National Institute of Technology
Tiruchirappalli - 620 015

REGULATIONS 2024

MS (BY RESEARCH)

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Contents

MS (by Research) REGULATIONS

| R.1	Areas of Specialization
	MS (by Research) programme shall be offered in all engineering departments, and the department of Physics, offering M.Tech. programmes. Specific areas (research topics) will be decided by the departments from time to time based on the following: a. Research interests of the faculty, b. Research areas of mutual interest (considering NITT and sponsoring industries like BHEL) (such as Fuels, Design and operation of boilers, Welding / Fabrication of boilers, Occupational Safety, Modeling / Simulation and Non – Destructive Testing) and c. Research areas of other sponsored research projects.
R.2	Educational Qualifications
	Admission criteria / policies will be decided by the Senate following the guidelines issued by the Ministry of Education (MoE), Government of India. The eligibility for admission to MS (by Research) in any engineering department shall be, in general, the same as the qualifications prescribed for admission to the M.Tech. programmes of that department.
R.3	Selection Procedure and Student Status
	Admission to the M. S. (by Research) programme will be based on: a. GATE score and performance in the interview conducted by the Institute. b. Candidates from abroad / NRI category / nominees of foreign Governments shall be accepted directly from the Ministry, following the guidelines listed for admission to M. Tech. programmes. c. Full-time: The candidates may be either supported by the Institute (stipend paid by the Institute / stipend paid by BHEL / stipend paid from other sponsored projects). Part-time: Candidates from organizations which have MOU with NIT-T, National Laboratories and similar organizations of high repute. d. Part-time candidates can move away from the campus for the duration of their project work. Prior approval of the Dean (Academic) is required in the case of full-time scholars seeking project work outside the Institute and such students will be treated as a full-time student during the project term/s also.
R.4	Duration of the Programme
	The programme (full-time and part-time) shall, on an average, need two years from the date of registration to submission of synopsis, and hence the minimum duration required for the completion shall be four semesters. The course work may be completed in one semester and the project work can be taken up in the following three semesters. The maximum duration of stipend for the eligible candidates will be restricted to three years (six semesters).

		Under extraordinary circumstances, based on the recommendations of the GTC extension of duration may be considered. Nevertheless, at the end of 5 years from the date of provisional registration, no further extension will be given and the registration to the MS programme stands cancelled.
R.5	**Course Work**	
		The student will have to complete five courses (minimum 3 core courses and remaining 2 courses may elective or core subjects) at the M. Tech. level (from a list of seven courses recommended by the General Test Committee). The Elective courses can be taken from online platforms like NPTEL / SWAYAM (Online courses should be of 12 week duration). One directed study course is permitted for sponsored candidates. The course work shall be, typically, completed in the first semester. The credits for course work shall be based on the procedures prescribed for M. Tech. programmes. The student needs to earn a minimum of fifteen credits from the five courses. Any five courses (minimum 3 core courses and remaining 2 courses may elective or core subjects) with higher grade is taken for overall grade calculation. The minimum Cumulative grade point average (CGPA) of 7.5 should be obtained.
R.6	**MS (by Research) Guideship**	
		a. All faculty members of the Institute holding doctorate degree are eligible to guide M.S (by Research) scholars
		b. No guide shall have more than two M.S (by Research) scholars under NIT-T (Full-Time), excluding the Candidates taken under sponsored projects, who are yet to submit the Synopsis of their theses. The guide can take subsequent candidates after the submission of synopsis by the existing Scholars.
R.7	**General Test Committee**	
		The guide allotment will be made within three days from the date of admission. The research activity, along with the necessary course work, shall be directed by a General Test Committee (GTC) constituted specifically for each student. The GTC shall have, the following members:
		1. One senior faculty member from the Department concerned, as the chairman of GTC (suggested by the Guide),
		2. The guide,
		3. One faculty member nominated by the Dean (Academic) from the panel of names (NIT-T) suggested by guide, and
		4. One technical expert (external) from leading academic institutions/ national laboratories / industry to be nominated by the Dean (Academic) from the panel of names suggested by guide. In case of projects supported by Industry (like BHEL) the external technical expert shall be drawn from Industry. (Each panel consisting of two members for item 3&4)

		The GTC will meet within a week time from the date of admission of the student to the MS (by Research) programme. For the first meeting the external member need not be present. The GTC shall meet again in the third semester (within the first two weeks) to review the progress made by the candidate.
R.8	**Progress Report**	
		a. MS (by Research) scholars shall sign the attendance register on all working days. They are eligible for a total of 15 days leave every semester, which they can avail after obtaining the HOD's permission. b. Every MS (by Research) scholar shall submit a written report of work done by him/her in the prescribed proforma to the Guide who shall forward it to the GTC within two weeks before the end of each 12-month period from the date of registration in the first 2 years, and before the end of each 6-month period beyond 2 years. c. Every MS (by Research) scholar shall appear before the GTC once a year for the first two years and once in a semester thereafter for progress evaluation. d. Progress evaluation meetings of the GTC will be convened by the Chairman, GTC in April (for research scholars admitted in July semester) and in November (for research scholars admitted in January semester) to assess the progress in his/her research work and recommend renewal of scholarship / registration wherever applicable. e. If the progress of the research scholar continues to be unsatisfactory, the GTC can recommend the cancellation of registration. For more detail about semester plan, please refer appendix-1
R.9	**Seminar Presentation**	
		a. The scholar, upon completion of his research work, shall present a seminar, highlighting the methodology and the inferences drawn. b. This seminar shall be attended by at least three members of the GTC, to ensure that the scholar has followed up the suggestions made by the GTC in its earlier meetings.
R.10	**Synopsis of Thesis**	
		a. MS Research scholars are required to give, prior to the submission of synopsis, one Seminar talk and shall have at least one paper accepted in a reputed journal or two papers in reputed conference proceedings. b. Up on satisfactory completion of the prescribed courses and the required publications as mentioned above (Publications in paid journals shall not be considered), the research scholar shall submit ten copies of the synopsis of his/her research work to the GTC. c. The research scholar should present the synopsis before the GTC. The GTC will, if it approves the work reported in the synopsis, permit the research scholar to submit the thesis and recommend a panel of at least six thesis examiners outside the Institute and within India. (The

		examiners should have Ph.D. degree). This meeting of the GTC will be held in the presence of the Dean (Academic) or Associate Dean (MS & Ph.D.).
R.11	**Submission of the Thesis**	
		The research scholar, within three months of presentation of the synopsis, shall submit four copies of thesis embodying the results of investigation, and also three copies of the Abstract of the thesis of about 400 words. The scholar should also submit Plagiarism Report attested by the Research Supervisor that the plagiarism is less than 20% excluding scholar's publication while submitting the thesis.
R.12	**Panel of Examiners**	
		The thesis shall be referred to two examiners, to be chosen by the Chairman of the Senate or Dean (Academic) from among the panel of 6 Indian examiners submitted by the guide and recommended by the GTC at its synopsis meeting.
R.13	**Thesis Evaluation Report**	
		a. The examiner is expected to send the report on the thesis within two months from the date of receipt of the thesis.
		b. In case of undue delay in receiving the thesis report, the Chairman, Senate or Dean (Academic) shall appoint another examiner from the panel for evaluating the thesis.
		c. If an examiner suggests resubmission of the thesis, after revision, the research scholar will be allowed to resubmit the thesis within the time stipulated by the GTC failing which the revised thesis will not be accepted and his/her registration will be cancelled.
		d. If one of the examiners declares the thesis as not commended the thesis shall be referred to a third examiner from the panel for his evaluation.
		e. If two examiners, after referring to a third examiner (if necessary), report the thesis as not commended the registration of the scholar will be cancelled.
		f. If reports of two examiners, declare the thesis as 'commended,' and if no viva voce is suggested, the GTC will consider the reports within two weeks of receipt of copies of reports by the Chairman, GTC from the academic section, and recommends the award of MS degree (by Research) to the scholar, with a certificate that the corrections / revisions suggested by the examiner(s) have been incorporated in the thesis.
		g. In the event of one or both of the examiners suggesting the conduct of viva-voce, a board constituted for this purpose will conduct the viva-voce examination and recommend the award of MS degree (by Research) to the scholar, with a certificate that the performance of the research scholar in the viva-voce was found satisfactory and the corrections / revisions suggested by the examiner(s) have been incorporated in the thesis. The viva-voce examination will be conducted normally not earlier

		than two weeks from the date of receipt of copies of reports by the Chairman, General test Committee from the Academic Section. h. In all other cases, not covered by the above Regulations, the matter will be referred to the Dean (Academic) for consideration.
R.14	**Viva Voce Board**	
		a. The viva-voce board shall comprise the members of the GTC. b. The viva-voce board will examine the scholar on his/her thesis work and evaluate his/her performance as satisfactory or otherwise. c. If the report of the viva-voce board declares the performance of the research scholar as not satisfactory, he/she may be asked to reappear for oral examination at a later date (not earlier than a month and not later than six months from the date of the first oral examination). d. If the viva-voce Board on the second occasion also evaluates the performance of the research scholar as not satisfactory, the matter will be referred to the Senate for a decision. e. The viva-voce board may also recommend revision to be made in the final version of the thesis after taking in to consideration, suggestions of the examiners who evaluated the thesis and the discussion at the viva-voce examination. The chairman of the viva-voce board shall forward the thesis to the Academic section certifying that the revisions recommended by the viva-voce board, if any, have been incorporated in the copy of the thesis along with the report of the viva-voce board. f. All the research scholars shall submit one copy of the final form of the thesis in A5 size and an electronic version in pdf format after the GTC or the viva voce board recommends the award of the degree.
R.15	**Award of MS Degree (by Research)**	
	On the recommendation of the general test committee/viva voce board and the senate and with the approval of the board of governors of the institute, the research scholar will be awarded the MS (by research) degree.	
R.16	**Power to modify**	
	Notwithstanding all that has been stated above, the Senate of the Institute has the right to modify any of the above rules and regulations from time to time.	
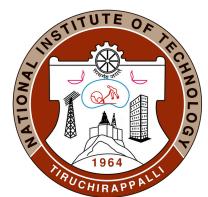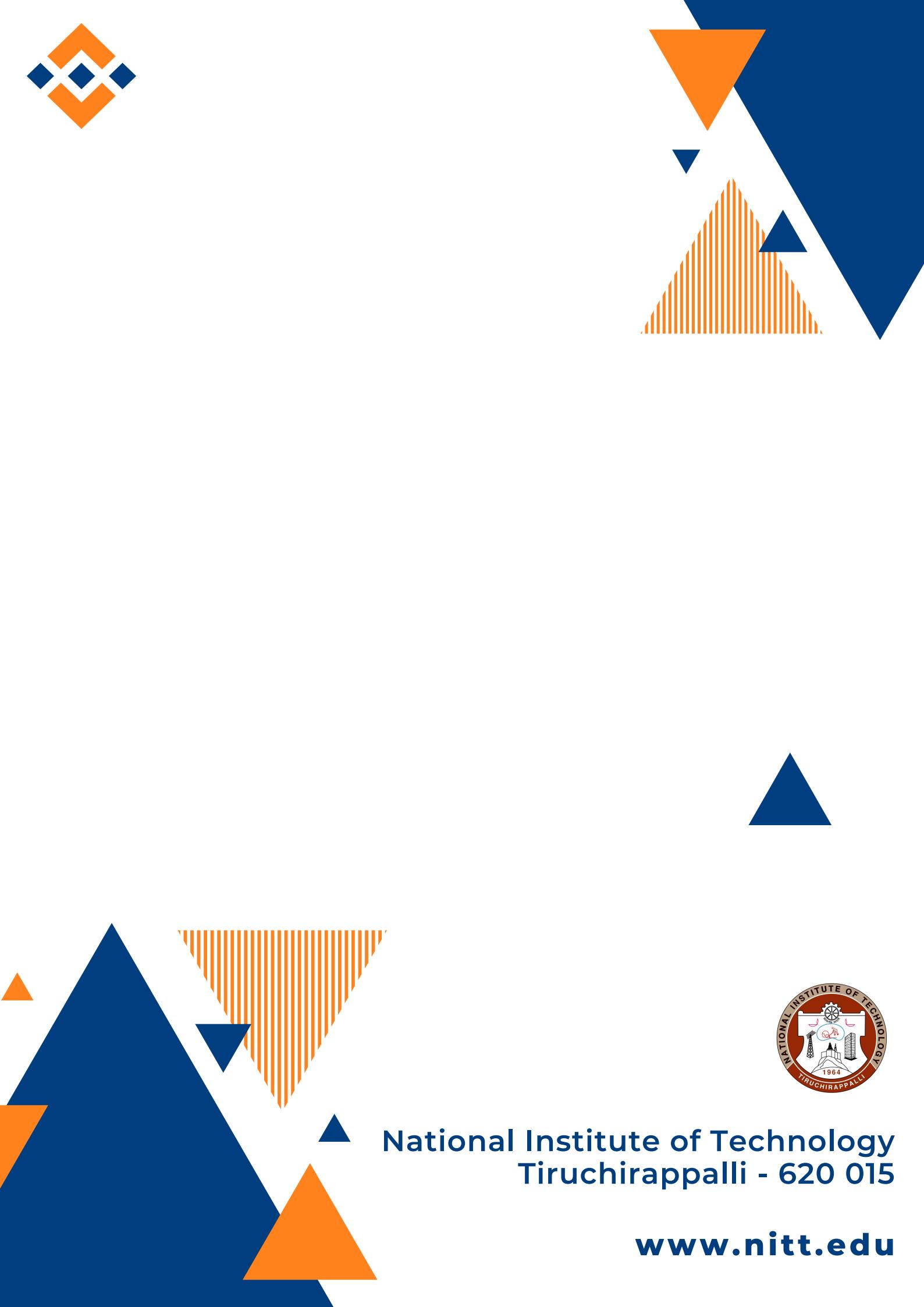
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