

# **Regulations for**

MS (by Research)/PhD Programme IIT Palakkad

(Applicable for students from August 2021 batch onwards)

# Revised Master of Science by Research (MS) and Doctor of Philosophy (PhD) Regulations

# (Originally approved on July 19, 2021) Last modified: As per the 34th Meeting of the Senate Version: 2025-10-15

(Applicable for students from August 2021 batch onwards)

- 1. PhD ORDINANCES AND REGULATIONS
- 2. MS (by Research) ORDINANCES AND REGULATIONS
- **3.** Annexure I: Upgradation of registration from MS (by Research) to PhD/ MS+PhD dual degree programme
- 4. Annexure II: Upgradation of registration from MSc to MSc+PhD dual degree programme
- 5. Annexure III: Upgradation of registration from MTech to MTech+PhD dual degree programme
- 6. Annexure IV: Regulations for Admission of Project Staff for Research Degrees
- 7. Annexure V: Regulations for Admission to MS (by Research) Programme under "Project-NHTRA" category
- 8. Annexure VI: Upgradation from MSc to MSc+MS (by Research) dual degree programme
- **9.** Annexure VII: Upgradation from MSc+Master of Science (by Research) Dual Degree Programme to MSc+PhD Dual Degree Programme
- 10. Annexure VIII: Regulations for Admission to PhD Programme under "Project-NHTRA" category
- 11. Annexure IX: List of institutions other than CFTIs, National Laboratories, recognized by IIT Palakkad for external registration

# PhD 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 PhD 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/Architecture/Planning<sup>1</sup>/Humanities and Social Sciences with exceptionally good academic record in the discipline as prescribed in the regulations is also eligible to apply for PhD programme in Engineering/Technology/Sciences /Humanities and Social Sciences of the Institute.
- O.3 The award of the PhD degree shall be in accordance with the regulations decided by the Senate of the Institute.
- O.4 Every research scholar joining for the PhD programme will be monitored by the Doctoral Committee (DC) constituted as per the PhD regulations.
- O.5 Any academic grievances of the scholar pursuing PhD and/or the guide will be handled by the Departmental Research Committee (DRCs) of the respective departments/centres or the Dean (Academics). The DRC shall consist of a minimum of three members including the Chairperson. The DRC will be constituted by the HoD/HoC in consultation with the department/Centre. The Chairperson and members of the DRC will be nominated by the Head of the Department/Centre in consultation with the department. The HoD/HoC can also act as the Chairperson of the DRC.<sup>2</sup>

#### REGULATIONS

# R.1. Categories of Admission

Candidates will be admitted to the PhD 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 etc

<sup>&</sup>lt;sup>1</sup> Updated as per the recommendation of the 31st meeting of the Senate

<sup>&</sup>lt;sup>2</sup> Updated as per recommendation of 29th meeting of the Senate

Project-HTRA	With funding through a project administered by ICSR, with possibility of moving to HTRA as per Institute rules.	
Project-NHTRA	"Project-NHTRA" category will be funded by a project administered via ICSR. The candidate applying under this category does not need to have a valid GATE score to pursue PhD, provided the funding agency for the project has no requirement of GATE for hiring of staff under the project. Such candidates are not eligible for HTRA funding under any circumstance.	
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 organisations and National Laboratories, recognized by IIT Palakkad for external registration are available in Annexure IX. Research scholars under the category will normally carry out part or all of his/her research work in the industry / organisation / national laboratory employing the scholar under the supervision of a co-guide employed in the same organisation 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 PhD programme of the Institute are as follows:

### 2.1.1 PhD in Engineering

- (a) Candidates with a Master's degree in Engineering/Technology/Architecture/Planning<sup>3</sup> or a Master's degree (by Research) in Engineering/Technology/Architecture/Planning 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 CSIR-UGC NET (all categories)<sup>4</sup> / NBHM or equivalent qualification in the relevant

<sup>&</sup>lt;sup>3</sup> Updated as per the recommendation of the 31st meeting of the Senate

Updated as per the recommendation of the 31st meeting of the Senate

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 PhD.
- (d) Candidates who have qualified for the award of four year Bachelor's or integrated Master's degree in Engineering/Technology/Sciences/Architecture/Planning from a Centrally Funded Technical Institute (CFTI) or 2 year M. Sc. from CFTIs (entry through JAM only)<sup>5</sup> with an exceptionally good academic record in an eligible discipline provided he/she has a minimum CGPA of 8 (7.5 for OBC- NCL/GEN-EWS<sup>6</sup> and 7.0 for SC/ST/PwD) on a 10.0 point scale.

#### 2.1.2 PhD in Sciences

- (a) Master's degree in Sciences/Medical/Pharma/Veterinary Sciences/Allied Health Sciences with good academic record and valid GATE score or CSIR-UGC NET (all categories)<sup>7</sup> / NBHM / INSPIRE / ICMR / JEST or other similar National Level Fellowships or equivalent qualification tenable for the year of registration in the relevant area.
- (b) Candidates who have qualified for the award of four year Bachelor's degree in Engineering/Technology/Architecture/Planning/Sciences with an exceptionally good academic record and valid GATE score in an eligible discipline will be considered for direct admission to PhD.
- (c) Candidates who have qualified for the award of four year Bachelor's or integrated Master's degree in Engineering/Technology/Architecture/Planning/Sciences from a Centrally Funded Technical Institute (CFTI) or 2 year M. Sc. from CFTIs (entry through JAM only)<sup>8</sup> with an exceptionally good academic record in an eligible discipline provided he/she has a minimum CGPA of 8 (7.5 for OBC- NCL/GEN-EWS<sup>9</sup> and 7.0 for SC/ST/PwD) on a 10.0 point scale.
- (d) Candidates with a Master's degree in Engineering/Technology/Architecture/Planning or a Master's degree (by Research) in Engineering/Technology/Architecture/Planning with a good academic record.

#### 2.1.3 PhD in Humanities and Social Sciences

- (a) Master's degree in Humanities with good academic record and valid GATE score or CSIR-UGC NET (all categories) or other similar National Level Fellowships or equivalent qualification in the relevant area tenable for the year of registration.
- (b) Master's degree in Sciences with exceptionally good academic record with a valid GATE

<sup>&</sup>lt;sup>5</sup> Updated as per recommendation of 20th meeting of the Senate

<sup>&</sup>lt;sup>6</sup> Updated as per recommendation of 26th meeting of the Senate

<sup>&</sup>lt;sup>7</sup> Updated as per the recommendation of the 31st meeting of the Senate

<sup>&</sup>lt;sup>8</sup> Updated as per recommendation of 20th meeting of the Senate

<sup>&</sup>lt;sup>9</sup> Updated as per recommendation of 26th meeting of the Senate

score.

- (c) Candidates who have qualified for the award of four year Bachelor's degree in Engineering/Technology/Sciences/Architecture/Planning/Humanities and Social Sciences with an exceptionally good academic record and a valid GATE score will be considered for direct admission to PhD.
- (d) Candidates who have qualified for the award of four year Bachelor's or integrated Master's degree in Engineering/Technology/Sciences/Architecture/Planning/Humanities and Social Sciences from a Centrally Funded Technical Institute (CFTI) or 2 year M. Sc. from CFTIs (entry through JAM only)<sup>2</sup> with an exceptionally good academic record in an eligible discipline provided he/she has a minimum CGPA of 8 (7.5 for OBC- NCL/GEN-EWS<sup>10</sup> and 7.0 for SC/ST/PwD) on a 10.0 point scale.
- (e) Candidates with a Master's degree in Engineering/Technology/Architecture/Planning or a Master's degree (by Research) in Engineering/Technology/Architecture/Planning with a good academic record.

# 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 NET / 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. 2.3 Qualification for Full-Time Research under Project-NHTRA Category<sup>11</sup>

Candidates who meet the minimum educational qualifications for admission to the PhD programme of the Institute are eligible. The candidate applying under this category does not need to have a valid GATE score to pursue PhD, provided the funding agency for the project has no requirement of GATE for hiring of staff under the project. Project NHTRA candidates are not eligible for HTRA funding under any circumstance.

See Annexure VIII for more details on admission to PhD Programme under "Project-NHTRA" category.

### **R.3.** Selection Procedure

Eligible candidates possessing the minimum educational qualifications and satisfying

<sup>&</sup>lt;sup>10</sup> Updated as per recommendation of 26th meeting of the Senate

<sup>&</sup>lt;sup>11</sup> Updated as per recommendation of 29th meeting of the Senate

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 PhD 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. Foreign nationals who were born and secured OCI/PIO card before 04.03.2021 shall be considered for seats in the unreserved category<sup>12</sup>. Candidates are expected to have a good working knowledge in English.

#### R.4. Admission

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

#### R.5. Guide/s

### R.5.1. Allotment of Research Guide

- (a) The DRCs 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 DRC will advise the students admitted in the department/centre till guides have been allocated.<sup>13</sup>
- (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, 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 DRC<sup>14</sup> 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

<sup>&</sup>lt;sup>12</sup> Updated as per recommendation of 31st meeting of the Senate

<sup>&</sup>lt;sup>13</sup> Updated as per recommendation of 29th meeting of the Senate

<sup>&</sup>lt;sup>14</sup> Updated as per recommendation of 29th meeting of the Senate

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 superannuate 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 superannuation, the faculty member will continue to be one of the guides and will be invited to the Doctoral Committee meetings, thesis submission meeting and viva voce examination.

# **R.6. Doctoral Committee (DC)**

- R.6.1The 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 other members with at least one member from within the department/centre and at least one from outside the department/centre/institute (preferably a subject matter expert).
  - iii. Guide will act as a convener of the DC.
  - iv. The Chairperson of the DC will be nominated by the Chairperson, DRC from among the faculty members of the DC who are not a guide.<sup>15</sup>
  - 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" remarks after every meeting. Two successive "Not Satisfactory" remarks 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 examination of the research scholar.
- (f) The DC will recommend and forward the Panel of thesis examiners to Dean, Academics.

<sup>&</sup>lt;sup>15</sup> Updated as per recommendation of 30th meeting of the Senate

- (g) The DC will review the examiners' reports on the thesis.
- (h) The DC will be invitees to 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).
2	First DC meeting	Within one year of joining. In the first meeting, DC will discuss a broad area of proposed research.
3	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).
4	Research proposal	Within 24 months from the date of joining. Up to additional six months for part time registrants.
5	Yearly DC meetings	Every year for the first 4 years. After 4 years, the DC should meet every six months.
6	Thesis submission	Between 30 months (min.) to 60 months (max.). See R.14.

### R.8. Course Work

The research scholar is required to complete 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 Methodology seminars have to be attended by the students within the first year of the PhD programme. The course Research Methodology is to be completed in addition to the minimum credit requirement and the course would not be counted in the CGPA calculation.<sup>16</sup>

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 up to 3 credits, which can

\_

<sup>&</sup>lt;sup>16</sup> Updated as per recommendation of 30th meeting of the Senate

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 programme. The CGPA shall be calculated based on the set of courses satisfying the minimum course-credit requirement in which a student performed the best. The other courses shall be mentioned as additional courses in the transcript<sup>17</sup>.

# **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. The minimum period of study and research for regular full time research scholars at IIT Palakkad from the date of registration for the PhD programme to the date of submission of the thesis shall be 30 months.

# **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. The desired upper limit of the number of pages<sup>18</sup> for the DC reports is 15. 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 PhD 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 knowledge in his/her discipline and areas related to his/her field of research.

The comprehensive examination shall be conducted by the Comprehensive Examination

<sup>&</sup>lt;sup>17</sup> Updated as per recommendation of 20th meeting of the Senate

<sup>&</sup>lt;sup>18</sup> Updated as per recommendation of 24th meeting of the Senate

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. The department 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 (preferably before 2 months) the syllabus of the comprehensive examination, so as to enable the scholar to adequately prepare for it.

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

# **R.12. Research Proposal**

After the successful completion of the comprehensive examination, there should be a detailed presentation of the Research Proposal. The progress by the research scholar will be evaluated in the subsequent meetings of the DC. The Research Proposal meeting of the DC shall be conducted within 24 months of joining the programme. 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. Research proposals should be presented to the Doctoral Committee in a DC meeting and it is not required to do so as an open seminar<sup>19</sup>.

#### R.13. Enrolment

Enrolment to 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 PhD

Research scholars should submit the thesis within a maximum of 5 years from the date of

<sup>&</sup>lt;sup>19</sup> Updated as per 25th Senate recommendation. For research scholars who presented a research proposal seminar before 13th Oct 2023,the research proposal seminar will be considered as the first Seminar.

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

The research scholar will not be paid assistantship/fellowship during his/her period of leave, except for first maternity leave.

# R. 15. 1. Relief from the PhD programme to take up Employment<sup>20</sup>

Regular full-time research scholars who have a job offer can obtain relief from the programme upon recommendation by the DC, if they have completed the minimum residential requirement, coursework, the comprehensive examination and the research proposal meeting. Such requests of PhD scholars should be considered only after 2.5 years from the date of registration to the programme.

The scholar should keep his/her registration alive by paying the requisite fee every semester. Renewal of the registration in each semester is subject to the DC finding the scholar's progress satisfactory.

# R. 15. 2. Temporary Withdrawal from the Programme<sup>21</sup>

A regular full-time scholar may be permitted by the Dean (Academics) to withdraw from the programme for a period not longer than six months for health reasons or any other valid grounds, if recommended by the DC. The maximum time permitted for temporary withdrawal from the programme is for a period of one year, which may be taken continuously with the reapproval by the DC.

# R.16. Exit from PhD Programme

- (a) If a PhD 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 PhD to MS (by Research) programme in Engineering. Otherwise, the scholar's registration will be cancelled. The procedure for conversion is as follows:
  - (i) The PhD scholar has to give a written request to the DC to exercise the option for conversion of registration to the MS (by Research) programme within two weeks

<sup>&</sup>lt;sup>20</sup> Updated as per recommendation of 25th meeting of the Senate

<sup>&</sup>lt;sup>21</sup> Updated as per recommendation of 25th meeting of the Senate

- 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 two weeks 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 programme will be converted as MS (by Research) programme.
- (b) If the DC, on continuous assessment, finds the scholar to be incompetent to continue research leading to his/her PhD degree, then the DC may recommend for the scholar's conversion from the PhD programme. The procedure for conversion is as follows:
  - (i) The PhD scholar has to give a written request to the DC to exercise the option for conversion of registration to the MS (by Research) programme within two weeks after the intimation by DC.
  - (ii) The DC must give its recommendation to the Dean, Academics within two weeks 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 (by Research) programme.
- (c) The PhD scholar, due to valid personal reasons, may exit from the PhD programme with an MS (by Research) degree. The procedure for conversion is as follows:
  - (i) The PhD 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 two weeks 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 (by Research) degree if all the requirements of MS (by Research) degree are completed.

In all the three cases above, if the scholar has not completed the requirements of the PhD degree, then the scholar shall convert his/her registration to MS (by Research) programme. In such cases, the duration of the scholar's MS (by Research) 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 programme, the scholar should complete all requirements for

the MS (by Research) programme 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 (by Research) 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 (by Research) 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 (by Research) programme 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 (by Research) programme 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 to the current semester, 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 is not limited to), fabrication of results, plagiarizing, or 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. Publication of Research Output

At the time of submission of thesis, 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.

# R.19. Thesis Submission Meeting<sup>22</sup> and Submission of Thesis

(a) The scholar is permitted to submit the thesis, on satisfactory completion of the prescribed courses, the comprehensive examination and research work. Prior to submission of the thesis, the PhD scholar is required to give at least two open seminar talks on the topic of his/her research containing the results of their PhD work. It is suggested that the first of these may be given in the third year / early part of the fourth year so that the student gets feedback

<sup>&</sup>lt;sup>22</sup> Updated as per recommendation of 24th meeting of the Senate

early enough.<sup>23</sup>

- The seminars are open to all within the Institute and any comments/suggestions that arise (b) from the seminars may be incorporated into the thesis, after due consideration by the student and the guide(s). A notice of the seminars must be displayed at least one week in advance of the seminar. The intimation that each seminar has been delivered successfully should be communicated by the Chairperson, DC to the Academic Section.
- (c) In addition, a scholar who meets the above requirements shall present his/her work before the DC in a Thesis Submission Meeting. The thesis will be shared with the Doctoral Committee one week before the thesis submission meeting and after this meeting, the final thesis along with a list of thesis evaluators should be submitted to the Academic Section. The guide(s) may obtain a consent email from at least six potential examiners and propose the list of examiners. The guide may consult the DC for suggestions on examiners. The guide may also propose a panel of internal examiners to the DC for their approval. The Doctoral Committee will, if it approves the thesis in the thesis submission meeting, permit the research scholar to submit the thesis and recommend the panel of at least six examiners from institutes/universities/research establishments.
- The guidelines for the use of anti-plagiarism software for the PhD thesis are as follows: The (d) 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.
- If a research scholar submits the thesis for external review within the stipulated period, then (e) 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 thesis submission 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

<sup>&</sup>lt;sup>23</sup> Updated as per recommendation of 25th meeting of the Senate

- (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 and exit provisions should be provided.
- (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 Dean (Academics) and to 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 Head of the Department as the Chairperson and the guide(s), one of the thesis examiners and one internal examiner from the Institute as members<sup>24</sup>. 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

<sup>&</sup>lt;sup>24</sup> Updated as per the recommendation of the 33rd meeting of the Senate

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 soft 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.

# 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 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/Architecture/Planning 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 Master of Science by Research (MS) programme of the Institute.
- O.2 The award of the MS (by Research) degree shall be in accordance with the regulations decided by the Senate of the Institute.
- O.4 Every research scholar joining for the MS (by Research) programme will be monitored by the MS Committee (MSC) constituted as per the MS (by Research) regulations.
- O.5 Any academic grievances of the scholar pursuing MS (by Research) and/or the guide will be handled by the Departmental Research Committees (DRCs) of the respective departments/centres or the Dean (Academics). The DRC shall consist of a minimum of three members including the Chairperson. The DRC will be constituted by the HoD/HoC in consultation with the department/Centre. The Chairperson of the DRC will be nominated by the Head of the Department/Centre in consultation with the department. The HoD/HoC can also act as the Chairperson of the DRC.<sup>25</sup>

#### REGULATIONS

# R.1. Categories of Admission

Candidates will be admitted to the MS (by Research) 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-HTRA	With funding through a project administered by ICSR, with possibility of moving to HTRA as per Institute rules.	
Project-NHTRA <sup>26</sup>	This category will be funded by a project administered via ICSR. The candidate applying under this category does not need to have a valid GATE score to pursue MS, provided the funding agency for the project	

<sup>&</sup>lt;sup>25</sup> Updated as per recommendation of 29th meeting of the Senate

<sup>&</sup>lt;sup>26</sup> Updated as per recommendation of 22th meeting of the Senate

has no requirement of GATE for hiring of staff under the project. Such candidates are not eligible for HTRA funding under any circumstance.  Part-time students		
Turt time student		
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 organisations and National Laboratories, recognized by IIT Palakkad for external registration are available in Annexure VI. Research scholars under the category will normally carry out part or all of his/her research work in the industry / organisation / national laboratory employing the scholar under the supervision of a co-guide employed in the same organisation 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 (by Research) programme of the Institute are as follows:

- (a) Candidates with a four year Bachelor's degree in Engineering / Technology / Sciences / Architecture / Planning<sup>27</sup> 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 (by Research) 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/Architecture/Planning 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/GEN-EWS<sup>28</sup> and 7.0 for SC/ST/PwD) on a 10.0 point scale.

.

<sup>&</sup>lt;sup>27</sup> Updated as per the recommendation of the 31st meeting of the Senate

<sup>&</sup>lt;sup>28</sup> Updated as per recommendation of 26th meeting of the Senate

# 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 NET / 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. 2.3 Qualification for Full-Time Research under Project-NHTRA Category<sup>29</sup>

Candidates with a four year Bachelor's degree in Engineering/Technology/Sciences or a Master's degree in sciences. The candidate applying under this category does not need to have a valid GATE score to pursue MS (by Research), provided the funding agency for the project has no requirement of GATE for hiring of staff under the project. Such candidates are not eligible for HTRA funding under any circumstance.

See Annexure V for more details on admission to MS (by Research) Programme under "Project-NHTRA" category.

#### **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 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 (by Research) 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. Foreign nationals who were born and secured OCI/PIO card before 04.03.2021 shall be considered for seats in the unreserved category<sup>30</sup>. Candidates are expected to have a good working knowledge of English.

#### R.4. Admission

Updated as per recommendation of 22nd meeting of the Senate
 Updated as per recommendation of 31st meeting of the Senate

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

# R.5. Guide/s

### R.5.1. Allotment of Research Guide

- (a) The DRCs 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 DRC will advise the students admitted in the department/centre till advisors have been allocated.<sup>31</sup>
- (b) There shall be not more than two guides for a research scholar.
- (c) A research scholar may have 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 DRC<sup>32</sup> 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 superannuate 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 superannuation, the faculty member will continue to be one of the guides and will be invited to the MS Committee meetings, and thesis submission 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

<sup>&</sup>lt;sup>31</sup> Updated as per recommendation of 29th meeting of the Senate

<sup>&</sup>lt;sup>32</sup> Updated as per recommendation of 29th meeting of the Senate

#### following:

- i. Research Guide/s
- ii. A minimum of two other members, with at least one member from within the department/centre and at least one from outside the department/centre/institute (preferably a subject matter expert).
- iii. Guide will act as a convener of the MSC meetings.
- iv. The Chairperson of the MSC will be nominated by the Chairperson, DRC from among the regular faculty members of the MSC who are not a guide.<sup>33</sup>
- 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.
- (e) The MSC will recommend and forward the panel of thesis examiners to the Dean, Academics.
- (f) The MSC will review the examiners' reports on the thesis.

# **R.7. Timeline for MSC meetings**

Sl. No.	Event	Timeline
1	Zeroth MSC <sup>34</sup>	Should be conducted within two weeks after MSC is formed. Can be conducted over email. MSC will propose courses in addition to the minimum requirements (if necessary).
2	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).

<sup>&</sup>lt;sup>33</sup> Updated as per recommendation of 30th meeting of the Senate

<sup>&</sup>lt;sup>34</sup> Updated as per recommendation of 34th meeting of the Senate

3	Yearly MSC meetings	Every year for the first 2 years. After 2 years, the MSC should meet every six months.
4	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 Methodology seminars have to be attended by the students within the first year of joining the MS (by Research) programme. The course Research Methodology is to be completed in addition to the minimum credit requirement and the course would not be counted in the CGPA calculation.<sup>35</sup>

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. MS (by Research) scholars from all departments may credit up to one 3000-level/4000-level course and count it towards their MS (by Research) programme credit requirements based on the approval of their MS Committee.<sup>36</sup>

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 programme. The CGPA shall be calculated based on the set of courses satisfying the minimum course-credit requirement in which a student performed the best. The other courses shall be mentioned as additional courses in the transcript<sup>37</sup>.

#### 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. The minimum period of study and

<sup>&</sup>lt;sup>35</sup> Updated as per recommendation of 30th meeting of the Senate

<sup>&</sup>lt;sup>36</sup> Updated as per recommendation of 21st meeting of the Senate

<sup>&</sup>lt;sup>37</sup> Updated as per recommendation of 20th meeting of the Senate

research for regular full time research scholars at IIT Palakkad from the date of joining for the MS (by Research) programme to the date of submission of the thesis shall be 18 months.

# **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. The desired upper limit of the number of pages<sup>38</sup> for the MSC reports is 15. 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

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 long 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 (by Research) programme to take up job

An MS (by Research) scholar who gets a job offer can get relief from the programme, while

<sup>&</sup>lt;sup>38</sup> Updated as per recommendation of 24th meeting of the Senate

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 MSC 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 programme 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 is not limited to), fabrication of results, plagiarizing, or 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. Thesis Submission Meeting<sup>39</sup>

The scholar is permitted to submit the thesis on satisfactory completion of the prescribed courses and research work. It is recommended that at the time of submission of thesis, an MS (by Research) 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 thesis, the MS (by Research) 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 thesis submission meeting. The thesis will be shared with the MS Committee one week before the thesis submission meeting and after this meeting, the final thesis along with a list of thesis evaluators should be submitted to the Academic Section. The guide may obtain a

\_

<sup>&</sup>lt;sup>39</sup> Updated as per recommendation of 24th meeting of the Senate

consent email from at least four potential examiners and propose the list of examiners. The guide may consult the MSC for suggestions on examiners. The MS Committee will, if it approves the thesis in the thesis submission meeting, permit the research scholar to submit the thesis and recommend the panel of at least four examiners from institutes/universities/research establishments.

#### **R.17. Submission of Thesis**

- (a) The guidelines for the use of anti-plagiarism software for the MS (by Research) 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.
- (b) 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 thesis submission 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 programme Eligibility

Meritorious scholars who have registered for the MS (by Research) 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 (by Research) programme and at the time of request for upgradation should have completed at least 9 of 15 prescribed credits of the MS (by Research) programme.
- (b) Minimum CGPA of 8 (7.5 for OBC-NCL/GEN-EWS and 7 for SC/ST/PwD) on a 10 point scale in the prescribed courses in the MS (by Research) 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.

Applications may be submitted against the admission notification circulated by the academics section.<sup>40</sup>

- (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 programme 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 (by Research) and PhD degrees (option (iii)), he/she should complete all coursework requirements for MS (by Research) and submit the MS (by Research) thesis for external review. The date of upgradation to PhD, if approved, will be the date of submission of the MS (by Research) 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.

\_

<sup>&</sup>lt;sup>40</sup> Updated as per recommendation of 28th meeting of the Senate

### **Fellowship**

- 1. A scholar upgrading to the PhD programme is entitled to a regular PhD fellowship from the date of approval of upgradation by the Chairperson, Senate and as per PhD regulation.
- 2. However, for students who choose to obtain their MS (by Research) degree and then convert to the PhD programme, the difference in fellowship from the time of upgradation to the time MSC recommends for the award of MS (by Research) degree, will be paid as arrears.

### Exit from PhD/MS+PhD dual degree programme

An MS (by Research) scholar, upgrading to the PhD programme will be permitted to exit the programme with an MS (by Research) degree alone, any time after their 6th semester (from the date of joining the MS (by Research) programme) upon recommendation by the DC, provided they complete all the requirements for the MS programme 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 programme (option (i)) will be awarded a PhD degree.
- 2. A scholar upgrading to the MS+PhD dual degree programme (option (ii)) will be awarded a MS+PhD dual degree.
- 3. A scholar who chooses to obtain an MS degree and then convert to the PhD programme (option (iii)) will be awarded separate degrees for their MS and PhD programmes, at the end of the respective programmes.

# Upgradation of registration from MSc to MSc+PhD dual degree programme Eligibility

Meritorious scholars 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 MSc 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 (47 credits for the 2024 batch onwards) coursework of the MSc programme.
- (b) Minimum CGPA of 8/10 (7.5 for OBC-NCL / GEN-EWS and 7 for SC/ST/PwD) with no pending backlogs in the prescribed courses in the MSc Programme.

# **Procedure for upgradation**

- (a) MSc students should apply for upgradation to MSc+PhD dual degree in the fourth semester against the admission notification circulated by the academics section.<sup>41</sup>
- (b) The scholar should make a written request to the Dean, Academics at that time.
- (c) 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 programme 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 MSc programme by the end of three semesters from the date of registration to the MSc programme. She will not need to do an MSc project. The grades of the project will be included in the CGPA calculation of the MSc+MS (by Research) or MSc+PhD or MTech+PhD degree for students who have completed the project<sup>42</sup>.
- ii. For students from the 2024 batch onwards, point (i) above is modified as: The scholar should have been registered for a minimum of 3 semesters in the MSc programme and not yet completed the fourth semester at the time of request for upgradation, and should have completed at least 47 credits of coursework of the MSc programme. These 47 credits of coursework must include all the core courses of the curriculum, and exclude the main

<sup>&</sup>lt;sup>41</sup> Updated as per recommendation of 28th meeting of the Senate

<sup>&</sup>lt;sup>42</sup> Updated as per recommendation of the 31st meeting of the Senate

project<sup>43</sup>. The grades of the project will be included in the CGPA calculation of the MSc+MS (by Research) or MSc+PhD or MTech+PhD degree for students who have completed the project<sup>44</sup>.

iii. In addition, he/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 MSc 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 MSc degree.

The upgraded students to MSc-PhD dual degree, who quit at or after 3 years may be given the option of MS (by Research) degree, in lieu of MSc, at their exit. However, such students who opt for MS (by Research), must satisfy the course requirement, except the project work, for MSc. The student will submit an MS (by Research) thesis in place of Project-II report (or Major Project) and the same may be evaluated as per MS (by Research) thesis submission and evaluation guidelines of the Institute<sup>45</sup>.

#### **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 M. Sc.+PhD dual degree will be awarded. The MSc part of the degree will be awarded in the original MSc discipline.

#### Award of a separate MSc degree<sup>46</sup>

- (a) The students must satisfy all the requirements for the MSc degree including the MSc projects. The MSc report should be evaluated and recommended by the relevant committee before awarding the degree. Note that different degrees require non-overlapping content of the report and coursework. Therefore, the PhD thesis content should not overlap with work presented in the MSc project report.
- (b) The issuance of separate degree certificates may be given as an option to the students upon their request, on choosing which the student shall receive the MSc degree upon approval, and the student shall receive only a PhD degree after the completion of the requirements for a PhD.

<sup>&</sup>lt;sup>43</sup> Updated as per recommendation of the 31st meeting of the Senate

<sup>&</sup>lt;sup>44</sup> Updated as per recommendation of the 31st meeting of the Senate

<sup>&</sup>lt;sup>45</sup> Updated as per recommendation of 20th meeting of the Senate

<sup>&</sup>lt;sup>46</sup> Updated as per recommendation of 22nd meeting of the Senate

- (c) The students must choose this option after three years and before the end of the fourth year after joining the original programme.
- (d) In case the students do not opt for the MSc degree option within the period mentioned above, they will be awarded MSc +PhD Dual Degree after the successful completion of all the requirements of the PhD programme.

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

Meritorious scholars 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 programme (except for the project).
- (b) Minimum CGPA of 8 (7.5 for OBC-NCL/GEN-EWS 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) Applications may be submitted against the admission notification circulated by the academics section.<sup>47</sup>
- (b) The scholar should make a written request to the Dean (Academics) at that time.
- (c) 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 programme 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. The grades of the project will be included in the CGPA calculation of the MSc+MS (by Research) or MSc+PhD or MTech+PhD degree for students who have completed the project<sup>48</sup>.
- 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)

<sup>&</sup>lt;sup>47</sup> Updated as per recommendation of 28th meeting of the Senate

<sup>&</sup>lt;sup>48</sup> Updated as per recommendation of the 31st meeting of the Senate

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.

The upgraded students to MTech+PhD dual degree, who quit at or after 3 years may be given the option of MS (by Research) degree, in lieu of MTech, at their exit. However, such students who opt for MS (by Research), must satisfy the course requirement, except the project work, for MTech. The student will submit an MS (by Research) thesis in place of Project-II report (or Major Project) and the same may be evaluated as per MS (by Research) thesis submission and evaluation guidelines of the Institute<sup>49</sup>.

#### **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.

# Award of M Tech degree to upgraded M Tech + PhD Dual Degree programme<sup>50</sup>

- (a) The students must satisfy all the requirements for the MTech degree including the MTech projects. The MTech report should be evaluated and recommended by the relevant committee before awarding the degree. Note that different degrees require non-overlapping content of the report and coursework. Therefore, the PhD thesis content should not overlap with work presented in the MTech project report.
- (b) The issuance of separate degree certificates may be given as an option to the students upon their request, on choosing which the student shall receive the MTech degree upon approval, and the student shall receive only a PhD degree after the completion of the requirements for a PhD.
- (c) The students must choose this option after three years and before the end of the fourth year after joining the original programme.
- (d) In case the students do not opt for the MTech degree option within the period mentioned above, they will be awarded MTech+PhD Dual Degree after the successful completion of all the requirements of the PhD programme.

<sup>&</sup>lt;sup>49</sup> Updated as per recommendation of 20th meeting of the Senate

<sup>&</sup>lt;sup>50</sup> Updated as per recommendation of 22nd meeting of the Senate

# Regulations for Admission of Project Staff to Research Programme (Project-HTRA<sup>51</sup> category)

These regulations are applicable when a Project Staff wants to apply for the PhD/ MS (by Research) programme, with the possibility of switching to the HTRA category after completion of the project duration.

The MS (by Research)/PhD topic of the project staff after admission should be preferably closely related to the topic of the sponsored project. An MS (by Research)/PhD topic totally different from the theme of the project is strongly discouraged.

MS (by Research)/PhD 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 MS (by Research) and 1.5 years<sup>52</sup> for PhD. 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, on the recommendation of the DC/MSC.

A project staff, interested in applying for the research programmes, 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 (by Research)/PhD regulations.

<sup>&</sup>lt;sup>51</sup> Updated as per recommendation of 29th meeting of the Senate

<sup>&</sup>lt;sup>52</sup> Updated as per recommendation of 24th meeting of the Senate

# Regulations for Admission to MS (by Research) Programme under (Project-NHTRA $^{53}$

category)

- "Project-NHTRA" category will be funded by a project administered via ICSR. The
  candidate applying under this category does not need to have a valid GATE score to pursue
  MS (by Research), provided the funding agency for the project has no requirement of GATE
  for hiring of staff under the project. Such candidates are not eligible for HTRA funding under
  any circumstance.
- 2. Only the PI (or Co-PI) of the sponsored project can act as guide/co-guide for candidates selected under the Project-NHTRA category.
- 3. The PI (or Co-PI) needs to show confirmed funding for at least 24 months from the date of joining of the project staff as an MS (by Research) scholar. The value of the monthly stipend must be at least equal to the stipend paid to scholars under HTRA.
- 4. The selection of such candidates will happen through the appropriate selection committee, constituted by the departments/centres<sup>54</sup>, for the area. Selection procedures will be similar to that followed for the "Project-HTRA" category students.
- 5. Leave rules will be as applicable to project staff as per ICSR guidelines and not as per the regulations for regular MS (by Research) students.

<sup>&</sup>lt;sup>53</sup> Updated as per recommendation of 22nd meeting of the Senate

<sup>&</sup>lt;sup>54</sup> Updated as per recommendation of 29th meeting of the Senate

# **Upgradation from MSc to MSc+Master of Science (by Research) Dual Degree Programme**<sup>55</sup>

Students with a research aptitude who have completed three semesters in an MSc programme of IIT Palakkad have an option to upgrade their registration to a MSc + Master of Science (by Research) dual degree programme in IIT Palakkad.

#### **Eligibility:**

- a. The student must be registered for the MSc programme at IIT Palakkad.
- b. Must have completed three semesters, but not yet completed the fourth semester at the time of application. For students from the 2024 batch onwards, this is modified as: The scholar should have been registered for a minimum of 3 semesters in the MSc programme and not yet completed the fourth semester at the time of request for upgradation, and should have completed at least 47 credits of coursework of the MSc programme. These 47 credits of coursework must include all the core courses of the curriculum, and exclude the main project<sup>56</sup>.
- c. Must not have any outstanding backlogs.
- d. Must have a CGPA of 7.0 or higher at the time of application.

#### **Procedure for upgradation:**

- a. Applications may be submitted against the admission notification circulated by the academics section.<sup>57</sup>
- b. The scholar should make a written request to the Dean, Academics during their fourth semester.
- c. The selection will be done through a direct interview conducted by a panel of faculty members formed by the discipline and upon receiving final approval from the Chairman, Senate.

#### Fellowship and Leaves:

A scholar upgrading to the MSc+MS (by Research) dual degree programme will be eligible for regular MS (by Research) fellowship (HTRA) from the date of approval of upgradation by the Chairperson, Senate and as per MS (by Research) regulations. The eligibility of stipend will be decided as per Institute HTRA rules and students shall be given Teaching Assistant (TA) duties

<sup>&</sup>lt;sup>55</sup> Updated as per recommendation of 23rd meeting of the Senate

<sup>&</sup>lt;sup>56</sup> Updated as per recommendation of the 31st meeting of the Senate

<sup>&</sup>lt;sup>57</sup> Updated as per recommendation of 28th meeting of the Senate

during the fellowship period. The nature of assistantship, its conditions and leave rules during this period will be the same as those for regular MS (by Research) students in the Institute.

#### **Degree requirements:**

- a. The student should complete all the courses towards the MSc programme at the time of graduation. She will not need to do an MSc project in the fourth semester. The grades of the project will be included in the CGPA calculation of the MSc+MS (by Research) or MSc+PhD or MTech+PhD degree for students who have completed the project<sup>58</sup>.
- b. In addition, she should do research work leading to an MS (by Research) thesis from the time of upgradation.<sup>59</sup>
- c. The minimum duration of completion of research towards MS (by Research) degree is 12 months for MSc + MS (by Research) dual degree programme and it will be applicable from the batch that converted in 2023 onwards.<sup>60</sup>

### Research Guide, MS Committee, Synopsis, Thesis:

Allocation of research guide(s), the constitution and functioning of the MS Committee and submission and evaluation of thesis will be as per the MS (by Research) regulations of the Institute applicable at the time of upgradation.

### Exit from MSc+ MS (by Research) dual degree:

The students who upgrade to MSc+MS (by Research) dual degree programme will be permitted to exit with the MSc degree alone anytime after their 5th semester (from the date of joining the original programme) provided they complete all the course requirements for the regular MSc programme. The final semester MSc project has to be evaluated before the degree is awarded. The HTRA collected during the period need not be repaid if the student has performed the assistantship duties satisfactorily during the period.

#### 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+MS (by Research) dual degree will be awarded.

<sup>&</sup>lt;sup>58</sup> Updated as per recommendation of the 31st meeting of the Senate

<sup>&</sup>lt;sup>59</sup> Updated as per recommendation of 28th meeting of the Senate

<sup>&</sup>lt;sup>60</sup> Updated as per recommendation of 28th meeting of the Senate

# **Upgradation from MSc+Master of Science (by Research) Dual Degree Programme** to MSc+PhD Dual Degree Programme<sup>61</sup>

The minimum eligibility for the upgradation from MSc+MS (by Research) to MSc+PhD should be same as upgradation of MSc to MSc+PhD dual degree programme, and students who have a minimum CGPA of 8/10 (7.5 for OBC-NCL / GEN-EWS and 7 for SC/ST/PwD) with no pending backlogs in the prescribed courses at the time of application for the upgradation from MSc+MS (by Research) to MSc+PhD will be considered for upgradation from MSc+MS (by Research) to MSc+PhD with the recommendation of the MS (by Research) guide. The last date for the conversion from MSc+MS (by Research) to MSc+PhD should be within 6 Semesters from the date of joining for MSc.

- Applications may be submitted against the admission notification circulated by the academics section.<sup>62</sup>
- Students who satisfied the eligibility criteria for MSc+PhD upgradation at the time of upgradation to the MSc+MS (by Research) dual degree programme are eligible to apply for upgradation to the MSc+PhD dual degree programme.
- Students should make a written request to the MSC within 6 Semesters from the date of joining for MSc.
- Students upgrading to the MSc+PhD dual degree programme are entitled to regular PhD fellowship from the date of approval of upgradation to MSc+PhD dual degree programme by the Chairperson, Senate and as per PhD regulations. While applying PhD regulations, the scholar's duration in the PhD programme will be interpreted as the time spent by the scholar from the date of upgradation to MSc+PhD dual degree.
- The course requirements, Exit options, Award of Degree will be as mentioned in the regulations for MSc+PhD dual degree programme.

<sup>&</sup>lt;sup>61</sup> Updated as per recommendation of 28th meeting of the Senate

<sup>&</sup>lt;sup>62</sup> Updated as per recommendation of 28th meeting of the Senate

### **Annexure-VIII**

# Regulations for Admission to PhD Programme under "Project-NHTRA" category<sup>63</sup>

- 1. "Project-NHTRA" category will be funded by a project administered via ICSR. The candidate applying under this category does not need to have a valid GATE score to pursue PhD, provided the funding agency for the project has no requirement of GATE for hiring of staff under the project. Such candidates are not eligible for HTRA funding under any circumstance.
- 2. Only the PI (or Co-PI) of the sponsored project can act as guide/co-guide for candidates selected under the Project-NHTRA category.
- 3. The PI (or Co-PI) needs to show confirmed funding for a 5-year project, with at least 48 months of funding remaining from the date of joining of the project staff as a PhD scholar. The value of the monthly stipend must be at least equal to the stipend paid to scholars under HTRA.
- 4. The selection of such candidates will happen through the appropriate selection committee, constituted by the departments/centres for the area. Selection procedures will be similar to that followed for the "Project-HTRA" category students.
- 5. Leave rules will be as applicable to project staff as per ICSR guidelines and not as per the regulations for regular PhD students.

-

<sup>&</sup>lt;sup>63</sup> Updated as per recommendation of 29th meeting of the Senate

# Annexure-IX

# 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)
- 3. Maccaferri Middle East LLC, UAE
- 4. GE India Industrial Private Limited (GE Research), Bangalore<sup>64</sup>
- 5. Toshiba Software India Pvt. Ltd., Bangalore<sup>65</sup>
- 6. Wabtec Corporation, Bangalore<sup>66</sup>
- 7. Automotive Component Manufacturers Association of India, New Delhi
- 8. ZF Wind Power Pvt. Ltd.<sup>67</sup>

<sup>&</sup>lt;sup>64</sup> Updated as per recommendation of 22nd meeting of the Senate

<sup>65</sup> Updated as per recommendation of 30th meeting of the Senate

<sup>&</sup>lt;sup>66</sup> Updated as per recommendation of 30th meeting of the Senate

<sup>&</sup>lt;sup>67</sup> Updated as per the recommendation of the 31st meeting of the Senate