Regulations

of

Post Graduate Programmes

Academic Year 2025-26 onwards

**NATIONAL INSTITUTE OF ADVANCED MANUFACTURING
TECHNOLOGY (NIAMT)**
Deemed to be University (under Distinct Category)
Ministry of Education, Government of India
RANCHI, JHARKHAND, INDIA
2025-26

PREAMBLE

National Institute of Advanced Manufacturing Technology (NIAMT), Ranchi offers postgraduate programmes through its various Departments. The vision is to enhance the knowledge and educate the students in technology that will wisely serve the professional community, society and the nation.

NIAMT, Ranchi seeks to provide a stimulating and supportive environment for postgraduate students to pursue advanced studies and research; also, it aims to foster intellectual curiosity, creativity, and critical thinking among postgraduate students.
Therefore, the institute hereby establishes this Postgraduate Regulations to govern the conduct of postgraduate programs, including admission, coursework, research, thesis requirements, and examination procedures, to ensure the highest standards of academic quality and excellence.

To that end, the rules and regulations framed have taken care of philosophy of higher performance ethics in pedagogy work at the Institute. Nevertheless, these regulations, duly approved by the Academic Council in its 41st meeting held on 6th June 2025 shall supersede all the prior sets of regulations/ordinances/manuals for the postgraduate programme of the Institute and shall be obligatory on all postgraduate students.

In light of the periodic amendments in regulations, appropriate care shall be taken to avoid any unfair circumstances inadvertently created for the students admitted in earlier years.

Contents

REGULATIONS FOR POST GRADUATE PROGRAMME

1.   INTRODUCTION

The postgraduate programme at the National Institute of Advanced Manufacturing Technology (NIAMT) Ranchi aims to develop high-quality scientific, technological, engineering, and educational resources to meet the needs of the country, industry, R&D organizations, and educational institutions. The programme focuses on providing students with a broad understanding of fundamental principles and scientific methods, a deep understanding of their area of specialization, and the ability to innovate and solve new problems. Additionally, it aims to cultivate a capacity for continuous learning and skill enhancement, as well as the ability to interact with professionals and scientists across various disciplines. Above all, the programme emphasizes the importance of courage and integrity in conducting free and objective inquiry, as well as awareness and sensitivity to the needs and aspirations of society. To achieve these goals, the postgraduate programmes include a range of courses, seminars, and project/thesis work to help students develop their concepts and intellectual skills.

The Master of Technology (M.Tech) courses offered by the institute will be governed by these regulations and will come into effect immediately. These regulations will apply to all specializations leading to the degrees of M.Tech. At present, the following M.Tech programmes are offered in the institute –

1. M. Tech in Foundry-Forge Technology, Department of Foundry and Forge Technology
2. M.Tech in Industrial Metallurgy, Department of Metallurgy and Material Engineering
3. M. Tech in Manufacturing Engineering, Department of Mechanical Engineering
4. M.Tech in Environmental Engineering, Department of Environmental Engineering
5. M.Tech in Material Engineering (Nanotechnology), Department of Applied Sciences & Humanities

Further, this regulations shall also apply to new disciplines or specializations introduced for the Master's program with the approval of the academic council subsequently by Board of Governors (BOG) in the future.

2.   ACADEMIC CALENDAR AND DURATION OF PROGRAMME

An academic session is divided into two semesters i.e. Odd, and Even Semester, of approximately 16-18 weeks each. Typically, odd semester commences in July and even semester commences in January. Minimum duration of M. Tech. programmes shall be of two years. The schedule of events of each semester, i.e., the Date of Commencement of Classes, Registration, Mid- and End-Semester Examinations, etc. shall be as laid down in the annual academic calendar duly approved by the institute. The total duration will be of 2 years for full time M.Tech. Programme

3.   ADMISSION

3.1   Admission to the M.Tech programme will be made in the July of each academic year based on performance in Graduate Aptitude Test in Engineering (**GATE**) for **M. Tech.** courses. The admission will be through central counselling process (CCMT

portal). The admission to the vacant seats after central counselling process will be through institute admission test (IAT). These students are not entitled to receive any stipend from the institute and they will take admission in the institute as sponsored/self-sponsored candidates.

3.2 Students shall have to submit a copy of their Mark Sheet/Grade Card/Provisional Certificate/ Qualifying Degree Certificate as evidence of passing the qualifying examination within three months from the date of registration.

3.3 The admission will be revoked, if at any stage it is found that the student has obtained admission based on falsified information or had by any malafide intentions submitted forged mark sheet/degree/caste/PwD certificate, etc. or suppressed some material information of academic nature or otherwise required for his/her admission in the Institute.

3.4 Admissions will be made in accordance with the instructions received from Ministry of Education (MoE), Govt. of India (GoI) from time to time. Reservation for candidates belonging to SC/ST/OBC/PwD/EWS and other categories shall be as per GoI norms.

3.5 The Institute reserves the right to cancel the admission of any student and ask him/her to discontinue the studies at any stage of the program either due to unsatisfactory academic performance, or unsatisfactory attendance in classes, or indecent behaviour or for any other reason(s), as the Institute deem fit to be.

3.6 For admission to other PG programme which institute may offer in future, the respective competitive entrance test will be taken into consideration.

4. ELIGIBILITY CRITERIA FOR ADMISSION TO M.TECH

4.1 Students with Assistantship

   a.   Graduate Aptitude Test in Engineering (GATE)
   b.   The admission will be made in accordance with Section 3.
   c.   Details regarding assistantship are given in **Appendix-IV**

4.2 Sponsored and Self-sponsored students

Vacant seats may be filled under sponsored and self-sponsored category while observing the guidelines mentioned under Section 3.

Eligibility for admission in the M.Tech programme shall be a Bachelors degree in Engineering/Technology or equivalent in an appropriate branch of Engineering or a Masters degree in Science (with Mathematics in UG level). The candidates must have obtained minimum marks in the qualifying examinations as per the AICTE guidelines. The academic/executive council of NIAMT shall have power to modify the eligibility criteria.

Candidates who are employed in recognized Organization/Institutions shall be eligible for admission as 'sponsored candidates' against available vacant seats to any of the M.Tech Courses offered by the Institute.

Candidates who possess the minimum prescribed qualification and are in service in any of the following establishments shall be eligible for admission to the courses as sponsored student:

     i.   Defence/Ministries of the GOI/ Ministries of the State Government.

     ii.   Established Industries, academic institutions, Research and Development (R&D) Organizations, NGOs as may be recognized by the Institute from time to time.

     iii.   Autonomous Public Undertaking

     iv.   Various schemes of the Government of India

     v.   Universities and recognized technical institutions.

4.2.2   Intending sponsored candidates must submit their application on prescribed form for admission through their employer, with suitable endorsement as required in the application form. The form must reach the Institute by the stipulated date.

4.2.3   All eligible self-sponsored candidates shall be required to qualify for a written test and/or interview conducted by a selection committee to be appointed by the concerned Head of Department (HoD) duly approved by Dean (Academics). The provisions of this sub-section, however, shall not be applicable to the candidates selected for admission under sponsored category.

4.2.4   A sponsored candidate selected for admission shall be required to produce the following documents at the time of joining the Institute,

    (a)   Produce No-objection Certificate (NOC) in a prescribed format.

    (b)   Submit evidence of having passed the qualifying examination with the required percentage of Marks or Grade and such other documents as the Institute may require.

4.3 FOREIGN NATIONALS

Eligible foreign nationals/non-resident Indians/Overseas Citizenship of India who have either been selected for award of Government assistantship/fellowship or been permitted by the GOI to undergo studies as self-financing foreign student, may also be admitted to any of the courses subject to the acceptance of the academic record of the applicant by the Institute. However, those foreign nationals/non-resident Indians/Overseas Citizenship of India who passed the qualifying degree examination (B. Tech, M.Sc., or an equivalent degree, as the case may be) from an Indian University/Institute and are willing to take admission in any of the PG courses offered by the Institute, with GOI assistantship/fellowship, shall be required to qualify GATE/CEED. However self-financing foreign nationals/NRI/OCI students need not require qualifying GATE/CEED.

4.4 PERMANENT STAFF MEMBERS OF THE INSTITUTE

Permanent non-teaching staff members of the Institute (henceforth, referred to as staff members) shall be eligible for admission to a PG programme (without assistantship) subject to

(i) prior permission obtained from the competent authority
(ii) fulfillment of the minimum prescribed qualifications and experience. They will, however, must appear for an interview. The conditions governing such permission are as given below:

4.4.1 Staff members may be permitted to join any PG program of the Institute provided prior permission has been obtained from competent authority before applying for admission to the programme.

4.4.2 For admission to PG programme, a staff member must have obtained at least the prescribed minimum percentage of marks/grade/CGPA for sponsored candidates.

4.4.3 Staff members enrolled for PG degree shall be required to pay full tuition fee same as sponsored candidate and as applicable from time to time.

4.4.4 The other guidelines for granting permission to staff members to enroll in the PG program shall be as follows:

(i) The applicant must hold a permanent (substantive) post in the Institute with a standing of at least two years of service.

(ii) The application for administrative permission to join the PG program by a staff member must be submitted through the Head of the Department or the Section In-charge, as the case may be. Further, the applicant must also give an undertaking (refer to the application form) to the effect that the applicant shall abide by all the rules.

(iii) The maximum number of credits that a staff member can register for each semester shall be at the convenience of the Department. If the exigencies of Institute duties so require, the permission granted can be withdrawn by the Institute at any time.

(iv) The maximum period to be spent for completion of the course work and submission of the dissertation/thesis by the candidate in this category shall be five years on the approval of the competent authority.

(v) A staff member who has obtained M. Tech. degree from the Institute under this clause shall have to serve the Institute for a period of three years after obtaining the degree.

5. RESIDENCE

The Institute has hostel facilities. Students have the option to stay in the hostel or outside the campus. Fees for hosteller and non-hosteller are mentioned. All those students who have opted for rooms in the hostel are required to reside in the hostel and become a member of a hostel to which they are assigned. While residing in hostel the students are required to abide by the following rules.

5.1 The mess of each Hostel shall function as a single unit and shall not, under any circumstances, be sub-divided into any kind of groups or sub- groups.

5.2 Family accommodation, if available, may be provided to married students (Sponsored, QIP, Foreign Nationals with Government Assistantship) of M. Tech. courses.

5.3 A student shall reside in a room allotted to him/her only and may shift to any other room only under the direction/permission of the Chief Warden / hostel warden.

5.4 No student shall occupy or vacate a room in any Hostel without the prior permission of the Warden and Chief Warden. Students shall be required to make their rooms available whenever required for repairs, maintenance, disinfection, or inspection and shall be required to vacate the rooms when leaving for vacations/holidays.

5.5 Students will be responsible for proper care of furniture, fan, and other features in their rooms and shall generally assist the Warden in ensuring proper use and care of those provided in the Common Hall.

5.6 Students will be responsible for the safe keeping of their own property. In the event of loss of personal property due to theft/fire/negligence, the Institute shall bear no responsibility and will not be liable for any loss.

5.7 All students must abide by the rules of the Hostel as may be framed from time to time.

5.8 Students are prohibited to (i) use and/ or possess electrical appliances like heaters, ovens, induction stoves, etc. (ii) cook within the premises of Hostel (iii) engage personal attendants and (iv) keep pets (v) use motorized vehicles.

5.9 A student who has been permitted to withdraw temporarily from the program must vacate the Hostel on the day of departure. Suitable accommodation may be re-allotted to the student when he/she rejoins the program subject to the availability.

6.   REGISTRATION

6.1 All M.Tech students must register for the required credits at the commencement of a semester as notified in the academic calendar.

6.2 Concerned HoDs shall organize the registration of the students by appointing a Faculty Advisor for each class of the programmes.

6.3 A student who does not register on the day announced for the purpose may be permitted to register late in consideration of compelling reasons, but only within the next five working days on payment of a prevalent additional late fee as prescribed by the Institute. Normally, no late registration shall be permitted after the scheduled date except in special cases with the permission of Dean (Academic).

6.4 Only those students will be permitted to register who have: -

(a) paid all the required payments e.g., Institute semester fee, Hostel and Mess advance fee, etc.

(b) cleared all Institute and Hostel dues of the previous semesters.

6.5 Student who obtains a 'F' grade in a/an

(a) **Core course** may pass it in the subsequent Supplementary/Summer term examination or, must re-register the subject (as a backlog paper), the next time when it is offered.

(b) **Elective course** may pass the paper in the Supplementary/Summer term examination or, alternatively, register for any other elective course categorized in the same group in the subsequent semester.

(c) **Open course** may pass the paper in the Supplementary/Summer term examination or, alternatively, must re-register the subject (as a backlog paper) the next time when it is offered.

(d) **Professional & Engineering Skill course** may pass the paper in the Supplementary/Summer term examination or, alternatively, must re-register the subject (as a backlog paper) the next time when it is offered.

(e) **Laboratory/Practical course** there will be no supplementary examination and the student must re-register for the same in the next time when it is offered.

6.6 When a student re-registers for a subject, his/her new grade obtained will be used for SGPA calculation, whereas for CGPA calculation, the better of the two grades (the old and the new) of that subject will be considered.

6.7 A student may be allowed for temporary withdrawal/semester leave from a programme based on the recommendation of the HoD for approval from the vice chancellor through the Dean (Academic). For M.Tech students, approval is contingent upon the successful and continuous completion of the course work (theory, professional & Engineering Skill, laboratory, semester and comprehensive viva voce etc.) with a CGPA of 6.0 or greater. The student seeking temporary withdrawal shall, however, must complete the thesis/project and submit the same and appear at the final viva-voce within 5 years (excluding the semester leave period) from the date of admission.

6.8 Sponsored students and those who opt for temporary withdrawal to re-join/join service will have to produce a letter from their employer stating that they can either carry out the Thesis/Project at their parent organization or re-join the Department to work on the project full time at a future date (if their parent organization does not have the facilities for execution of the project work). Further, they must also

a) communicate in writing, to the HoD, by the end of preceding Spring Semester the intention to submit the dissertation.

b) deliver a seminar before submitting the dissertation on a date fixed by the HoD and clears all outstanding dues, if any, to the Institute and/or the hostel

c) pay the semester registration fee for third and fourth semester and re- admission fee as may be prescribed by the Institute.

d) Assessment of the Thesis and the conduct of the viva voce examination for such cases will be arranged by the HoD along with the regular students.

6.9 Students who discontinue their studies without prior permission before completing the first and second semester course work shall be deemed to have discontinued their studies and their names will be struck off the rolls of the Institute. In such cases Transcript/ grade card will not be issued. However, the student may be allowed to continue considering the break as a temporary withdrawal if he/she discontinues their studies due to compelling reasons with approval from the Dean (Academic).

6.10 A student who has already registered may:

(a) Register an additional subject for credits, or

(b) Change an already registered additional subject or elective(s) with the approval of the Dean (Academic). Any change of subject(s) must, however, be done within one week of registration. Such changes once made will be final and request for further changes/modifications shall be summarily rejected.

6.11 Students must register for zero credits (audit) in summer/winter vacation, if required to stay in campus with permission from the competent authority.

7. ENTRY AND EXIT OPTIONS

For the students who want to opt for multiple entry/exit option for the Programme, the rules are as follows:

7.1 Students may be allowed to re-enter the Programme within three (3) years from the date of leaving the Institution. As per NEP 2020, multiple exit stages with some kind of authorized exit certificates may be introduced by the Dean (Academic). Any M.Tech student want to quit the programme after 1st year by earning minimum 40 credits will be awarded a certificate.

7.2 Academic Bank of Credits (ABC):

Students belonging to eligible Higher Educational Institutions (HEIs) can avail the facility of ABC Credits obtained by undertaking courses in HEIs during or after the

Academic Year 2024-25 alone are eligible for credit transfer, credit accrual and credit redemption through ABC. Students shall be required to earn at least 50% of the credits from the parent Institution that she/he is enrolled for a programme.

7.3   In case of M. Tech. student gets employed after successful completion of course work, she/he may be allowed to continue the thesis work at the place of work (academic institution, research centre, industries, consultancies etc.) and no objection certificate from the employer may be submitted. In this case the thesis duration will be a maximum 8 semesters from the date of registration of thesis work.

8   ATTENDANCE AND LEAVE RULES

8.2   Attendance

Following are the rules relating to attendance requirements:

   i.   Every student is expected to have 100% attendance in each course (lectures, tutorials laboratories, workshops, EAA including its related camps and other publicized activities etc.) in which he/she has registered at the beginning of the semester. However, condonation for shortage of attendance up to 25% (i.e., not lower than 75% aggregate attendance in any course) may be granted by the Head of the concerned Department.

   ii.   In any case the minimum attendance in order to make student eligible to appear in end semester examination should not fall below 75%.

   iii.   In certain cases due to compelling reason like serious illness of his/her, or natural calamity or death case in the family or family calamity, any unforeseen reason, attendance may be relaxed up to 65% with permission of the vice chancellor upon the due recommendations from the head of the department processed through the Dean (Academic).

   iv.   For the purpose of attendance calculation, every scheduled practical class will count as one unit irrespective of the number of contact hours. Students not having the mandatory requirement of minimum 75% attendance in any course, shall not be permitted to appear for the end semester examination in that course, and is awarded "F" Grade in that course. Such student has to register for the course in which he/she has shortage of attendance, as and when the course is offered next.

   v.   If the period of absence is for a short duration (of not more than one week), leave application should be submitted to the concerned Head of the Department, stating fully the reasons for the leave requested, along with the supporting document(s). The Head of the Department shall grant such leave. During such a leave period, the student will be marked as absent. Even with this leave applied, the student must satisfy at least 75% attendance requirement to appear for the end semester

examination.

vi.   If the period of absence exceeds one week, a prior application for grant of leave should be submitted through the Head of the Department to the Dean-Academic with supporting documents. The decision to grant such leave shall be taken by the Dean- Academic, after considering the recommendation of the Head of the Department, if the aggregate attendance is at least 75%.

vii. If a student is absent from the institute continuously for more than four weeks without notifying to the Dean Academic, his/her registration for that semester will stand cancelled.

viii. A student representing the Institute in approved extracurricular activities such as Sports, Games, Cultural meets Seminars, Workshops, Conferences and Interviews arranged through, NCC/ NSS Camps or Training & Placement activities shall be considered as on-duty, subject to a maximum of five working days in a semester. Prior permission from the concerned Head of the Department is required for availing on-duty permission. The period of absence, in such cases, will be counted as 'present' for the computation of percentage of attendance at the end of semester.

ix.   It will be the responsibility of the student to get his absence from classes condoned by the appropriate authority.

x.   A student must intimate his/her absence to the Warden of the hostel in which he/she is residing before availing himself/herself of any leave. Failing to do so will be construed as breach of discipline and will be dealt with as per provisions.

8.3   Leave of Absence

i.   If the period of leave is for a short duration (less than two weeks) after completion of requisite coursework, prior application for leave will have to be submitted to the concerned HoD stating the reason along with supporting document(s). Such leave will be granted by the HoD duly forwarded supervisor.

ii.   Absence for a period not exceeding two weeks in a semester due to sickness or any other unavoidable reasons for which prior application could not be made may be condoned by the HoD, provided satisfactory explanation is presented.

iii. If the period of absence is likely to exceed two weeks, a prior application for grant of leave will have to be submitted, through the concerned HoD, to the Dean (Academic) with supporting documents. The decision to grant leave, in such cases, shall be taken by the Dean (Academic).

iv.   Considering all the leave Clauses the attendance should not be less than 75%.

v.   Field visits relating to Project, if required shall be considered as Academic Leave, subject to the condition that proposals for such field visits are recommended by the Supervisor and approved by the HoD.

vi.   The Dean (Academic) may, on the receipt of an application, also decide whether the

student be asked to withdraw from the course for that particular semester because of long absence.

vii. It will be the responsibility of a student to intimate the warden of the hostel in which he/she is residing, and the concerned instructors and faculty advisor regarding his /her absence before availing leave.

viii. In exceptional circumstances, the Dean (Academic) in consultation with the vice chancellor may relax attendance requirement.

ix. While complying with the clauses GATE qualified M.Tech Students with assistance-ship shall be entitled to the following types of leave during an academic year.

Sl. No.	Nature of Leave	Maximum Number of Days
a.	General Leave	15 days per semester
b.	Maternity/Paternity Leave*	As per GOI rules

   * Provided that the application is supported by a certificate from the Institute's Doctor or a Doctor recognized by the Medical Council for the purpose.

Any absence over and above the prescribed limit of admissible leave shall entail deduction from the assistantship/scholarship for M. Tech. students, besides other action(s) as may be decided by the Institute.

(i) Leave records of students will be maintained by the concerned department.
(ii) Leave not availed by a student in an academic year will not carry forward to the subsequent academic year.
(iii) If a student is absent for more than one month without permission from competent authority, his/her stipend will be discontinued till further approval from competent authority.
(iv) A Master's student is not entitled to any vacation on account of inter semester break, summer and winter vacations.

9.   **COURSE STRUCTURE**

Every M.Tech Programme will have a curriculum and syllabi for the courses approved by the board of studies (BoS). Weightage of courses shall be reckoned in credits, as specified against each subject in the curricula.

   9.1 Credit requirements for M. Tech. degree

To qualify for M. Tech. degree, a student is required to successfully complete the credit requirements as prescribed in National Credit Framework (NCF) 2023. 80 credit is required to complete for the M.Tech. programme, minimum 40 credit in the first year. The credit distribution of various components of M. Tech. programme shall be as given below:

Course structure for M.Tech in XXXXX
(Effective from July 2025)

First Semester

Course Type/Code	Core/Elective	Subjects	Contact time per week			Total Credits
			L	T	P	
MTXX-01-01	Core 1		3	0	0	3
MTXX -01-02	Core 2		3	0	0	3
MTXX -01-03	Core 3		3	0	0	3
MTXX -01-04*	Department Elective-I		3	0	0	3
MTXX -01-05**	Open Elective-I		3	0	0	3
MTXX -01-L01	Core Lab 1		0	0	2	1
MTXX -01-L02	Core Lab 2		0	0	2	1
MTXX -01-06	MLC	Research Methodology and IPR	2	0	0	2
MTXX -01-07	Seminar		0	0	2	1
				Total Credits		20

Second Semester

Course Type/Code	Core/Elective	Subjects	Contact time per week			Total Credits
			L	T	P	
MTXX -02-01	Core 4		3	0	0	3
MTXX -02-02	Core 5		3	0	0	3
MTXX -02-03	Core 6		3	0	0	3
MTXX -02-04*	Department Elective-II		3	0	0	3
MTXX -02-05**	Open Elective-II		3	0	0	3
MTXX -02-L01	Core Lab 1		0	0	2	1
MTXX -02-L02	Core Lab 2		0	0	2	1
PES-02-01	PES-I*	Professional & Engineering Skill -I	3	0	0	3
				Total Credits		20

Third Semester

Course Type/Code	Core/Elective	Subjects	Contact time per week			Total Credits
			L	T	P	
MTXX-03-01		Major project dissertation Phase – I	0	0	24	12
PES -03-02	PES-II**	Professional & Engineering Skill-II	3	1	0	4
PES -03-03	PES-III***	Professional & Engineering Skill - III	3	0	2	4
				Total credits		20

Fourth Semester

Course Type/ Code	Core/ Elective	Subjects	Contact time per week			Total Credits
			L	T	P	
MTXX-04-01		Major project dissertation Phase – II	0	40	20	
				Total credits		20

Total credit (Semester I to IV): 20+20+20+20 =80

PES I, II, and III will be designed by the institute.
The course work shall comprise of core, department-elective, open-elective, Professional & Engineering Skill and laboratory. The list of elective subjects may include subjects from allied disciplines also. The curriculum will also include compulsory seminar to be delivered by each student.

9.2 PERFORMANCE ASSESSMENT

There will be continuous assessment of a student's performance throughout the semester and grades will be awarded by the concerned faculty members or by the appropriate committees appointed for the same based on the following:

(a) Mid- and End-semester examination for theoretical subjects
(b) Seminars
(c) Laboratory/workshop, thesis/project, dissertation, and viva voce.

9.3 Theoretical subjects:

(a) Centralized Mid- and End-semester examinations will be conducted.

(b) The final grades will be awarded on the basis of Teacher's assessment, Mid and End-Semester Examination according to the weightage given below:

Teacher's Assessment (Attendance, Assignments Quiz, Tutorials, Class test etc.)	Mid-Semester Exam (1.5 Hrs)	End-Semester Exam (3Hrs.)
20	20	60

9.4 Laboratory/drawing/workshop etc.: the evaluation will be based on the weightage as shown below:

- Completion of practical/laboratory/
  Drawing-tasks assigned   60%

- Oral/practical/ Drawing tests and/or Viva Voce (at least 2)   40%

9.5 Seminar: A Seminar Assessment Committee (SAC) will be constituted by the concerned HoD for the evaluation of performance at Seminars. Attendance is compulsory for students who have registered for Seminar and due weightage will be given for the same in the overall evaluation of this requirement.

9.6 Total marks for a course/seminar/ lab viva voce shall be submitted by the concerned teacher/faculty advisor/supervisor and the final grades must be submitted to the HoD within five days from the completion of End-Semester Examinations/seminars.

10. RECORDS OF ACADEMIC PROGRESS

10.1 Semester Grade Point Average (SGPA) shall be calculated as under:

SGPA= Σ Semester (Course Credits x Grade points)/ Σ Semester (Course credits)

10.2 The academic progress of the students in each semester shall be maintained in a grade card

or transcript, Where in the Letter Grades awarded to students as well as the Grade Points secured by the students in the examinations, shall be entered. The transcript given to the students upon Completion of their M. Tech. programme shall indicate the Cumulative Grade Point Average (CGPA) which shall be calculated as follows:

CGPA = Σ All semester (Course Credits x Grade points)/ Σ All Semester (Course credits)

The CGPA shall be rounded off to one place of decimal.

In case a student was awarded an 'F' grade in a subject and subsequently the student again appeared in an examination for that subject and obtained a better grade, the earlier obtained 'F' grade shall be substituted with the better grade so obtained.

10.3 The NIAMT shall follow the following conversion between CGPA and percentage of marks.
Percentage marks = (CGPA - 0.5) x 10

When a student gets a grade *'I'* for any subject(s) during the semester, the *SGPA* of that semester and the CGPA at the end of that semester will be tentatively calculated ignoring that (those) subject(s). After the *'I'* grade(s) has (have) been converted to appropriate grades the *SGPA* and *CGPA* for that semester will finally be recalculated after taking into account this (these) grade(s).

10.4 When a student gets the grade *'F'* in any subject during a semester, the *SGPA* and the *CGPA* from that semester onwards will be tentatively calculated, taking only *'zero point'* for each such *'F'* grade. After the *'F'* grade(s) has/have been substituted by better grades during a subsequent semester, the *SGPA* and the *CGPA* of all the semesters, starting from the earliest semester in which the `F' grade has been updated, will be recomputed to take this change of grade into account.

10.5 GRADING SYSTEM

A ten-scale letter grades system will be used to assess the performance of students in the various categories (subject, project, etc.) as follows: -

Description	Letter Grade	Grade point
Excellent (90% and above)	A+	10
Very Good (80% to less than 90%)	A	9
Good (70% to less than 80%)	B	8
Fair (60% to less than 70%)	C	7
Average (50% to less than 60%)	D	6
Pass (40% less than 50%)	P	5
Fail (less than 40%)	F	0

In addition, there shall be four transitional symbols:

I — for 'Incomplete assessment', when the student misses the End-semester examination on medical grounds.
X — for 'Debarred' on grounds of indiscipline/ malpractices in examinations.
R — for 'insufficient attendance' in the course.
W — for "Temporary withdrawal' from the Institute

AWARD OF CLASS AFTER COMPLETION OF COURSE

Marks/ CGPA	Class
75% and above (CGPA 8.0 and more)	First class with Honours
60% to less than 75% (CGPA 6.5 to less than 8.0)	First class
50% to less than 60% (CGPA 5.5 to less than 6.5)	Second class

11. SEMINAR AND THESIS

11.1 Appointment of M. Tech Thesis Supervisor(s)

1. A. M.Tech student shall be allotted Thesis Supervisor before the registration of 3rd Semester for M. Tech. programme. Students may be called for an interaction with the faculty members of the department and select the supervisor and research topic on which they are interested to pursue their research work. The allotment of the supervisor will be done at the end of the second semester.
2. A student shall not normally have more than two supervisors at any given time.
3. Thesis supervisor(s) of a student shall be appointed amongst the faculty of NIAMT Ranchi using modalities prescribed by the department.
4. A student on the recommendation of Dean (Academic) can have a co-supervisor from outside the Institute/ R&D organizations/Industry etc.
5. If a part of the dissertation work is required to be carried out at an external research centre/ laboratory/ or industry an external co-supervisor may be appointed in addition to the internal supervisor to facilitate the research work of the candidate. Such a person must have an M.Tech. Degree in the concerned discipline and a minimum of 2 years of industrial/R&D laboratory experience.
6. In case the dissertation work is of interdisciplinary nature, a teacher from the sister department, R&D organisation/lab or industry may be allowed to be appointed as a co- supervisor.
7. The appointment or change of supervisor(s) shall be communicated to the Dean Academic by the supervisor.
8. In case, there has been change/addition in the supervisor(s), the thesis shall not be submitted before three months from the date of such change.
9. In case a supervisor resign/retires or otherwise ceases to be a faculty of the Institute, the Dean (Academic) shall appoint a new supervisor/ co-supervisor in consultation with the student.
10. If a supervisor of students proceeds on long leave (more than Three months) and if there is only one supervisor, then prior to proceeding on such leave the Dean (Academic) shall in consultation with the Head of the Department and Student, appoint a thesis coordinator/supervisor/co-supervisor to ensure that the student does not suffer in his/her absence.

11.2 Submission of Progress Report at the end of the Third Semester

i. At the end of the Third Semester, the students shall submit a brief progress report of the research work being carried out by him and deliver a seminar for the purpose.

ii. The evaluation of the progress at the end of the Third Semester shall not be carried out unless he/she has put in not less than 75% of the working days in the institute/ or the place of work for the purpose of carrying out the project work. A relaxation of 10% may be permitted by the HoD on medical grounds or other valid reason.

iii. In case a student is working outside the institute for project work, the concerned co- supervisor shall endorse the attendance of the candidate and submit to the supervisor. The same shall apply for submission of dissertation at the end of the fourth semester.

11.3 Evaluation of presentation on the project work at the end of the Third Semester:

i. The PG Coordinator shall, in consultation with the Head of the department, notify the date of the presentation by the student on the project work. The performance of the student in the seminar shall be evaluated and the viva-voce shall be conducted by a committee.

ii. The Evaluation Committee for evaluation of the presentation at the end of the Third Semester shall comprise of the following –

1. Head of the concerned Department - Chairman
2. Faculty members of the Department-Members (s)
3. Concerned Supervisor(s)

iii. Presence of a minimum of three members of the committee shall be necessary for evaluating presentation. The presentation shall be open to all the faculty members and other students in the university, to obtain their feedback and comments. These feedback and comments may be suitably incorporated into the dissertation under the advice of the supervisor.

iv. The Committee shall evaluate and award separate marks for the presentation at the end of third semester The marks so awarded shall be submitted to Examination Section of the institute.

11.4   Submission of the Dissertation phase II:

(i) At the end of the Fourth Semester, the students shall be required to submit three (supervisor, co-supervisor, external examineer) typewritten copies of the final dissertation and Abstract/ Synopsis in about 500 words, to the PG coordinator through the supervisor, deliver a presentation and appear in a viva-voce examination on the same.

(ii)The Head of the Department shall propose names of three external examiners to the Dean (Academic), who shall nominate one of these to act as the external examiner in the evaluation committee.

(iii)The evaluation committee shall comprise of the following:

a. Head of the concerned Department – Chairman
b. One external examiner nominated by Dean (Academic) out of the proposal by the HoD.
c. Faculty members of the department and university-Member (s)

d. Concerned Supervisor(s) and co-supervisor

(iv) In respect of every dissertation a certificate shall be given by the supervisor to the effect that the dissertation is a record of work done by the student himself/ herself.

(v) The dissertation shall satisfy the following conditions –
The dissertation shall –
(a) be composed on the problem stated in the student's application made embody the result of studies carried out by him/her.
(b) show evidence of the student's capacity for critical examination and judgment;
(c) be satisfactory in presentation so far as language, style and form are concerned.
(d) be accompanied by a certificate from the supervisor to the effect that the dissertation is a record of work done by the student himself/ herself.
(d) include a suitable abstract/ synopsis of the work presented.
(e)
(vi) The student shall indicate clearly and extensively in the preface to his/her dissertation and specially in notes –
(a) the source from which referred information is taken.
(b) the extent to which he/she has availed himself/ herself of the work of others and the portion of the dissertation he/she claims to be his/ her original; and
(c) whether his/ her dissertation work has been conducted independently or in collaboration with others.

(vii)If a student fails in the presentation and the viva-voce examination on dissertation in the fourth semester, S/he may be allowed to resubmit the dissertation and appear again for the presentation/ viva-voce within a period of next six months. If the student fails to submit the dissertation within this extended period, he shall not be awarded the M.Tech. degree.

(viii) After incorporating all the comments of the externals and faculty members during presentation, the student must prepare and submit FIVE hard bound copies of the M.Tech thesis (library, academic section, supervisor, co-supervisor, yourself).

12.TEMPORARY WITHDRAWAL FROM THE INSTITUTE

12.1   A student who has been admitted to a Masters' programme of the Institute may be permitted to withdraw temporarily from the Institute on the grounds of prolonged illness or grave calamity in the family for a period of one semester or more, provided:

a) he/she applies to the Institute within 4 weeks of the commencement of the semester or from the date he last attended his/her classes whichever is later, stating reasons for such withdrawal together with supporting documents and endorsement of his/her guardian.
b) The Institute is satisfied that, counting the withdrawal period, the student is likely to complete his/her requirements of the Master's Degree within the time limits of 5 years.
c) There are no outstanding dues or demands to the Institute/ Hostel/ Department/ Library.
d) In the case of M. Tech. Student assistantship shall be suspended.

13.TERMINATION FROM A PROGRAMME

A student may be terminated from a Masters' programme on the following grounds:

a) **Indiscipline:** A student may also be terminated from Master's Programme on disciplinary grounds based on the recommendation of the committee.

b) **Falsification of documents and declaration**: On having been found to have produced false documents or having made false declaration at the time of admission.

c) On having been found to be pursuing regular studies in any other college, university or an educational institution.

d) For having been found to be concurrently employed and performing duty or carrying out business in contravention to academic schedules of the Institute and without approval from the Institute.

CONDUCT AND DISCIPLINE

Students shall conduct themselves within and outside the precincts of the Institute in a manner befitting the students of an Institute of National Importance. Detailed rules and regulations regarding discipline are given below:

Students shall show due respect to the teachers of the Institute, the Wardens of the Hostels /Halls of Residence, the Sports Officers of Gymkhana and the Officers of the National Social Service: proper courtesy and consideration should be extended to the employees of the Institute and of the Hostels/Halls of Residence. They shall also pay due attention and courtesy to visitors.

Students are required to develop a friendly relationship with fellow students. In particular, they are expected to show kindness and consideration to the new students admitted to the Institute every year. Law bans ragging in any form to anybody — acts of ragging will be considered as gross indiscipline and will be severely dealt with.

The following acts of omission and/or commission shall constitute gross violation of the code of conduct and are liable to invoke disciplinary measures:
a. Ragging
b. Furnishing false statement of any kind in the form of application for admission or for award of scholarship, fee waiver, etc.
c. Displaying lack of courtesy and decorum; resorting to indecent behaviour anywhere within or outside the campus.
d. Wilfully damaging or stealthily removing (theft of) any property/belongings of the Institute, Hall or fellow students.
e. Possession, consumption or distribution of alcoholic drinks, tobacco products or any kind of hallucinogenic drugs.
f. Adoption of unfair means in the examinations.
g. Organizing or participating in any group activity in company with others in or outside the campus without prior permission of the Dean of Student' Welfare.
h. Mutilation or unauthorized possession of library books.
i. Resorting to noisy and unseemly behaviour, disturbing studies of fellow students.
j. Not intimating his/her absence to the warden of the hostel/hall before availing any leave.
k. Commensurate with the gravity of the offence, the punishment may be reprimand, fine, and expulsion from the Hostel/Hall, debarment from an examination, rustication for a specified period or even outright expulsion from the Institute.

For an offence committed (a) in a Hall of Residence, (b) in the Department or a classroom and (c) elsewhere, the Warden, the Head of Department and the Dean of Students' Welfare, respectively, shall have the authority to reprimand or impose fine or take any other suitable measure. All cases involving punishment other than reprimand shall be reported to the Chairperson of the Standing Disciplinary Committee.

All major acts of indiscipline, which may have serious repercussions on the general body of students, and/or which may warrant a uniform and more formalized nature of investigation, shall be handled by the Standing Institute Disciplinary Committee appointed by the vice chancellor. The standing Disciplinary Committee consists of the following ex-officio and other members:

Dean Students' Welfare-Chairperson

Chairperson, Hostel Management Committee

Warden of the Hostel/Hall of Residence of which the student concerned is a boarder

One member of faculty nominated by the vice chancellor

The Deputy Registrar (Academic)-Member Secretary

In addition, the Chairperson may invite any other person(s) to be associated with the proceedings of a particular case, if his/their participation are considered necessary in disposing of the matter.

Recommendation of the committee, which will include the suggested punishment in cases of guilt proven, will be forwarded to the Chairperson Senate for necessary action.

Cases of adoption of unfair means (*UFM*) in an examination shall be dealt with by the committee on Examination Malpractice consisting of the following members

i	Faculty-in-Charge of Examination	-Chairperson
ii	Head of the Department to which the reported student belongs	-Member
iii	The invigilator reporting the case	-Member
iv	The Invigilator-in-Charge of the Examination Hall concerned	-Member
v	The Paper-setter concerned	-Member
vi	Two members of faculty nominated by the Dean (Academic)	-Members
vii	The Assistant/Deputy Registrar (Academic)	-Secretary

The Committee shall recommend appropriate measures in each case to the Chairperson of the Senate through Dean Academic for awarding the punishment.

AMENDMENTS

The academic programs of the Institute are governed by Rules and Regulations approved by the academic council from time to time. The academic council is a statutory and supreme body that governs all academic matters of the Institute, and the rulings of Chairperson (vice chancellor) are final in regard to all academic issues.

Notwithstanding all that has been stated above, the academic council, has the right to modify any of the above rules and regulations from time to time. All such modifications shall be documented and numbered sequentially and will be made available in the Institute website.

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GUIDELINES FOR ARRANGEMENT OF CERTIFICATES AND TEXT IN M. TECH. DISSERTATION

1.   Cover Page (In prescribed colour and format)
2.   Inside Cover Page (Identical to Cover Page)
3.   Declaration Certificate of Guide(s)
4.   Certificate of Approval
5.   Acknowledgments
6.   Abstract
7.   Nomenclature (if any)
8.   Contents

Main text of thesis should be typed on A4 size paper in Font Times New Roman (Size 12) with margin : Left 1.5", Right : 1", Top : 1", Bottom : 1" in 1.5 line spacing and arranged in suitable sections like introduction, Problem Definition, Literature Review, Computational / Design/ Experimental work/Case study, Results and Discussion, Conclusion, Future Scope of Work, References, Appendix (if any). The Thesis must be hard cover bound.

PROFORMA FOR THE COVER AND INSIDE PAGE

Paper : A4, Margin : Top : 1", Bottom : 1", Left 1.5", Right :
1", Line Spacing   : 1.5 lines throughout the page ,
Text Alignment : Centre throughout the page

Arial 16 Caps	**TITLE OF THE DISSERTATION**
Arial 12 Caps 2 Blank Lines	
Times New Roman 16, Bold , Italic	***A Dissertation*** ***Submitted in partial fulfillment of the*** ***requirements for the award of the Degree*** ***of***
Arial 12 Caps 2 Blank Lines	
Arial 16 Caps Bold	**MASTER OF TECHNOLOGY** **IN**
Arial 12 Caps 1 Blank Lines	
Arial 14Y Arial 12	
1 Blank Lines	
Arial 16 Bold	**Name of the Candidate**
Arial 14 Bold	**(Registration Number)**
Arial 12 2 Blank Lines	
Institute Logo Size 1"x 1"	
Arial 12 2 Blank Lines	
Arial 14 Caps	**DEPARTMENT OF _____ENGINEERING**
Bold	**NAME OF THE SUPERVISOR**

NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY, RANCHI, JHARKHAND

CERTIFICATE OF DECLARATION FROM THE SUPERVISOR

Paper : A4, Margin : Top : 1", Bottom : 1", Left 1.5", Right :
1", Line Spacing   : 1.5 lines through out the page ,
Text Alignment : Centre through out the page

Arial 16 Caps Bold ⟶ **DECLARATION CERTIFICATE**

Arial 12 1 Blank Lines ⟶

Thesis Title

        This is to certify that the work presented in the dissertation entitled " **Title of the Dissertation"** in partial fulfillment of the requirement   for the award of Degree of **Master of Technology in Engineering** is an authentic work carried out under my supervision and guidance.

Arial 14

        To the best of my knowledge, the content of this thesis does not form a basis for the award of any previous Degree to anyone else..

Date   :   (Supervisor's Name & Signature)

Arial 14   Dept. of _____Engineering
                                          Name of Institute/College

Arial 14 Head   Dean
        Dept. of ……..   (Academic)

NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY, RANCHI, JHARKHAND

CERTIFICATE OF APPROVAL FROM THE EXAMINERS

Paper : A4, Margin : Top : 1", Bottom : 1", Left 1.5", Right : 1", Line Spacing   : 1.5 lines through out the page ,
Text Alignment : Centre through out the page

Arial 16 Caps, Bold   ⟶   **CERTIFICATE OF APPROVAL**

Arial 12 1 Blank Line   ⟶

Thesis Title   The foregoing dissertation entitled **""**, is hereby approved as a creditable study of research topic and has been presented in satisfactory manner to warrant its acceptance as prerequisite to the degree for which it has been submitted.

Arial 14

It is understood that by this approval, the undersigned do not necessarily endorse any conclusion drawn or opinion expressed therein, but approve the thesis for the purpose for which it is submitted.

(Internal Examiner)   **(External Examiner)**

**(Chairman)
Head of the Department**

Colour scheme for cover page of post graduate thesis/project: M.Tech → Dark blue with golden letters.

Fee structure for M.Tech programme

A.	Admission Fee	Amount (Rs)
A1.	Institute fee	2000.00
A2.	Tuition fee	18000.00
A3.	Other fee (Computer fee, Internet access, Library)	5000.00
A4.	Medical fee	2000.00
A5.	Student activity fee	2000.00
	T1 (A1+A2+A3+A4+A5)	**29000.00**
B.	**Fee Payable at every semester**	
B1.	Tuition fee	18000.00
B2.	Other fee (Computer fee, internet access, Library, examination)	5000.00
B3.	Medical fee	2000.00
B4.	Student activity fee	2000.00
	T2 (B1+B2+B3+B4)	**27000.00**
C.	**Refundable Fee (at the time of admission)**	
C1.	**T3. Caution deposit**	**2000.00**
D.	**Hostel fees (payable every semester)**	
D1.	Establishment charges	9000.00
D2.	Seat rent, electricity, and water charges	5000.00
D3.	Mess advance (5 months)	21263.00
	T4 (D1+D2+D3)	**35263.00**
E.	**Total amount payable (at the time of admission)**	
E1.	At the time of admission (Hosteller)	**66263.00**
E2.	At the time of admission (non-Hosteller)	**31000.00**
F.	**Total amount payable (2nd semester onwards)**	
F1.	Hosteller	**62263.00**
F2.	Non-Hosteller	**27000.00**

M.Tech Thesis Dissertation Phase I-M.Tech XXXXX Engineering

Roll Number	Name	Title of presentation	Marks -40 (Other faculty members)	Marks -60 (Supervisor)	Total marks (100)

Prof. XXX

HoD XXXX

Date: XXXXX

M.Tech Thesis Dissertation Phase II-M.Tech XXXXX Engineering

Roll Number	Name	Title of presentation	Marks -40 (Other faculty members)	Marks -60 (External)	Marks-100 (Supervisor)	Total marks (100)

Prof. XXX

HoD XXXX

Date: XXXXX