



RULES & REGULATIONS
for
Master of Science (Research) Programme

(Updated till 31st December, 2010)

INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS, NEW DELHI- 110016

Vision

To contribute to India and the World through excellence in scientific and technical education and research; to serve as a valuable resource for industry and society; and to remain a source of pride for all Indians.

Mission

To generate new knowledge by engaging in cutting-edge research and to promote academic growth by offering state-of-the-art undergraduate, postgraduate and doctoral programmes.

To identify, based on an informed perception of Indian, regional and global needs, areas of specialization upon which the Institute can concentrate.

To undertake collaborative projects which offer opportunities for long-term interaction with academia and industry.

To develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

Values

- Academic integrity and accountability.
- Respect and tolerance for the views of every individual.
- Attention to issues of national relevance as well as a global concern.
- Breadth of understanding, including knowledge of the human sciences.
- Appreciation of intellectual excellence and creativity.
- An unfettered spirit of exploration, rationality and enterprise.

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Master of Science (Research) Programmes in :

DEPARTMENTS: Programme Code

Applied Mechanics AMY

Biochemical Engineering and Biotechnology BEY

Chemical Engineering CHY

Civil Engineering CEY

Computer Science & Engineering CSY

Electrical Engineering EEY

Mechanical Engineering MEY

SCHOOLS:

Amar Nath and Shashi Khosla School of Information Technology SIY

Bharti School of Telecommunication Technology and Management BSY

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RULES AND REGULATIONS
FOR THE MASTER OF SCIENCE (RESEARCH) PROGRAMME

1. a) Admission Eligibility

Minimum qualifications required for admission to full-time MS(R) programmes at IIT Delhi for *General/OBC(Non-creamy Layer)* category students is given below:-

Programme & Admission type	Qualifying Degree	Minimum performance in the qualifying degree for General/OBC (Non-Creamy Layer) category students	National level examination requirements
MS(R) (Direct without test/ interview)	B.E./B.Tech/M.Sc or equivalent	75% marks or 8.5 CGPA on a 10-point scale	GATE score \geq 300 or qualifying score whichever is higher
MS(R) Admission with test / interview	B.E./B.Tech/M.Sc or equivalent	60% marks or 6.75 CGPA on a 10-point scale	GATE score \geq 300 or qualifying score whichever is higher

- i) These are Institute minimum requirements and any Department/Centre operating through their DRC/CRC can specify higher short-listing criteria than what is specified in the above table.
- ii) This Table includes many degrees for eligibility but each DRC/CRC is free to specify the qualifying degree disciplines as well as GATE disciplines acceptable for admission to their programmes.
- iii) Admission to MS(R) programmes are carried out by first short-listing the eligible candidates (meeting the minimum performance in their qualifying degree – Column 3 of Table) and scoring above a GATE cut off specified for that programme and then interviewing them at IIT Delhi. In all such cases, GATE score is given a minimum weight of 70% in judging the overall performance of the candidates appearing for interview.
- iv) DRC/CRC is empowered to offer direct admission for MS(R) programme without interview to exceptionally meritorious students. The minimum performance required by such candidates is listed in the above Table. This is the Institute minimum and again DRC/CRC is free to set higher eligibility criteria for direct admission without interview. DRC/CRC may decide not to offer any direct admission without interviews.

- v) Candidates in the final year of their programmes and who expect to complete all their qualifying degree requirements before third week of July are eligible to apply for admission. For short-listing purposes, their performance till the preceding semester (preceding year if their programmes are year based) would be considered but their admission would be subject to their meeting the minimum eligibility criteria after their final qualifying examination results are announced.

b) Exemptions, relaxations and clarifications

- i) For Direct admission of *SC/ST/PH category students* (row 2 of the Table), minimum performance in the qualifying degree is relaxed from 75% to 70% (8.5 to 7.5) and GATE score requirement from 300 to 200.
- ii) For admission with interview of *SC/ST/PH category students* (row 3 of the Table), minimum performance in the qualifying degree is relaxed from 60% to 55% (6.75 to 6.25) and GATE score requirement from 300 to 200.
- iii) Qualifying degree performance is computed by *aggregating performance over all the semesters/years* of the qualifying degree.
- iv) For all *B. Techs. from IITs* graduating with a CGPA of 8.0 or above, the requirement of qualification through GATE is waived off.

c) Minimum Qualifications for admission to Part-time and Sponsored (Full - time) MS(R) Programmes.

The following additional eligibility conditions and relaxations apply for the Part-time and sponsored full-time programme.

- i) Only employees of Public Sector Undertakings or Government Departments or Research and Development Organizations or Private Industries (approved by Faculty Boards) are eligible for admission to these programmes.
- ii) Employees of only those organizations which are located within 50 KMs radius of IIT Delhi are eligible to be considered for admission to part-time MS(R) programmes.
- iii) All candidates should have a minimum experience of one year as on 1st August, for admission in July.
- iv) Minimum qualification for these candidates is the same as for full-time candidates except that the requirement of qualifying in a national examination (column 4 of the Tables) is waived off.
- v) *Sponsored (full-time) candidates* seeking admission to MS(R) programme on the basis of study leave, must submit a "sponsorship certificate" on a proper letterhead from the appropriate authority in the organization clearly stating the following"
- For the period of his/her studies in the programme, the candidate would be treated as on duty with usual salary and allowances, and
 - That he/she will be fully relieved and granted study leave for a minimum period of 2 years.

- vi) **Part-time candidates** are required to submit a “No objection Certificate” on a proper letterhead from the appropriate authority in the organization clearly stating the following:
- The candidate is permitted to pursue studies on a part-time basis
 - That his/her official duties permit him/her to devote sufficient time for studies
 - That he/she will not be transferred to any other place during the period of study

d) Reservation of Seats:

- 15% seats are reserved for SC and 7.5% for ST candidates.
- 27% seats reserved for Non-Creamy layer OBC candidates. All candidates applying for admission under this category should produce the OBC (Non-Creamy Layer) Certificate applicable for OBC's in the Central list at the time of interview. For details and specimen form visit: <http://www.iitd.ac.in/pgadmission>.
- 3% seats are reserved for Persons with Disability (PD) for admission to various Postgraduate Programmes. The candidates selected against the quota for PD will be placed in the appropriate category viz. SC/ST/OBC/General, depending upon the category to which they belong.

Note: All shortlisted candidates applying for admission under the reserved categories are required to produce the relevant certificate at the time of interview.

2. Rules for continuation/termination of registration:

- At the end of the first registered semester, a student with SGPA of 6.0 or more will be permitted to continue. If the SGPA is less than 6.0 then registration will be terminated.
- After the first registered semester, the minimum acceptable performance level in any registered semester is SGPA of 7.0 or more.
- If at the end of any registered semester, the SGPA is less than 7.0, then the student should be issued a warning letter and placed on probation; a copy of the warning letter should be sent to the Chairperson DRC/CRC. The Chairperson DRC/CRC shall assess the feasibility of completing degree requirements and identify remedial measures for problems leading to poor performance.
- If a student is on probation and his/her academic performance is below the minimum acceptable level in the following registered semester then his/her registration will be terminated.
- During the research work period, each unsatisfactory performance grade would entail a warning and two consecutive warnings would result in termination of registration.

3. The graduation requirement based on valid earned credits is CGPA of 7.0 or greater.

4. Duration of the M.S. (Research) Programme

- i) For the full time students the minimum period for the completion is 4 semesters. In the genuine cases it can be extended upto 5 semesters by the DRC/CRC and in extraordinary cases the Dean, PGS&R may consider the extension for one more semester on the recommendation of the DRC/CRC. The total period for the M.S. (Research) for the full time students will not exceed six semesters.
- ii) For the part-time M.S. (Research) students, the normal duration is 6 semesters. For genuine cases unable to complete in six semesters, the DRC/CRC may grant extension by one semester. In the extraordinary cases the Dean, PGS&R may consider the extension up to 10 semesters on the recommendation of the DRC/CRC. This rule for part-time M.S.(Research) students will be applicable only to those who have joined initially as part time students. For students converting from full-time to part-time the maximum stay limit of 6 semesters will be applicable subject to the recommendations of DRC/CRC and approval by Dean, PGS&R.

5. (a) Course/Thesis work

The MS. (Research) programme will be comprised of 20 credits of the course work and 40 credits of the research work. The 20 credits of course work should not include any component of minor project.

(b) Full-Time Students

In the first semester the student has to register for a minimum of 15 and a maximum of 22 credits (including research credits). A maximum of 6 research credits can be opted for in the first semester.

(c) Part-Time Students

In the first semester, the part-time students can only register for the course work with a minimum and maximum limits of 6 and 12 credits, respectively. In the second semester the registration for the thesis work (with an upper limit of 3 credits) can be initiated alongwith the course work. After the completion of the course work, a maximum of 12 research credit can be registered for in any semester. The course work must be completed by the end of third semester, otherwise the registration of the student will stand cancelled.

6. Migration from one PG programme to another PG programme of the institute

Provision exists for the PG students of the Institute to move from (i) M.Tech./M.S.(R) to Ph.d., (ii) M.Tech. to M.S.(R), and (iii) M.S.(R) to M.Tech. as per details given in the table below:

	M.Tech./M.S.(R) to Ph.D.	M.Tech. to M.S. (R)	M.S. (R) to M.Tech.
Timing	> 1 st Sem.	> 1 st Sem. & < 3 rd Sem.	> 1 st Sem. & < 3 rd Sem.
Eligibility	≥ 8.0 SGPA/CGPA & ≥ 12 credits	≥ 12 credits	≥ 12 credits
Admission	DRC/CRC (Evaluation)	DRC/CRC (Evaluation)	DRC/CRC (Evaluation)
Credits	Credits transfer as recommended by DRC/CRC	Credits transfer as recommended by DRC/ CRC	Credits transfer as recommended by DRC/ CRC
Duration	Max. 7 years from date of joining M.Tech./ M.S.(R)	Max. 5 years from date of joining M.Tech.	Max. 5 years from date of joining M.S. (R)

Full-time M.S.(R) students joining the Ph.D. programme within two years of completion of their M.S.(R) degree will be granted waiver of residency period. Further, the course work requirements can be made up by either additional credits (6 credits as per present norms) taken during this M.S.(R) period (over and above their minimum degree requirements), or in the summer semester (first or second) by identifying relevant courses. This credit transfer has to be recommended by the respective DRC/CRC.

7. Conversion from Full-Time to Part Time

The Dean, PGS&R, on the recommendation of the DRC/CRC, may consider the conversion from full-time to part-time for the students completing the course credit requirement of the M.S. (Research) programme.

8. Thesis Supervisor and the Student Research Committee

- i) There can be maximum of 2 thesis Supervisors. On the day of registration, the student should be assigned a caretaker supervisor who would advise him on the courses to be taken. The DRC will assign a supervisor as early as possible but not later than two months from the registration date of the I semester. The Board for Postgraduate Studies and Research, on the recommendation of DRC/CRC may appoint one more supervisor latest by the time of registration in the II semester.
- ii) The DRC/CRC will constitute a 4-member Student Research Committee (comprising of probable thesis supervisors) from the expertise coming from anywhere in the Institute.
- iii) The SRC would monitor the progress of student based on the written report and presentation before the SRC every semester and will recommend the number of thesis credits being considered as cleared (at the end of semester) out of the total thesis credits registered by the students in his research work. The student continuing the project will be given 'X' grade.

9. Appointment of Examiners and the Thesis Evaluation

- i) The student will be required to submit the synopsis at least one month in advance of the submission of the thesis (contrary to two months period being given in the Ph.D. programme). He/She would also be asked to give a pre-synopsis seminar before the DRC before sending the thesis for outside evaluation.
- ii) On receipt of the title and synopsis of the thesis, the Dean, PGS&R, will appoint a board of examiners. The board of examiners will consist of the thesis supervisor(s) and an external nominated by the Dean, PGS&R, from a panel of four experts (within India) recommended by the supervisor(s) through DRC/CRC. In case of sponsored candidates the outside expert cannot be from the organization sponsoring the candidate.
- iii) At the time of appointment of the examiner, it is clearly mentioned that viva-voce examination would be held six weeks after the thesis submission date. Along with the thesis submission, the supervisor indicates a range of Viva dates which is roughly six weeks hence. The examiner is sent the thesis with the range of dates and he/she accepts a suitable date among these. On the specified date, a public viva in presence of external examiner and SRC members would be held. In case the external examiner wants to give waiver for his/her presence, he/she would be required to submit the evaluation report indicating waiver prior to the viva date.

10. Thesis Grading

In case of approval of the thesis the examiners have to rate the standard of the thesis as per norms given below:-

Grade	Grade Points	Description of performance
A	10	Outstanding
A-	9	Excellent
B	8	Very Good
B-	7	Good
C	6	Average

The grading of the thesis is essential for computing the overall CGPA (including the thesis work having the weight of 40 credits) at the time of award of degree.

Final pass grading after the viva-voce examination for M.S. thesis evaluation will however, be limited to the following grades:-

Grade	Grade Points	Description of performance
A	10	Outstanding
A-	9	Excellent
B	8	Very Good
B-	7	Good
C	6	Average

10A. In case where the External Examiner waives his/her presence the weightage to the grade awarded by the External Examiner and the viva-voce team shall be given as follows:-

- 40% : To the grade communicated by the External Examiner
- 60% : Viva-Voce team(internal distribution to be decided by the SRC.)

Specific examples on calculation of the final grade are given in **Appendix**.

11. Thesis Defence

The oral defence of the thesis shall be conducted by a committee consisting of the following members:-

- i) External Examiner: Within India and not from IIT Delhi- referred to as outside expert.
- ii) Thesis supervisor(s).
- iii) Students Research Committee constituted by the DRC/CRC at the time of the initiation of the MS programme of the student.

In case the external examiner waives his presence (may be explicitly requested in the form), the Dean, PGS&R may expedite the evaluation process by entrusting the job of conducting the oral defence to the Student research Committee constituted by the DRC/CRC for reviewing the process of the student.

12. Assistantship

The full-time students admitted in the programme will be entitled for an Institute assistantship at par with M.Tech. Students. The total period of assistantship will not exceed four semesters and the students will be required to render 8 Hrs. of work per week for the course/laboratory management.

13. Conversion to Ph.D.

After a review by the DRC/CRC, the students showing excellent performance in the first two semesters and having scored a minimum of 8.0 CGPA can be considered for getting registered in the Ph.D. programme. The conversion is subject to the minimum qualifications laid down for the admission in the Ph.D. programme. The date of conversion will be considered as the date of registration in the Ph.D. programme and thereafter he will be governed by the rules and regulations applicable for the Ph.D. students. Conversion to Ph.D. will be on the basis of application form by the interested student, which has been recommended by the Student Research Committee and approved by the DRC.

14. Miscellaneous

- i) The student may be provided (on request) a copy of the relevant excerpts of the comments on the thesis work of the external examiner (examiner within India and not from IIT Delhi) reflecting the standard of the research carried out by the student.

- ii) The leave and attendance rules for the M.S. (Research) students will be same as being followed for the M.Tech./M.Des. students.
- iii) The other rules such as the procedure of award of the degree, semester withdrawal, format and no. of copies of the thesis to be submitted, eligibility criterion for the academic and non-academic faculty/staff will be the same as the one followed for the Ph.D. programme

15. Further Regulations governing the M.S. (Research) Students

The other rules and regulations will be identical to that adopted for the Ph.D. students and the MS (Research) degree of the institute may be conferred on a student who fulfills all the requirements detailed in the ordinances and other rules approved by the Senate.

APPENDIX

EXAMPLES ON CALCULATION OF THE FINAL GRADE

1. External examiner awards C and Viva-voce team awards A(-)

$$\text{Final Grade: } 0.4 \times 6 + 0.6 \times 9 = 2.4 + 5.4 = 7.8$$

being greater than 7.5, hence award B.

2. External examiner awards B(-) and the Viva-voce team B

$$\text{Final Grade: } 0.4 \times 7 + 0.6 \times 8 = 2.8 + 4.8 = 7.6$$

Hence award B.

3. External examiner awards A and Viva-voce team B

$$\text{Final Grade: } 0.4 \times 10 + 0.6 \times 8 = 4 + 4.8 = 8.8$$

Hence award A(-)