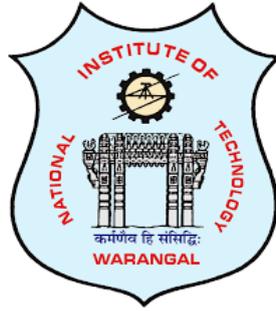


ACADEMIC REGULATIONS

Ph.D. PROGRAM

(Effective from 2024 - 2025)



**NATIONAL INSTITUTE OF TECHNOLOGY
WARANGAL**



Academic Regulations of Ph.D. Programs effective from 2024-25

1. INTRODUCTION:

The Institute provides facilities for research leading to the degree of Doctor of Philosophy (Ph.D.). Ph.D. Degree Program is offered in various departments as listed below.

- a) Civil Engineering
- b) Electrical Engineering
- c) Mechanical Engineering
- d) Electronics and Communication Engineering
- e) Metallurgical and Materials Engineering
- f) Chemical Engineering
- g) Computer Science and Engineering
- h) Biotechnology
- i) Mathematics
- j) Physics
- k) Chemistry
- l) Department of Management Studies
- m) Humanities and Social Sciences

2. ADMISSION:

2.1 Admission categories:

There are two types of admission categories for Ph.D. Degree Program, namely Full time and Part time.

Full time: There are seven categories in the full time Ph.D. Degree program

- a) Full-time student on institute fellowship.
- b) Full-time Government/Semi-Government Fellowship awardees / QIP / FIP (UGC) / CSIR / UGC / DOE / DST / DBT / NBHM/ INSPIRE etc.
- c) Full-time project fellows/JRF/SRF appointed in R&D projects being carried out in NITW.
- d) Full-time Sponsored student from Industry/R&D organizations.
- e) Indian Council for Cultural Relations (ICCR) fellowship awardees (Foreign students).
- f) Full-time External (CSIR/ JRF/ SRF Fellows) working in National Research Laboratories/ R&D Organization having necessary facilities
- g) Full-time Self-finance (Rules of reservation not applicable. Master's degree is compulsory whereas GATE/ UGC/ CSIR/ Inspire/ NET/ CAT is not mandatory)

Part time: There are four categories in the part time Ph.D. Degree program

- h) Permanent faculty of Private Academic Institutions
- i) Permanent faculty from Educational Institutions fully funded by Government or Maintained by Public-Private Partnership (PPP) Mode
- j) Permanent Employees from Private Industries with R & D facilities having four years of experience with PG qualification and five years of experience with UG qualification



- k) Permanent employees working in Government R & D laboratories/Government organizations/Government industry/PSUs/State Undertakings
- l) Faculty members working on contractual basis in Government Institutions such as IITs.

NOTE:

- i) A student of category (a and c) will receive the institute fellowship for a duration of three years, which may be extendable by two more years based on the recommendations of Doctoral Scrutiny Committee (See Appendix-I for more information and Appendix-V for constitution of DSC). One journal publication (acceptance) as prescribed in point 4.4.2 within 3 years from the date of registration is mandatory for continuing the enhanced fellowship after 3 years. The enhanced fellowship will be restored from the date of publication (acceptance). However, no arrears shall be paid for the intervening period.
- ii) Student of Category (d) shall be sponsored and financed by the sponsoring organization: (See Appendix-II, for more information)
- iii) Student of category (f) shall produce a no objection certificate from the organization where he/ she has got a fellowship and also acceptance from a possible supervisor along with biodata from the organization. There will not be any financial commitment from NITW for students under category (f) (See Appendix-III, for more information)
- iv) Student of category (g) shall produce a no objection and sponsorship certificate from the organization where he/ she is working
- v) A part-time student of category (i) shall produce a No Objection certificate from the present institute which should be AICTE recognized.
- vi) A part-time student of category (j, k, l) shall produce a No Objection Certificate from the present employer
- vii) Change of status from full-time to part time will be subjected to:
 - the approval of the senate based on recommendations of DSC
 - after submission of synopsis or completed three years with substantial amount of research.
- viii) No student can receive scholarship/fellowship from more than one source, either Government or Private.

2.2 ELIGIBILITY:

2.2.1 Aggregate 60% marks or CGPA of 6.5 (on a 10-point scale) at both UG and PG for GEN/ GEN-EWS/OBC-NCL category and minimum 55% aggregate marks or 6.0 CGPA (on a 10-point scale) for SC/ ST/ PwD category.

Engineering Departments:

Master's/M.S. (by Research) degree in Engineering / Technology in the appropriate branch of study.

(OR)

Bachelor's in Engineering / Technology with valid GATE score and at least CGPA of 7.0/10 or 65% aggregate of marks under GEN/OBC/EWS category and at least CGPA of 6.5/10 or 60% aggregate for candidates under SC/ST/PWD category.

**Science Departments:**

Master's degree in the relevant discipline of Science (Maths/ Physics/ Chemistry)/
B.Tech or equivalent degree/ M.Tech or equivalent degree.

Humanities and Social Sciences:

Master's degree in the relevant discipline of English.

Department of Management Studies:

“Master's degree or equivalent in Management/Social Sciences/Commerce/2-year
PGDM/ M.Tech/ MSc Statistics/ CA/CS/ICWA/ with a CAT/UGC-NET/GMAT/ GRE/
GATE/CSIR NET

2.2.2 As per AICTE / UGC norms, students of category (a) must have passed GATE. In case of students with M.Sc / M.Sc (Tech) / MBA / MA/ MPharm qualification, GATE / GPAT/UGC - CSIR NET / INSPIRE qualification is necessary.

2.2.3 In case of students of category (d), (e), (f) and (g), GATE / UGC-CSIR NET/ CAT/ GPAT qualification is relaxed. However, they (except category (e)) will be selected through an institute entrance test and/or an interview, as per the discretion of the department.

2.2.4 Students of category (c) have to undergo the regular selection process in order to enroll for Ph.D program. Such students are eligible for conversion from JRF/SRF to Institute fellowship only after working for a minimum period of 1 year in the project. The institute fellowship will be provided up to a maximum period of 5 years years including the period of JRF/SRF.

2.2.5 Admission under the category (j and k) is open to:

- i) Permanent Employees from Private Industries with R & D facilities having four years of experience with PG qualification and 5 years of experience with UG qualification in an industry of five years standing as per eligibility
- ii) Permanent employees working in Government R & D laboratories/ Government organizations / Government industry / PSUs / State Undertakings with ME / M.Tech. as per eligibility
- iii) Permanent Employees from Private Industries with R & D facilities, Government R & D laboratories / Government organizations / Government industry / PSUs / State Undertakings with B.Tech. who have put in at least 5 years of experience. See Appendix-IV for more information. The selection of candidates under this category is based on interview.

2.2.6 Candidates of all categories must appear for interview.

3. PROGRAM STRUCTURE:

3.1 The Ph.D. Degree Program Structure consists of the following stages:

- i) Ph.D. Course work and evaluation
- ii) Research proposal submission
- iii) Comprehensive Examination
- iv) Periodic assessment of research progress
- v) Pre-synopsis seminar and synopsis submission
- vi) Ph.D. thesis Submission and adjudication

3.2 The minimum course credit requirement for candidates getting admitted with different qualifications is as follows.



| Minimum Qualification | Credit |
|--|--------|
| M.E. / M.Tech. / M.Phil. / M.S. / M.Sc. (Tech.) of 3 years | 12 |
| M.Sc. / M.A. / MBA / M.Sc. (Tech.)/M.Pharm of 2 years | 15 |
| B.E./ B.Tech | 18 |

If the Doctoral Scrutiny Committee (DSC) recommends more courses of study, then the candidate has to do those courses as per the directions of the DSC.

3.3 Ph.D. scholars shall necessarily do at least one course from the institute level courses and other required courses from the department level courses, as suggested by the DSC. All the courses shall be of 3 credits only.

- **Institute Level courses:** AI & ML, Applied Mathematical Methods, Data Mining, Deep Learning for Image Processing, Design and Analysis of Experiments, English for Scientific Communication, Experimental Techniques, Intellectual Property Rights, Linear Systems Theory, Materials Characterization for Research, Modelling and Simulation, Polymer Chemistry for Technologists, Research Writing and Professional Ethics, Research Methodology, Scientific Communication, Soft Computing Techniques, Sustainability Engineering or any other course approved by the Senate.
- Department Level courses: few common courses must be designed by the department at higher level for all the scholars.
- If recommended by the DSC, student can also do a course under Self Study / MOOCs.
- The candidates can also enroll for any appropriate PG course (provided he/ she has not undergone that course during his/her PG program).
- Research Scholars may enroll for the Department level courses on self- study mode. For self-study courses, the DSC will allot a teacher to evaluate the candidate in the course.
- It is advisable that the supervisor(s) of the candidate are not allotted as teacher for self-study courses for more than one course.

3.4 The syllabi for all the courses to be offered to a Ph.D. scholar must be approved by the DSC.

4. EVALUATION SYSTEM:

4.1 Ph.D. Course Work and Evaluation:

4.1.1 The Ph.D. course work evaluation shall be similar to that of other PG courses.

As a measure of student's performance, a 7-scale grading system using the following letter grades and corresponding grade points per credit shall be followed. Grading will be done based on the total marks obtained by the student in that course.

| | | | | | | | |
|--------------|----|---|---|---|---|---|---|
| Letter Grade | S | A | B | C | D | P | U |
| Point | 10 | 9 | 8 | 7 | 6 | 5 | 3 |

The total marks obtained in a course can be used a reference for awarding grades as mentioned in the following Table. However, if the faculty feels, the marks may be lowered with a maximum change of 10 marks in each range.

| | | | | | | | |
|--------------|--------|-------|-------|-------|-------|-------|------|
| Letter Grade | S | A | B | C | D | P | U |
| Marks | 90-100 | 80-89 | 70-79 | 60-69 | 50-59 | 40-49 | < 40 |



- 4.1.2 Candidates must complete all the assigned course work with a grade not lower than C in each of the courses. If candidate gets a grade less than C, he/ she may be permitted to do the same course in self-study mode in the subsequent semester or he/she may register for another course based on the recommendations of DSC.
- 4.1.3 The course work should be completed in the first two semesters after admission. If a candidate fails to complete the course work in the first two semesters, the DSC may recommend for an extension of one more semester with proper justification.

4.2 Research Proposal Submission:

Every research scholar is required to submit his research proposal by the time of Comprehensive Examination. The research proposal must contain details including problem identification, state of the art literature, plan of research work etc. The DSC will assess the proposal at the time of Comprehensive Examination and communicate the recommendations for approval to the Dean-Academic.

4.3 Comprehensive Examination:

4.3.1 Every Ph.D. scholar shall take a Comprehensive Examination in his/ her Department. Comprehensive Exam shall be in two parts:

- i) Part-1: Written Test: Written exam in a subject (self-study) where syllabus is written comprehensively by including all the topics relevant to his PhD including methods and tools. DSC members shall frame the syllabus and contribute in setting the Question Paper. The DSC can co-opt, if required, other faculty for setting the question paper. Student has to score at least 50 percent in this comprehensive written exam. Only after successful completion of Part-1, the scholar will be allowed to appear for Part-2
- ii) Part-2: A seminar presentation by the scholar on the state of art in the proposed research area along with the objectives and methodology to the Comprehensive Examination Committee. The committee has to evaluate whether the performance is satisfactory or not. If the performance is not satisfactory, the scholar may be given one more opportunity with a minimum gap of one month

The Comprehensive Examination Committee should consist of DSC members and two other faculty members, either Associate Professor or Professor level of the Institute nominated by the Chairman, DSC. One member should be from allied Department.

- 4.3.2 If the performance of the candidate in the comprehensive examination is not satisfactory in the first attempt, he/ she may be given another opportunity. There must be a minimum gap of one month between two successive attempts of Comprehensive Examination. However, Comprehensive Exam for PhD shall be completed within 1½ year (with a maximum number of 2 attempts).
- 4.3.3 If the candidate fails to complete comprehensive exam within 1½ years even after 2 attempts, he may be given an option to convert to MS or quit the institute without any degree.

4.4 Period of Assessment of Research Progress

4.4.1 After the approval of the research work proposal, assessments are made periodically, through seminars (at least one seminar per semester before DSC), to ensure satisfactory progress. The research scholar shall submit through his/her supervisor(s),



a progress report of his/her research work, to the concerned DSC twice a year. The DSC will communicate to the Dean-Academic, about the periodic progress. The continuance of registration of all research scholars is subject to satisfactory progress made by them.

- 4.4.2 Prior to pre-synopsis seminar, the scholar is required to have at least two research papers published or accepted for publication *with the scholar as the first author*, in SCI / SCIE / Open Access journals of SCI. Scholars from Department of Management Studies shall publish TWO papers *with the scholar as the first author* in SCI / SCIE / Open Access journals of SCI / *ABDC journals*, with at least one publication in *ABDC journal*. In the case of research scholars from Humanities and Social Sciences Department 3 National and 2 International publications *with the scholar as the first author* in peer reviewed journals are required.

4.5 Pre-Synopsis Seminar and Synopsis Submission

- 4.5.1 Prior to submission of the synopsis of the thesis, a comprehensive assessment of the research work should be made by DSC by a Pre-Synopsis Seminar. The candidate can submit the synopsis only if DSC is satisfied about the adequacy of work for submission as a Ph.D. Thesis.
- 4.5.2 Details of the Pre-Synopsis seminar shall be notified well in advance, so as to enable the interested faculty members and students to attend the same.
- 4.5.3 The Chairman of the DSC shall send the assessment report on the Pre-Synopsis Seminar to the Dean-Academic.
- 4.5.4 The synopsis must be submitted at least one month before submitting the thesis. Both Soft and hard copy of the synopsis shall be submitted to the Academic section through the DSC. The synopsis must be a maximum of 10 pages, including references of research work, with the following certificates:
- i) Certificate from the Chairman, DSC that the Pre-Synopsis Seminar has been completed satisfactorily (Synopsis submission Form).
- 4.5.5 On successful completion of the Pre-Synopsis Seminar, the DSC will recommend to the Chairman of the Senate a panel of ten experts along with their ORCID, Google Scholar Link and h-Index (five from India and five from abroad), to examine the thesis. Two experts from the panel (one from India and one from abroad) will be appointed by the Chairman of the Senate as external examiners. The supervisor(s) will be the internal examiner(s). The thesis shall be forwarded to, these examiners who shall report separately on the thesis and forward their recommendation to the Dean-Academic.

4.6 Ph.D. Thesis Submission and Adjudication

- 4.6.1 A soft copy and hard copy of the Ph.D. thesis must be submitted within three months after the submission of the synopsis along with the following certificates.
- Declaration by the Research Supervisor in a prescribed proforma (**Ph.D. THESIS SUBMISSION CERTIFICATE**) stating
 - the bonafide nature of the work
 - that the thesis does not contain any work which has been previously submitted for the award of any degree, and
 - the extent of collaboration, if any.



The scholar may be required to submit an additional hard copy of the thesis, if demanded by the examiner(s). Guidelines for preparation of the Thesis may be downloaded from (<https://www.nitw.ac.in/main/phd./nitw/>). The copy of the thesis should be accompanied by originality report generated by any Plagiarism checking software suggested by the Institute and submit the three annexures (https://nitw.ac.in/api/static/files/Anti-Plagiarism_Policy_2024-5-21-13-6-5.pdf). The similarity should not exceed 20% excluding the papers published by the candidate.

4.6.2 The examiners can recommend that

- i) The thesis be accepted for award of the Ph.D. degree. The thesis is acceptable subject to clarification of certain points at the time of viva-voce
- ii) The thesis is acceptable subject to minor modifications and correction of errors as suggested in the report. No major modification of scientific, technical or conceptual contents is suggested. After modification/ correction, the thesis need not be referred back to me.
- iii) The thesis is acceptable subject to enhancement/modification of scientific/technical content or substantial revision of text as per enclosed details. After modification and scrutiny by Institute committee **the thesis need NOT be referred back to me.**
- iv) The thesis is acceptable subject to enhancement/modification of scientific/technical content or substantial revision of text as per enclosed details. After modification **the thesis should be referred back to me for final assessment.**
- v) The thesis does not meet the standards of comparable works in institutions of higher learning. It is **rejected.**

4.6.3 The reports of the examiners shall be examined by the Dean-Academic and the Chairman of the Senate. There may be four possible situations arising out of the nature of the reports, and the steps to be taken appropriate to the circumstances shall be as laid down below:

- i) The examiners are unanimous in recommending for the award of the degree on the basis of the thesis without any modification. This is a clear case for the final requirement of viva-voce.
- ii) The external examiners are unanimous in recommending for the award of the degree but have suggested modification and / or have asked for clarifications. The candidate in that case shall make modifications and provide the clarifications as suggested, within a time prescribed by the DSC, which in no case shall exceed 3 months. These may be sent to the examiners if so desired by them. Otherwise, the DSC would evaluate the clarifications and recommend for conducting the Viva Voce Examination.
- iii) One of the external examiners does not recommend for the award of the degree and rejects the thesis while the other external examiner recommends the award of the degree. The DSC in such a case may either ask the candidate to modify the thesis as suggested, within a given time, not exceeding six months and send the modified thesis to the same examiner again, or, recommend to the Chairman of the Senate, for appointment of another external examiner and send the thesis to him/her in its original form. If the examiner who rejected the thesis is an Indian examiner then the third examiner shall be an Indian examiner. If the examiner who rejected the thesis is a foreign examiner then the third examiner shall be a



foreign examiner. The recommendation of this third examiner, at this stage, shall be taken as final and binding.

iv) Both the external examiners reject the thesis.

4.6.4 In the event of a thesis being rejected by both the external examiners, the Senate may, on the recommendation of the DSC, permit submission of a revised thesis on an additional payment of the prescribed fee, after a suitable time to be fixed by the Senate. Copies of the observations and comments of the examiners, if any, may be given to the candidate on request. However, the names of the examiners are not to be disclosed. In no case should a resubmission of the thesis without modification along the lines of criticism made by the earlier examiners be allowed. The revised thesis shall be referred for assessment to two external examiners selected from a new panel of ten experts (five from India and five from abroad) recommended by the DSC.

4.6.5 Once the reports of the examiners have been accepted as satisfactory, the candidate will have to defend his thesis before a viva-voce board consisting of at least three DSC members including the supervisor(s), and an external examiner.

Copies of the reports of the examiners are to be shown to the candidate through the DSC. The external examiner may either be one of the experts who have already adjudicated upon the thesis or be another expert appointed for the purpose. The Chairman of the senate, at his/her discretion may advise that a faculty from an allied Department / Centre of the institute be appointed as the additional examiner to conduct the viva-voce examination. In such a case, the DSC recommends a faculty member of the institute having knowledge in the area of the thesis topic, to be appointed as the additional examiner. If the viva-voce board is not satisfied, the candidate has to appear again before the board within the next three months. If the viva voce is satisfactory and all other requirements have been fulfilled, the viva-voce board shall recommend to the Senate for the award of the Ph.D. degree.

4.6.6 After the recommendations of the viva-voce board, either for acceptance of the thesis for the award of Ph.D. degree or for its rejection, a copy of the reports of the examiners may be issued to the candidate at his request.

4.6.7 The scholar shall submit hard copies of the final thesis to the supervisor(s) and the department.

4.6.8 Nothing contained in these regulations shall preclude a candidate from publishing / patenting with the supervisor and/or others, the results of the work incorporated in the thesis, at any time.

5. RESEARCH SUPERVISOR:

The candidates selected for PhD program in a Department have to report to the Head of the Department two weeks before the date of the registration. During this time the candidates will be given an opportunity to discuss with the faculty members on proposed research areas and indicate their choice of the supervisor in the order of preference. DAC-PG&R will allot one faculty member of the Department as research supervisor. The Head of the Department in consultation with the research supervisor will constitute the DSC and finalize the course work before the registration and commencement of the semester.

5.1 A permanent faculty member of the Institute possessing Ph.D. degree shall be recognized as Research Supervisor.



- 5.2 Each research scholar shall be allotted one faculty member of the department, as research supervisor, on the recommendations of the DAC-PG & R. Depending on the research requirements, additional research supervisor either from the same department or other departments of the institute if the problem is of inter-departmental nature, or from industry may be considered as co-supervisor(s).
- 5.3 *A scholar (Full-time or Part-time) shall be allotted a maximum of two supervisors (including internal and external supervisors).*
- 5.4 Change of research supervisor(s)/ withdrawal of co-supervisor (if any), under exceptional circumstances shall be permitted by the senate, on recommendation of DSC after consulting (i) the research scholar (ii) the allotted supervisor(s) and (iii) the proposed supervisor(s).
- 5.5 At any given time, the total number of research scholars with Institute Fellowship registered with a faculty member as a Main/Soul Supervisor shall not exceed **TWO**. DAC- PG&R shall ensure the number of scholars with institute fellowship with any supervisor does not exceed TWO. However, there is no limit for the number of scholars without institute fellowship.
- 5.6 To promote research culture, the faculty members having an ongoing project will be given an additional scholar with Institute fellowship.
- 5.7 The individual department will formulate the guidelines for the allotment of supervisor(s) for the scholar with institute fellowship. However, the following guidelines are to be followed while allotting the supervisor.
- (i) First priority should be given to the faculty having less number of research scholars with institute fellowship.
 - (ii) If any two or more faculty are with the same number of PhD students, preference is to be given to the faculty with older allotment of scholar.
 - (iii) Faculty who are related to the candidate shall not be considered to act either a supervisor or co-supervisor. Further, the faculty shall not be considered for inclusion in the DSC.
- 5.8 When a faculty member, who has guided a candidate for at least 3 years, retires, he/she will continue to be a supervisor. However, a faculty who is in service shall be appointed as co-supervisor.
- 5.9 After the Comprehensive Examination of the student, if the supervisor (in case of a single supervisor) proceeds on leave/deputation/ lien for a period of
- Less than 6 months, a care-taker supervisor will be appointed by the Department.
 - More than 6 months and less than 2 years, a co-supervisor will be appointed by the Department.
 - More than 2 years, a new supervisor will be appointed by the Department. However, the original supervisor may continue as co-supervisor.
 - In case of more than one supervisor, the co-supervisor will take the role of main supervisor. If the co-supervisor belongs to an external organization, a new Main supervisor shall be allotted.
- 5.10 If the supervisor (in case of a single supervisor) is leaving the institute before the comprehensive viva of the enrolled candidate for Ph.D. program, he/ she will cease to be a supervisor. In this case, the Department has to allot a new supervisor.
- 5.11 If the supervisor is leaving the Institute after submission of synopsis, he/she can continue to be supervisor till the award of Ph.D. degree.
- 5.12 Faculty members having less than 3 years of service shall not be considered for allocation of a scholar.



6. RESIDENTIAL REQUIREMENT

- 6.1 All candidates admitted to the full time Ph.D. program (except categories (d) and (f)) will be required to stay in the institute till they complete all assigned work and submit thesis. (See <https://nitw.ac.in/dms/>) for students' disciplinary Manual.
- 6.2 In case of part-time candidates with at least 5 years of experience, with the recommendation of the DSC and approval of the Chairman, Senate, the residential requirement may be waived completely. Nevertheless, it is mandatory for such candidates also to complete the course work for the prescribed number of credits on self-study mode, following all steps like assignments, examinations etc., as prescribed for any regular course at NIT, Warangal. However at least one seminar per semester before DSC is mandatory to review his/her progress.

7. MINIMUM AND MAXIMUM PERIODS OF THESIS SUBMISSION

- 7.1 The minimum period for submission of thesis is as given below:

| Qualification at the time of admission into Ph.D. program | Min. Period for thesis Submission from the date of |
|---|--|
| Full time candidates with M.E. / M.Tech. / M.Phil. | 2 Years |
| Full time candidates with M.Sc. / M.A. / MBA / B.Tech. | 3 Years |
| Part time candidates | 4 Years |

- 7.2 Registration of a candidate for the PhD degree shall be effective, normally, from the date of joining unless on account of unsatisfactory progress in work deferred for a later date and shall remain valid for a period of EIGHT years before the expiry of which he/she will be required to submit the thesis. In the event of a candidate failing to submit his/her thesis within the period, his/ her registration shall lapse automatically.
- 7.3 If the scholar is permitted for re-admission by the Senate after completion of eight years, the scholar will have to submit the thesis within a maximum period of four years.
- 7.4 **Irregularities in Registration:** If any scholar (internal / external / FT / PT) doesn't register for two consecutive semesters without prior approval, his / her registration shall be cancelled.
- 7.5 Scholars failing to submit progress report and registration without prior approval, will not be permitted to register in the next semester. Scholars failing to register in any one semester will be allowed to register in the subsequent semester subject to satisfying the following:
- Pay the tuition fee of the previous semester along with the present semester.
 - Pay a prescribed fine of Rs. 5,000/-.

8. AWARD OF THE DEGREE

- 8.1 On the recommendation of the Viva-Voce Board, the Senate shall decide whether the candidate should be recommended to the Board of Governors for the award of the degree of Doctor of Philosophy.
- 8.2 The Senate may authorize its Chairman to recommend to the Board of Governors, a candidate for the award of the Degree of Doctor of Philosophy, if he/she has completed all the requirements



successfully and has been recommended by the Viva-Voce Board. Any action taken by the Chairman under the provisions of this section shall be reported to the Senate at its subsequent meeting.

9. TEMPORARY WITHDRAWAL

- 9.1 A student who has been admitted to PhD program may be permitted to withdraw temporarily for a period of one semester from the Institute on account of prolonged illness/acute problem in the family provided that:
- the student applies to the Institute through the DSC
 - The institute is satisfied that, inclusive of the period of withdrawal, the student is likely to complete all the requirements for the degree within 8 years of admission to the Program.
 - There are no outstanding dues or demand from the Institute/ Department/ Centre/ Hall of Residence / Library.
- 9.2 A student who has been granted temporary withdrawal for a complete semester need not pay tuition fee for the leave period.
- 9.3 A student shall be granted only one such temporary withdrawal during the program.

10. EXIT POLICY

- 10.1 The scholars have to present the progress of the research work to the DSC at the end of each semester. The DSC has to award a 'Satisfactory' or 'Un-Satisfactory' in the progress report at the end of each semester.
- 10.2 The scholar is allowed to exit with a lower degree than admitted in the event of the following:
- based on the student's request
 - if the concerned DSC recommends termination of studentship on the grounds of unsatisfactory progress in research (two Un-Satisfactory reports in the consecutive progress reports)
 - if the scholar could not clear Comprehensive viva voce exam within three semesters
- 10.3 The lower degree allowed for such scholars is M.S. by Research.
- 10.4 The M.S. by Research degree will be awarded to the above students only on completion of required course credits for Ph.D. as prescribed by the DSC and on successful viva-voce examination after submission of dissertation work.
- 10.5 These students are also required to publish ONE paper as detailed in 4.4.2
- 10.6 The registration of the student from Ph.D. program shall be terminated immediately on the approval of the Senate for exit and the student shall be deemed as registered for M.S. by Research for submission of dissertation.
- 10.7 The stipend shall also be reduced from FULL to HALF from the date of conversion. However, the total period of stipend is only for 3 years from the date of registration for all such candidates.



APPENDIX - I

1. INSTITUTE FELLOWSHIP

(For candidates belonging to category (a), described in section 2.1)

All full-time scholars admitted under Institute fellowship are eligible for fellowship. Part-time scholars shall not be eligible for any kind of fellowship.

2. FELLOWSHIP

- 2.1 The amount of the Institute Research Fellowship for scholars possessing the stipulated qualification at the time of admission to the research program shall be as per the AICTE guidelines under instructions of MoE, Govt. of India. The Board of Governors may revise the rates of fellowship from time to time.
- 2.2 The scholar has to present his/her progress to the DSC and submit its recommendations. Scholar is eligible for enhancement of fellowship after two years of registration to PhD program. Fellowship will be given only for three years. However, based on the Supervisor(s) and DSC recommendations, the fellowship will be extended every year up to a maximum period of 5 years from the date of registration. However, if any scholar has opted for temporary withdrawal, fellowship will be paid for maximum of five years even though it encroaches into the sixth year from the date of admission.
- 2.3 In the event of the DSC being not satisfied with the progress of a scholar during the preceding two years, it may recommend suspension of enhancement in the value of the fellowship for such period, as it deems appropriate. The committee will reassess the candidate's work after the period so fixed. If satisfied, the committee will recommend the enhancement of the fellowship. The committee should also indicate the date from which the enhanced value will be effective.

3. CONVERSION OF PROJECT TO INSTITUTE FELLOWSHIP

The following procedure is recommended for converting JRF/SRF under different schemes to Institute fellowship:

- 3.1 The scholar must have been selected through a regular advertisement at the time of PhD admissions satisfying the eligibility criteria. He/she will be paid fellowship from the project funds of the PI. His / Her admission at this point of time will be an addition to the number of seats allotted to the Department/Institute.
- 3.2 The scholar is eligible for conversion from JRF to Institute fellowship only after working for a minimum period of 1 year in a project.
- 3.3 Scholar need to apply for PhD admission against the advertisement during the period in which the scholar wants to get his/her project fellowship converted to Institute fellowship. No need to attend written test or interview, if his/her first selection as JRF/SRF was against an advertisement for PhD admissions. Otherwise, he/she has to attend the selection process.
- 3.4 The scholar shall apply to the Chairman, Senate through proper channel (i.e., Supervisor(s), DSC, Dean-R&C and Dean-Academic) requesting for conversion of the scholar from Project funds to the Institute fellowship once the project gets closed. The supervisor (PI) should enclose the following with the application:



4. TENURE:

- 4.1 The Fellowship shall be payable from the date the scholar joins the Institute. At the initial stage the order for payment of fellowship shall, however, be issued when the scholar is enrolled formally.
- 4.2 The tenure of a research fellowship shall be three years counted from the date of joining. The initial award shall however, be released for one year and then renewed from year to year up to the third year, subject to satisfactory progress. On the recommendation of the DSC, the tenure may be extended for a further period of two more years, granting the extension for not more than a year at a time subject to the satisfactory performance of the scholar, at seminar lecture delivered embodying the progress of the work. Grant of yearly instalment of the tenure is subject to actual requirement of the scholar's work to be certified by the DSC, after assessing the progress of the work presented through Seminar lectures.
- 4.3 Normally the tenure of the fellowship awarded to a scholar will terminate with effect from the day following the date of submission of thesis, provided he has not left the institute earlier and has been working in the Department/Centre till that date. However, a scholar may be allowed to draw fellowship for a further period of 3 months after the date of submission in view to complete any unfinished part of experiment undertaken relating to his research work, subject to the overall limit of 5 years, on the recommendation of the Supervisor and DSC.
- 4.4 The fellowship for the last month shall be payable subject to foregoing conditions up to the actual date of the scholar's leaving the institute. The disbursement of last monthly instalment of fellowship shall be made, on production of a No Dues Certificate from the hostels, library and the Department/Centre.
- 4.5 Notwithstanding anything contained in the foregoing sub-paragraphs, continuation of fellowship from month to month is subject to candidate's good conduct and continuous progress of research work to the satisfaction of the supervisor(s), the Head of the Department/Centre and other authorities.

5. CONCESSION OF LEAVE

- 5.1 An Institute Research Scholar is required to carry out his research work regularly under the guidance of the Supervisor(s), without any interruption during the period he enjoys the fellowship.
- 5.2 A scholar shall be entitled to i) casual leave of 15 days and (ii) medical leave of 15 days, in a year counting from the date of joining the program. Any leave not availed of shall not accumulate. Research scholars going on medical leave should give prior intimation to the Department within a week.
- 5.3 Married Research scholars admitted to the research program of the institute shall, in addition to casual leave and medical leave, be entitled to maternity/paternity leave as per rules of the Government of India admissible to Central Government employees (Rule 43(1) of the CCS (leave) rules 1972, if the request for the leave is supported by an original medical certificate from a registered medical practitioner to all the eligible married Full Time PhD scholars (under the Institute fellowship) of the Institute.
- 5.4 Fellowship for the maternity leave period will be paid only on rejoining from Maternity Leave. Full time PhD Scholars are eligible for paternity leave subject to the following conditions:
 - Minimum six months of research period prior to proceeding on paternity leave
 - Paternity leave will be sanctioned on submitting the original medical certificate.
- 5.5 Any absence over and above the admissible leave as prescribed above shall be without fellowship which shall be, deducted on pro rata basis for the days of such absence.



- 5.6 A research scholar may be granted leave by the Dean-Academic, on the recommendation of the supervisor and the Head of the Department without fellowship for a total period not exceeding three months, during the entire tenure of fellowship.
- 5.7 A research scholar may be given special leave to collect data for his research/ carry out part of his research in an Industry/ R&D Lab or to present papers in conferences. The scholar shall submit the Special Casual Leave with necessary and prior approvals to the Academic section before availing. The total number of Special Casual Leaves for a scholar in an academic year shall not be more than 10 days.
 - i) For attending conferences (National/International): The leave shall be recommended by the Supervisor(s) and approved by the concerned Head of the Department. The period of leave shall not be more than the duration of the conference + four days for travel in any case.
 - ii) For data collection outside NITW or any research related work: This shall be recommended by the Supervisor(s) and approved by the concerned Head of the Department.

6. GENERAL

- 6.1 No Research scholar shall be permitted to accept or hold any appointment paid or otherwise or receive any emoluments, salary, stipend or any other fellowship during the tenure of the award. In the event of scholar being awarded another scholarship of the institute or of any external organization/institution, he will have the option to retain any one of the awards, according to his choice, which he will communicate immediately in writing to the Dean- Academic.
- 6.2 A research scholar may be assigned academic responsibilities up to six hours per week (like tutorial classes, laboratory demonstration work, conduct of seminar/symposia, running and maintenance of equipment, computer etc.) as may be decided by the Head of the Department.
- 6.3 A research scholar shall maintain, besides satisfactory academic progress, good conduct, behavior and discipline in the institute. In the event of a scholar being found to be involved in any act of misconduct, misbehavior, indiscipline or use of unfair means at an examination, the fellowship is liable to be suspended with immediate effect. (See <https://nitw.ac.in/dms/>) for students' disciplinary Manual.
- 6.4 If a research scholar wishes to relinquish the fellowship during the tenure, it should be done with the prior approval of the supervisor(s), the Head of the Department and the Dean- Academic. He should also obtain prior permission from the same authority for appearing in any examination conducted by any institution, university or public body.

**APPENDIX-II****ADMISSION OF SPONSORED CANDIDATES TO Ph.D. PROGRAM**

[For categories (b) and (d) described in section 2.1]

1. The Institute may admit self-supporting candidates and persons who are in gainful employment as 'Sponsored Scholars' to the research program subject to the following conditions:
 - 1.1 *Category b:* Qualified teachers of recognized Engineering Colleges selected under the Quality Improvement Program (QIP) of the Govt. of India and of Science Colleges who are awarded Teacher fellowship of the University Grants Commission shall be eligible for admission to the program.
 - 1.2 *Category-d:* Persons who possess the minimum prescribed qualifications and are in service in any of the following establishments, as may be recognized by NIT Warangal, for the purpose, from time to time, shall be eligible for admission to the Ph.D. program as sponsored scholars:
 - i) Defense or other Ministries of the Government of India or any other government organizations.
 - ii) Established industrial research and development organizations.
 - iii) Autonomous bodies/industries.
2. The prescribed minimum qualification for admission to the Ph.D. program is:
 - i) M.Tech. / M.E. / M.S. / M.Phil./MPharm or equivalent degree or M.Sc./ M.Sc. (Tech)/ M.A. / MBA or equivalent degree.
 - ii) Admission to a Ph.D. program shall be open to candidates with *60% aggregate marks or 6.5 CGPA (on a 10-point scale) at both UG and PG for GEN/ GENEWS/ OBC-NCL category and minimum 55% aggregate marks or 6.0 CGPA (on a 10-point scale) for SC/ ST/ PwD category.*
3. An intending sponsored candidate must submit his application in prescribed form for admission through his employer, who will forward the same to the institute with suitable endorsement so as to reach the institute by the date stipulated in the notification for the semester.
4. A sponsored scholar selected for admission shall be required, at the time of joining the institute:
 - a) to submit evidence of having passed the qualifying examination and such other documents as the institute may require,
 - b) to produce certificate from the employer to the effect
 - i) that he/she has been officially relieved from his/her duties for purpose of joining the program and has been granted the leave for the required period
 - ii) that his/her services shall be retained with the employer. The proforma for Sponsorship cum clearance certificate from the employer, is given in Appendix-VII.
5. Sponsored candidate (category (d)) admitted to the Ph.D:
 - a) In the case of a sponsored candidate [Category (d)] admitted as such to the Ph.D. program, the minimum residential requirement is one year. However, it may be reduced to one semester to be completed at a stretch, preferably immediately after joining, if the organization in which he/she is employed has R&D facilities, and subject to conditions laid down in Sec. 3.4 of the Regulations as well as the following sub sections (b), (c) and (d).
 - b) A candidate sponsored by an industry, an R&D Organization, or a Government Organization [Category (d)] having adequate research facilities may be allowed to work externally subject to his fulfilling all such conditions prescribed by these Regulations as are applicable. Permission to carry out the research work partially or entirely at the organization shall be



granted by the Chairman of senate, only if the DSC recommends after it is satisfied about availability of research facilities there and fulfilment of all requirements. Such permission is to be obtained in advance.

- c) In such a case a joint supervisor from the sponsoring organization with adequate research experience may be appointed. When a sponsored candidate has been granted permission under these provisions to work externally at the parent Organization, he/she will be required to maintain frequent contact with the supervisor in the institute.



APPENDIX-III

ADMISSION OF SRFs JRFs IN CSIR / DST / DEFENCE LABORATORIES / GOVERNMENT R&D ORGANZATIONS / IIMs

1. They will have to be permitted by the organizations, they are attached to, for admission to this institute for pursuing Ph.D. program.
2. Applications from such candidates will be received twice a year, against advertisements in the newspaper(s).
3. Selection will be made as per the normal procedure of the institute.
4. The candidate must have qualified in GATE / NET as the case may be.
5. They must be SRF's / JRF's or of equivalent position attached to CSIR / DST / Defense Laboratories / Government R&D Organizations / IIMs.
6. No fellowship or financial assistance will be provided to such candidates.
7. Minimum residential requirement for such candidates for course work etc. shall be one semester.
8. In case of candidates from such institutions, certificate from the Director of the Institute will be required confirming that such candidates, have not / will not, register for any other academic programs of any Institute while pursuing Ph.D. program at NIT Warangal.
9. All conditions including minimum qualifications for admission to the Ph.D. program prescribed for other categories of scholars would apply to these candidates as well.



APPENDIX-IV

Ph.D. PROGRAM – PART TIME REGISTRATION

(For category (I, j, k, l) described in section 2.1)

1. ELIGIBILITY CRITERIA

- i) Permanent Employees from Private Industries with R & D facilities having five years of experience in an industry with UG qualification and four years of experience with PG qualification are eligible.
- ii) Permanent employees working in Government R & D laboratories/Government organizations/Government industry/PSUs/State Undertakings with UG/PG qualification as per eligibility
- iii) Permanent Employees from Private Industries with R & D facilities, Government R & D laboratories/Government organizations/Government industry/PSUs/State Undertakings with B. Tech. who have put in at least 5 years of experience and having at least four research publications in journals of repute. The selection of candidates under this category is based on interview.
- iv) Permanent faculty of Private Academic Institutions
- v) Permanent faculty from Educational Institutions fully funded by Government or Maintained by Public-Private Partnership (PPP) Mode
- vi) Faculty members working on contractual basis in Government Institutions such as IITs are also eligible.

2. RESIDENTIAL REQUIREMENTS

- i) The part-time external candidates will have to undergo a mandatory residential requirement of one semester, either in one stretch or with a break of maximum three times (i.e. two months each time), in case the candidate registers for course work on self-study basis.
- ii) In case of part-time external candidates with at least 5 years of research experience in R&D Organizations, with the special permission of the DSC and approval of the senate, the residential requirement may be waived completely. Nevertheless, it is mandatory for such candidates also to complete the course work for the prescribed number of credits on self-study mode, following all steps like assignments, examinations etc., as prescribed for any regular course at NIT, Warangal. However at least one seminar per semester before DSC is mandatory to review his/her progress.

NOTE: All other rules and regulations including the evaluation of Ph.D. thesis are same as those applicable for full time Ph.D. scholars.



APPENDIX-V

DOCTORAL SCRUTINY COMMITTEE (DSC)

The Head of the Department in consultation with the supervisor shall constitute a Doctoral Scrutiny Committee for each candidate admitted to the Research Program leading to Ph.D. degree.

| | |
|---|------------------|
| 1. HoD/Any Senior faculty from the Department/ Allied Department {to be nominated by Dean (Academic)} | Chairman |
| 2. Research Supervisor | Member/ Convener |
| 3. Co-supervisor (if any) | Member |
| 4. Two faculty members of the Department | Member |
| 5. One faculty member of the allied Department {to be nominated by Dean (Academic)} | Member |

The guidelines to be followed to avoid the frequent changes in DSC constitution:

- A senior professor in the department based on the area of research work of the scholar may be nominated by the Dean, Academic as Chairman.
- If the Head of the Department is nominated as the Chairman, DSC, the name of the Head of the Department need not be mentioned in the DSC form. This will avoid taking fresh approval every time whenever a change in the Headship.
- If the Research Supervisor happens to be the HoD and Chairman, DSC, another senior faculty member of the Department shall be nominated as the Chairman DSC.
- Proposing the faculty as a member in DSC who is getting retired in the next 3 years may be avoided.

FUNCTIONS:

1. To formulate the course work of the candidate.
2. To scrutinize syllabi of courses of self-study (if any) prepared by the Research Supervisor(s) and send the same to the Dean, Academic.
3. To frame syllabus and set the question paper for the written test component of the Comprehensive Examination.
4. To assess and approve the research proposal of the candidate and conduct the Comprehensive Examination.
5. To finalize and forward the grades of the Candidate in each of the courses to the Dean-Academic.
6. To review the progress of the candidate once in every six months and send the progress report to the Dean-Academic.
7. To assess and approve the adequacy of the work in the Pre-synopsis seminar and communicate the same through DSC to Dean-Academic.
8. To prepare a panel of examiners consisting of 5 National and 5 International examiners to be sent to the Dean-Academic.
9. To act as members of the Viva-Voce Board along with the external examiner and submit the Viva-voce report.



APPENDIX-VI

GUIDELINES FOR APPOINTMENT OF JOINT SUPERVISOR

1. All candidates admitted for the Ph.D. program are required to carry out their research work under the guidance of a supervisor. There can be two supervisors, at most, for any Ph.D. student.
2. After the Comprehensive Examination of the student, if the supervisor (in case of a single supervisor) proceeds on leave/deputation/ lien for a period of
 - Less than 6 months, a care-taker supervisor will be appointed by the Department.
 - More than 6 months and less than 2 years, a co-supervisor will be appointed by the Department.
 - More than 2 years, a new supervisor will be appointed by the Department. However, the original supervisor may continue as co-supervisor.
3. If the supervisor (in case of a single supervisor) is leaving the institute before the comprehensive viva of the enrolled candidate for Ph.D. program, he/ she will cease to be a supervisor. In this case, the Department has to allot a new supervisor.
4. If the supervisor is leaving the Institute after submission of synopsis, he/she can continue to be supervisor till the award of Ph.D. degree.
5. A supervisor, who is superannuating, will continue to be the sole guide, if the thesis is submitted within 6 months. If the thesis is not ready for submission within 6 months, a joint supervisor must be appointed by the DSC.
6. After superannuating from service of this institute, if the supervisor joins the institute as an Emeritus Scientist Professor or in any other capacity, he may continue to be the sole supervisor or as joint supervisor if the DSC so recommends. A person re-employed after superannuation shall continue to hold the same status in the matter till the end of the period of re-employment.
7. Persons from outside the Institute, Joining as Emeritus Scientists or Professors or as Chair-Professors, can be appointed as guide for new scholars, only jointly with a regular faculty member and not alone.

NOTE: The above points are only guidelines. The recommendation of DSC of a candidate will be given due consideration in deciding.



APPENDIX-VII

SPONSORSHIP-CUM-CLEARANCE CERTIFICATE FROM EMPLOYER

(For sponsored applicants only)

We certify that Mr./Ms..... Designation , an applicant for admission into Ph.D. program of the National Institute of Technology, Warangal, for the(month and year), has been in continuous employment in our organization named... (give complete address), for the last years and that he/she has been sponsored by us for undergoing the program. Certified further that his/her services with the organization will be retained during the period carrying out the studies/ research work at the National Institute of Technology, Warangal, and on completion thereof he/she will continue in service in our organization.

Station:
Date
(Signature of the Competent Authority with seal)
Name in full.....
Designation
(seal)

Note: Application will not be considered without the above sponsorship certificate.