



Regulations for M.Tech. (Research) Computer Science and Engineering (CSE)

1. Preamble

IIIT-Delhi subscribes to the view that a Masters (Research) degree is primarily research-focused and aims to prepare a student to develop an adequate in-depth understanding of a foundational topic of today's computing technology. The decision whether the degree is to be pursued for skill and knowledge upgradation or also for building research skills at pre-doctoral level should rest with a student.

2. Program Educational Objectives

The main PEOs of the program are to produce graduates that are well prepared:

- PEO 1: to undertake research centric academic and/or industry careers involving problem solving using computing technologies.
- PEO 2: to perform collaborative research & engagement with peers and lead innovation in projects.
- PEO 3: to demonstrate the requisite breadth and depth of knowledge in advanced areas of Computer Science and Engineering.
- PEO 4: to contribute to society by becoming a model professional who can communicate effectively and follow ethical behavior.

3. Program Outcomes:

At the end of the program a student is expected to have an ability to:

- PO 1: apply concepts from varied disciplines including computer science, electronics, mathematics, and the sciences, to engineer and develop robust and scalable systems.
- PO 2: identify, formulate and analyze complex engineering problems, interpolate and extrapolate existing knowledge base and arrive at creative solutions.
- PO 3: utilize cutting edge software packages, libraries, programming languages, and software development environments.
- PO 4: make judicious use of resources and understand the impact of technology across the societal, ethical, environmental, and economic aspects.
- PO 5: demonstrate knowledge by communicating the findings and effectively present the results.
- PO 6: perform independent, continuous, and life-long learning required to excel in a professional career.

4. General Requirements

a. Eligibility Criteria:

- i. B.E./B.Tech. in CSE/IT/ECE/EE, or an M.C.A., or an M.Sc. in Mathematics/Statistics from a recognized university (including state universities)/institute.
- ii. Percentage marks $\geq 75\%$ or Equivalent CGPA.
- iii. Mandatory GATE in CSE/IT/EC/EE/MATH/ST



b. Reservation: The reservation policy shall be decided by the Board of Governors of the Institute. Exact details about these shall be provided in the admission prospectus each year.

c. Program Structure:

The overall credits requirement for the M.Tech. (Research) is 48 credits. In addition to 48 credits a student has to complete a summer refresher of 4 credits, Object Oriented Programming and Design (4 credits) and Research Methods (2 credits). Requirements of 48 credits are as follows:

- i. 4 courses equivalent to 16 credits of CSE 500 level or above from the list of courses available at <http://techtree.iiitd.edu.in/> or being offered in a semester.
- ii. M.Tech. (minor) thesis spanned over the first two semesters of the program with 4 credits registered in each of these semesters. The evaluation will comprise
 1. Minor thesis submission in the prescribed format by the department adhering to the guidelines mentioned therein.
 2. Minor thesis presentation by way of a poster or seminar at the end of the second semester.
- iii. 24 credits of M.Tech. thesis spanned over the second year of the program. The evaluation will comprise
 1. M.Tech. thesis submission in the prescribed format by the department adhering to the guidelines mentioned therein.
 2. M.Tech. thesis defense evaluated by a committee. The committee will include
 - a. A faculty member of the institute working in an allied area of the thesis topic.
 - b. A(n) (preferably external) expert familiar with the topic of the thesis.

**Change of supervisor may be allowed in some special circumstances before the second semester starts.*

**Minor thesis in the first and second semester will be assigned with an S/X grade and a final letter grade will be awarded after the poster or seminar presentation for full 8 credits which will be counted towards SGPA and CGPA.*

**There is no provision for students admitted to M.Tech. (Research) program in CSE to switch to regular M.Tech. program in CSE.*

**The students are allowed to take up internships in summer term with approval of the supervisor.*

d. Program Completion:

- i. Continuing CGPA of at least 6.5 in every semester.
- ii. Graduating CGPA of at least 7.0.



- iii. There will be an academic warning sent to the student if the CGPA falls below the minimum required.
- iv. Students have the provision for grade improvement similar to the provision available for regular M.Tech Program.
- v. Registration can be terminated if there are two consecutive warnings.
- vi. Completion of credit requirements.
- vii. Successful submission and defense of thesis.
- viii. (Desirable) Research publication at a reputed venue.

5. M.Tech. (Research) Assistantship:

Rs. 21000/- per month as per the break-up give in the following:

- a. Candidates will be eligible for M.Tech. (Research) Assistantship for a maximum of 24 months from the date of starting of the classes at IIIT-Delhi. GATE score above the qualifying marks announced by GATE in the past two years and the current academic year, will be considered valid. Assistantship for M.Tech. (Research) students will be paid at the rate of Rs. 12,400/- per month as per the approval of AICTE.
- b. In addition, IIITD will provide extra support of Rs. 8600/- per month for a maximum of 24 months from the date of starting the classes at IIIT-Delhi.
- c. As specified in the Regulations for M.Tech./PhD Programs, a student who is offered an Assistantship will be required to do 10-15 hours of academic work per week in-lieu of the Assistantship.

6. Conversion to Ph.D. Program:

- a. An M.Tech. (Research) student can change his/her program, if permitted, to Ph.D. and continue to do the course/research work to enable him/her to meet the requirements of the Ph.D. degree. Only students with CGPA > 8.00 and who would have completed a minimum of 2 semesters and 20 credits in M.Tech. (Research) program will be eligible to apply for the change to Ph.D. program. The student will be eligible for Ph.D. stipend only from the time he/she is approved for enrollment as a Ph.D. student. Such a student, for Ph.D. credit requirement, may be treated as if he/she had joined the Ph.D. program from the start of the PG (here, M.Tech (Research)) program. The student may be granted an M.Tech. (Research) degree also, provided he/she fulfills all the academic requirements for the same. Such a student may also be refunded his/her M.Tech. (Research) tuition fee, if he/she successfully completes the Ph.D. program.
- b. An M.Tech. (Research) graduated student will be eligible to pursue the sponsored Ph.D. program of the institute with a 100% fee waiver if he/she starts the Ph.D. program within two years from his/her graduation date.

7. Other General Regulations:

In addition to the specific regulation mentioned above, all other general regulation as specified in the institute's approved PG regulations will also be applicable for M.Tech. (Research) Program.