid reasons.
- (c) The guidelines for the use of anti-plagiarism software for the MS thesis are as follows: The scholar has to submit a plagiarism-check report, endorsed by the guide(s), generated using a plagiarism check software provided by the institute. The scholar may obtain a special relief from this checking from the Dean, Academics on grounds of IP implications or National Security, if applicable.

- (d) If a research scholar submits the thesis for external review within the stipulated period, then the assistantship/fellowship may continue up to the date of award of MS degree, or completion of 2 years (excluding long leave, if any) from the date of joining, whichever is earlier.

R.18. Panel of Examiners

The thesis shall be referred to two examiners chosen by the Dean, Academics from among the panel of examiners, recommended by the MSC at its synopsis meeting.

R. 19. Thesis Report

- (a) The examiners are expected to send the report on the thesis within six weeks from the date of receipt of the thesis. In case of undue delay in receiving the thesis report, Dean, Academics may appoint another examiner from the recommended list of examiners in place of the previous examiner, for evaluating the thesis.
- (b) If one of the two thesis examiners reports the thesis as not commended, the thesis shall be referred to a third examiner from the recommended panel for evaluation. If two examiners, after referral to a third examiner, if necessary, report the thesis as not commended, the scholar will be denied his/her degree and his/her registration will be cancelled.
- (c) If an examiner suggests revisions or resubmission of the thesis after revision, the research scholar will be allowed to resubmit the thesis within the time stipulated by the MSC, failing which, the revised thesis will not be accepted and his/her registration will be cancelled.
- (d) If reports of two examiners, after referral to a third examiner if necessary, declare the thesis as 'commended', the MSC will consider the reports and recommend modifications, if any, to the thesis.
- (e) The soft copy of the revised thesis, the external review reports, and the response of the scholar to the review comments, should be submitted to the Academic Section for circulation to members of the MSC for consideration of award of the degree.

R.20. Award of the MS by Research Degree

On recommendation of the MSC and the Senate and with the approval of the Board of Governors of the institute the scholar will be awarded the Master of Science by Research (MS) degree.

R.21. Residual powers

In all other cases, not covered by the above Regulations, the matter will be referred to the Dean, Academics.

Upgradation of registration from MS to PhD/ MS+PhD dual degree program**Eligibility**

Meritorious scholar who have registered for the MS programme at IIT Palakkad are eligible to upgrade their registration to the PhD programme in the same discipline if they satisfy the following criteria:

- (a) The scholar should have been registered for a minimum of 2 semesters in the MS programme and at the time of request for upgradation should have completed at least 9 of 15 prescribed credits of the MS program.
- (b) Minimum CGPA of 8 (7.5 for OBC-NCL and 7 for SC/ST/PwD) on a 10 point scale in the prescribed courses in the MS Programme.

Procedure for upgradation

- (a) The scholar should make a written request to the MSC. At the time of request, the scholar should clearly state if he/she wants to upgrade to
 - (i) PhD only (under the same guide(s)),
 - (ii) MS+PhD dual degree (under the same guide(s)) or
 - (iii) separate MS and PhD degrees.
- (b) The MSC will consider the request, made by the scholar, for upgradation to PhD and make its recommendation to the Chairperson, Senate. If approved, a Doctoral Committee, as per PhD Regulations, will be constituted to replace the MSC. From the date of upgradation, the program of the scholar will be governed by the PhD Regulations of the institute. The candidate will be treated on par with one with direct admission to PhD, but with the residency period and course work completed under the MS registration as decided by the MSC credited to the PhD programme, except for option (iii).
- (c) In case the scholar wants separate MS and PhD degrees (option (iii)), he/she should complete all coursework requirements for MS and submit the MS thesis for external review. The date of upgradation to PhD, if approved, will be the date of submission of the MS thesis for external review or the date of approval by the Chairperson, Senate whichever is later. The scholar will have to complete additional courses as per PhD regulations.

Fellowship

1. A scholar upgrading to the PhD program is entitled to a regular PhD fellowship from the date of approval of upgradation by the Chairperson, Senate and as per PhD regulations.

2. However, for students who choose to obtain their MS degree and then convert to the PhD program, the difference in fellowship from the time of upgradation to the time MSC recommends for the award of MS degree, will be paid as arrears.

Exit from PhD/MS+PhD dual degree program

An MS scholar, upgrading to the PhD program will be permitted to exit the program with an MS degree alone, any time after their 6th semester (from the date of joining the MS programme) upon recommendation by the DC, provided they complete all the requirements for the MS program as per MS regulations.

Award of Degree

Upon completion of all requirements, and on the recommendation of the Senate and with the approval of the Board of Governors of the institute, the degrees awarded will be as follows:

1. A scholar upgrading to the PhD only program (option (i)) will be awarded a PhD degree.
2. A scholar upgrading to the MS+PhD dual degree program (option (ii)) will be awarded a MS+PhD dual degree.
2. A scholar who chooses to obtain an MS degree and then convert to the PhD program (option (iii)) will be awarded separate degrees for their MS and PhD programs, at the end of the respective programs.

Upgradation of registration from MSc to MSc+PhD dual degree program**Eligibility**

Meritorious scholar who have registered for the MSc programme at IIT Palakkad are eligible to upgrade their registration to the PhD programme in any discipline in IIT Palakkad which accepts the corresponding M.Sc. degree as an eligibility for PhD if they satisfy the following criteria:

- (a) The scholar should have been registered for a minimum of 3 semesters in the MSc programme and at the time of request for upgradation should have completed at least 50 credits coursework of the MSc program.
- (b) Minimum CGPA of 8/10 (7.5 for OBC-NCL and 7 for SC/ST/PwD) with no pending backlogs in the prescribed courses in the MSc Programme.

Procedure for upgradation

- (a) The scholar should make a written request to the Dean, Academics at the start of his/her fourth semester.
- (b) The selection will be done through a direct interview conducted by a panel of faculty members formed by the target discipline.

Fellowship

A scholar upgrading to the MSc+PhD dual degree program is entitled to regular PhD fellowship from the date of approval of upgradation by the Chairperson, Senate and as per PhD regulations. While applying the PhD regulations, the scholar's duration in the PhD programme will be interpreted as the time spent by the scholar from their date of upgradation to MSc+PhD dual degree.

Course requirements

- i. The student should complete at least 50 credits of coursework in the original discipline towards the M.Sc. programme by the end of three semesters from the date of registration to M.Sc. programme. She will not need to do an M.Sc. project.
- ii. In addition, she should separately complete the minimum course requirements for PhD as recommended by the doctoral committee.

Exit from dual degree

The students who upgrade to MSc+PhD dual degree will be permitted to exit with the MSc degree alone anytime after their 6th semester (from the date of joining the MSc programme) provided they complete all the course requirements for the regular M.Sc. programme including the project. The research work done during the PhD programme can be part of the project. The project work has to be approved by the original discipline in which the student registered before the award of the M.Sc. degree.

Award of Degree

Upon completion of all requirements, and on the recommendation of the Senate and with the approval of the Board of Governors of the institute, an MSc+PhD dual degree will be awarded. The MSc part of the degree will be awarded in the original MSc discipline.

Upgradation of registration from MTech to MTech+PhD dual degree program**Eligibility**

Meritorious scholar who have registered for the MTech programme at IIT Palakkad are eligible to upgrade their registration to the PhD programme in any discipline in IIT Palakkad which accepts the corresponding MTech degree as an eligibility for PhD if they satisfy the following criteria:

- (a) The scholar should have been registered for a minimum of 2 semesters in the MTech programme and at the time of request for upgradation should have completed all the courses of the MTech program.
- (b) Minimum CGPA of 8 (7.5 for OBC-NCL and 7 for SC/ST/PwD) on a 10 point scale with no pending backlogs in the prescribed courses in the MTech Programme.

Procedure for upgradation

- (a) The scholar should make a written request to the Dean, Academics any time after the second semester.
- (b) The selection will be done through a direct interview conducted by a panel of faculty members formed by the target discipline.

Fellowship

A scholar upgrading to the MTech+PhD dual degree program is entitled to regular PhD fellowship from the date of approval of upgradation by the Chairperson, Senate and as per PhD regulations. While applying the PhD regulations, the scholar's duration in the PhD programme will be interpreted as the time spent by the scholar from their date of upgradation to MTech+PhD dual degree.

Course requirements

- i. The student should complete all the courses in the original discipline towards the MTech programme at the time of upgradation. She will not need to do an MTech project.
- ii. In addition, they should separately complete the minimum course requirements for PhD as recommended by the doctoral committee.

Exit from dual degree

The students who upgrade to MTech+PhD dual degree will be permitted to exit with the MTech degree alone anytime after their 6th semester (from the date of joining the MTech programme) provided they complete all the course requirements for the regular MTech programme including the project. The research work done during the PhD programme can be part of the project. The project work has to be approved by the original discipline in which the student registered before the award of the MTech degree.

Award of Degree

Upon completion of all requirements, and on the recommendation of the Senate and with the approval of the Board of Governors of the institute, an MTech+PhD dual degree will be awarded. The MTech part of the degree will be awarded in the original MTech discipline.

Regulations for Admission of Project Staff to Research Program

These regulations are applicable when a Project Staff wants to apply for the Ph.D./ MS program, with the possibility of switching to the HTRA category after completion of the project duration.

The MS/Ph.D. topic of the project staff after admission should be preferably closely related to the topic of the sponsored project. An MS/Ph.D. topic totally different from the theme of the project is strongly discouraged.

MS/Ph.D. guide should be the Principal Investigator of the project (or the Co-Investigator of the same project subject to the agreement of the Principal Investigator). Only under exceptional circumstances can the research guide be another faculty member other than the PI or Co- Investigator(s).

The minimum duration of the project funding remaining at the time of registration of the Scholar should be 1 year for M.S and 2 years for Ph.D. It is required the student will be financially supported through the project for the minimum period as mentioned or the project duration, whichever is longer.

Procedure for selection

The method of selection should be the same as that for regular scholars. After selection, the candidate shall continue to receive the salary from the project. While the candidate is paid from the project he/she is not expected to do halftime assistantship (apart from the project work). After the end of the project duration, the candidate may be considered for an HTRA fellowship for the remaining period of the research programme. After the completion of the financial support from the project, if the scholar wants to convert to HTRA, conversion to HTRA may be done on a case-to-case basis, by the Research Advisory Committee on recommendation of the DC/MSC.

A project staff, interested in applying for the research programs, may be encouraged to do courses before applying and while working on the project. Credits to such courses, if any, will be given as per the MS/PhD regulations.

List of institutions other than CFTIs, National Laboratories, recognized by IIT Palakkad for external registration

1. CWRDM (Centre for Water Resources Development and Management)
2. National Transportation Planning and Research Centre (NATPAC)