

DETAILED INFORMATION FOR INTERNATIONAL STUDENTS ABOUT THE MASTER'S DEGREE PROGRAMS AT IIT GANDHINAGAR

IIT Gandhinagar currently offers the Master of Technology (M.Tech), Master of Science (M.Sc.) and Master of Arts (M.A. degrees at the Master's level. The detailed information about the requirements for each program is given below. For any additional information, please write to academics@iitgn.ac.in

Master of Technology

Disciplines

- Biological Engineering
- Chemical Engineering
- Civil Engineering
- Computer Science and Engineering
- Earth System Science
- Electrical Engineering
- Materials Science and Engineering
- Mechanical Engineering

Minimum Eligibility Criteria

- Minimum of 60% marks / 6.0 (on a 10-point scale) / 2.5 (on a 4-point scale) in B.S./B.E./B.Tech. or equivalent Bachelor's degree in a relevant field of study.

Program Requirements

The M.Tech. program at IITGN is a 4-semester fully residential program that places a strong emphasis on both course work and research dissertation/thesis. A minimum 80 credits in coursework and thesis together is required for the award of this degree. The thesis is mandatory. It is expected that the thesis will result in high quality scholarly publications and national and international conference presentations.

Coursework requirements (normally spread over the first 3 semesters):

- 32-48 credits of course work (equivalent of 8-12 courses of 4 credits each)
- Course work comprises:
 - Humanities, Social Sciences and Management Courses - minimum 6 credits
 - General Institute Courses - minimum 6 credits
 - Basic Engineering Courses - minimum 6 credits
 - Departmental Core and Elective Courses - remainder of required credits.

Thesis requirements:

- 32-48 credits of thesis work on a research-oriented, developmental or an industrially relevant topic.
- Open-ended thesis with no deadline for submission
- The quality of thesis will be judged by the research publications; appropriate changes will be made in the program as needed
- Each thesis unit registered will be assigned S (satisfactory) or U (unsatisfactory) grades
- Grades of thesis units are not counted for the calculation of SPI/CPI.
- Candidates should satisfactorily complete the thesis work for the award of an M.Tech degree and this may require more than 48 research credits.

Master of Science

Disciplines

- Chemistry
- Mathematics
- Physics
- Cognitive Science

Minimum Eligibility Criteria

- Minimum of 60% marks / 6.0 (on a 10-point scale) / 2.5 (on a 4-point scale) at the Bachelor's level in a relevant field of study.
- Students who are awaiting final semester/year results and those who would be completing their Bachelor's degree in the current academic year are also eligible to apply.

Program Requirements

The M. Sc. program at IITGN is a 4-semester fully residential program that places a strong emphasis on both course work and research dissertation/thesis. A minimum 80 credits in coursework and thesis together is required for the award of this degree. The thesis is mandatory. It is expected that the thesis will result in high quality scholarly publications and national and international conference presentations.

Coursework requirements:

- At least 50 credits of course work is required
- Course work comprises:
 - Core courses* – 30-34 credits
 - Elective Courses** – At least 20 credits

*- Core courses are those that are deemed essential to the Master's program and are discipline specific.

** - Elective courses are offered either by the home discipline or any other discipline at the Institute. Some undergraduate courses may also qualify as elective courses Out of Elective Courses, at least 4 credits of course work in Humanities and

Social Sciences and a course on Research Communication must be taken.

Thesis requirements:

- At least 20 credits of thesis work on a research-oriented, developmental or industrially relevant topic.
- Candidates should satisfactorily complete the thesis work for the award of an M. Sc. degree and this may require more than 20 thesis credits.

Note that the credits listed under core, elective and thesis categories do not add up to a total minimum of 80. This is expected to provide flexibility in tailoring the curriculum to the interests of the student(s) and to the course availability options of the discipline.

Master of Arts

Specialization

- Society and Culture (offered by the discipline of Humanities and Social Sciences)

Minimum Eligibility Criteria

- Minimum of 60% marks / 6.0 (on a 10-point scale) / 2.5 (on a 4-point scale) at the Bachelor's level in any field of study.
- Students who are awaiting final semester/year results and those who would be completing their Bachelor's degree in the current academic year may also be eligible to apply.

Program Requirements

The M. A. program at IITGN is a 4-semester fully residential program that places a strong emphasis on both course work and research projects. A minimum 80 credits in coursework (core courses and electives) and thesis together is required for the award of this degree. Interested students are encouraged to check the program website (link to MASC page) for more details.

Coursework requirements:

- At least 60 credits of course work is required
- Course work comprises:
 - Core courses* – at least 24 credits (6 courses)
 - Elective Courses** – At least 24 credits (6 courses)

*- Core courses are those that are deemed essential to the Master's program and are discipline specific.

** - Elective courses are offered either by the home discipline or any other discipline at the Institute. As part of the elective courses, students in this program will be required to take at least 2 courses (8 credits) offered by faculty outside Humanities and

Social Sciences and related to science and technology in the 2nd year of their program.

- Students can also take up an Independent Study with a faculty member and earn credits towards it. A maximum of 8 credits can be acquired through Independent Study courses.

Thesis requirements:

- At least 20 credits of thesis work is required.
- Candidates should satisfactorily complete the thesis work for the award of an M. Sc. degree and this may require more than 20 thesis credits.

Summer research internships/projects on or off campus are encouraged as part of the Master's curriculum to help students to complement their research activities, build networks/professional references and advance their career aspirations. Competitive stipends may be available to support students in certain cases. The summer research component will be worth 4 credits, which will be awarded by the advisor.