



Established: 2009

PGECET Code: MLRS

## Academic Regulations under Autonomous Status

### Master of Technology (M.Tech)

Choice Based Credit System (CBCS)

(MLRS - MT25 Regulations)

(Applicable for the batches admitted from 2025-26)



## MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT

(AN AUTONOMOUS INSTITUTION)

(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)

Accredited by NAAC with 'A' Grade & Recognized Under Section 2(f) & 12(B) of the UGC act, 1956

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## PRELIMINARY DEFINITIONS AND NOMENCLATURES

**Academic Council:** The Academic Council is the highest academic body of the institute and is responsible for the maintenance of standards of instruction, education and examination within the institute. Academic Council is an authority as per UGC regulations and it has the right to take decisions on all academic matters including academic research.

**Academic Autonomy:** Means freedom to an institute in all aspects of conducting its academic programs, granted by UGC for Promoting Excellence.

**Academic Year:** It is the period necessary to complete an actual course of study within a year. It comprises two consecutive semesters i.e., Even and Odd semester.

**AICTE:** Means All India Council for Technical Education, New Delhi.

**Autonomous Institute:** Means an institute designated as autonomous by University Grants Commission (UGC), New Delhi in concurrence with affiliating University (Jawaharlal Nehru Technological University, Hyderabad) and State Government.

**Backlog Course:** A course is considered to be a backlog course if the student has obtained a failure grade (F) in that course.

**Board of Studies (BOS):** BOS is an authority as defined in UGC regulations, constituted by Head of the Organization for each of the departments separately. They are responsible for curriculum design and updation in respect of all the programs offered by a department.

**Certificate course:** It is a course that makes a student gain hands-on experience and skill required for holistic development in a specific area / field.

**Choice Based Credit System:** The credit based semester system is one which provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching along with provision of choice for the student in the course selection.

**Compulsory course:** Course required to be undertaken for the award of the degree as per the program.

**Commission:** Means University Grants Commission (UGC), New Delhi.

**Continuous Internal Examination:** It is an examination conducted towards internal assessment.

**Course:** A course is a subject offered by the University for learning in a particular semester.

**Course Outcomes:** The essential skills that need to be acquired by every student through a course.

**Credit:** A credit is a unit that gives weight to the value, level or time requirements of an academic course. The number of 'Contact Hours' in a week of a particular course determines its credit value. One credit is equivalent to one lecture hour per week.

**Credit point:** It is the product of grade point and number of credits for a course.

**Cumulative Grade Point Average (CGPA):** It is a measure of cumulative performance of a student over all the completed semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.

**Curriculum:** Curriculum incorporates the planned interaction of students with instructional content, materials, resources and processes for evaluating the attainment of Program Educational Objectives.

**Degree with Specialization:** A student who fulfills all the program requirements of her/his discipline and successfully completes a specified set of professional elective courses in a specialized area is eligible to receive a degree with specialization like Structural Engineering, Embedded Systems, CSE, etc.

**Department:** An academic entity that conducts relevant curricular and co-curricular activities, involving both teaching and non-teaching staff and other resources in the process of study for a degree.

**Detention in a course:** Student who does not obtain minimum prescribed attendance in a course shall be detained in that particular course.

**Dropping from the Semester:** A student who doesn't want to register for any semester can apply in writing in prescribed format before commencement of that semester.

**Elective Course:** A course that can be chosen from a set of courses. An elective can be Professional Elective and/or Open Elective.

**Evaluation:** Evaluation is the process of judging the academic performance of the student in her/his courses. It is done through a combination of continuous internal assessment and semester end examinations.

**Grade:** It is an index of the performance of the students in a said course. Grades are indicated by alphabets.

**Grade Point:** It is a numerical weight allotted to each letter grade on a 10 point scale.

**Institute:** Means MLRITM, Hyderabad unless indicated otherwise by the context.

**Massive Open Online Course (MOOC):** MOOC courses inculcate the habit of self learning. MOOC courses would be additional choices in all the elective group courses.

**Pre-requisite:** A course, the knowledge of which is required for registration into higher level course.

**Core:** The courses that are essential constituents of each engineering discipline are categorized as professional core courses for that discipline.

**Professional Elective:** A course that is discipline centric. An appropriate choice of minimum number of such electives as specified in the program will lead to a degree with specialization.

**Program:** Means, Master of Technology (M.Tech) degree program.

**Program Educational Objectives:** The broad career, professional and personal goals that every student will achieve through a strategic and sequential action plan.

**Project work:** It is a design or research based work to be taken up by a student during his/her second year to achieve a particular aim. It is a credit based course and is to be planned carefully by the student.

**Re-Appearing:** A student can reappear only in the semester end examination for the theory component of a course, subject to the regulations contained herein.

**Registration:** Process of enrolling into a set of courses in a semester of a Program.

**Regulations:** The regulations, common to all M.Tech programs offered by institute are designated as 'MLRS-MT25' Regulations and are binding on all the stakeholders.

**Semester:** It is a period of study consisting of 15 weeks of academic work. The odd semester starts usually in July and even semester in December.

**Semester End Examinations:** It is an examination conducted for all courses offered in a semester at the end of the semester.

**S/he:** Means "she" and "he" both.

**Student Outcomes:** The essential skill sets that need to be acquired by every student during her/his program of study. These skill sets are in the areas of employability, entrepreneurial, social and behavioral.

**University:** Means the Jawaharlal Nehru Technological University Hyderabad, Hyderabad.

**Withdraw from a Course:** Withdrawing from a course means that a student can drop from a course within the first two weeks of the odd or even semester (deadlines are different for summer sessions). However s/he can choose a substitute course in place of it by exercising the option within 5 working days from the date of withdrawal.

**Words 'he', 'him', 'his', occur, they imply 'she', 'her', 'hers' also.**

## **FOREWORD**

The autonomy is conferred to Marri Laxman Reddy Institute of Technology and management (MLRITM), Hyderabad by University Grants Commission (UGC), New Delhi based on its performance as well as future commitment and competency to impart quality education. It is a mark of its ability to function independently in accordance with the set norms of the monitoring bodies like J N T University Hyderabad (JNTUH), Hyderabad and AICTE. It reflects the confidence of the affiliating University in the autonomous institution to uphold and maintain standards it expects to deliver on its own behalf and thus awards degrees on behalf of the college. Thus, an autonomous institution is given the freedom to have its own **curriculum, examination system and monitoring mechanism**, independent of the affiliating University but under its observance.

MLRITM is proud to win the credence of all the above bodies monitoring the quality in education and has gladly accepted the responsibility of sustaining, if not improving upon the standards and ethics for which it has been striving for more than a decade in reaching its present standing in the arena of contemporary technical education. As a follow up, statutory bodies like Academic Council and Boards of Studies are constituted with the guidance of the Governing Body of the institute and recommendations of the JNTUH to frame the regulations, course structure and syllabi under autonomous status.

The autonomous regulations, course structure and syllabi have been prepared after prolonged and detailed interaction with several expertise solicited from academics, industry and research, in accordance with the vision and mission of the institute to order to produce a quality engineering graduate to the society.

All the faculty, parents and students are requested to go through all the rules and regulations carefully. Any clarifications needed are to be sought at appropriate time and with principal of the college, without presumptions, to avoid unwanted subsequent inconveniences and embarrassments. The Cooperation of all the stake holders is sought for the successful implementation of the autonomous system in the larger interests of the college and brighter prospects of engineering graduates.

**Dr. SRIDHAR P  
DIRECTOR**



## **MARRI LAXMAN REDDY INSTITUTE OF TECHNOLOGY AND MANAGEMENT (Autonomous)**

### **Academic Regulations of M.Tech. (Regular / Full Time) Programmes, 2025-26 (MLRS-MT25) (Effective for the students admitted from the Academic year 2025-26 and onwards)**

For pursuing two year postgraduate Master Degree program of study in Engineering (M.Tech.) offered by Marri Laxman Reddy Institute Of Technology and Management under Autonomous status and herein after referred to as MLRITM.

- 1.0** Marri Laxman Institute of Technology and Management (MLRITM) offers **Two Years (Four Semesters)** full-time Master of Technology (M.Tech.) Degree Programmes, under Choice Based Credit System (CBCS) in different branches of Engineering and Technology with different specializations.
- 2.0 Eligibility for Admissions**
  - 2.1** Admission to the M.Tech. Programme shall be made subject to eligibility, qualification and specializations prescribed by the University from time to time, for each specialization under each M.Tech programme.
  - 2.2** Admission to the post graduate programme shall be made on the basis of either the merit rank or Percentile obtained by the qualified student in the relevant qualifying GATE Examination / the merit rank obtained by the qualified student in an entrance test conducted by Telangana Government (PGEET) for M.Tech. Programmes / an entrance test conducted by JNTUH / on the basis of any other exams approved by the University, subject to reservations as laid down by the Govt. from time to time.
  - 2.3** The medium of instructions for all PG Programmes will be **ENGLISH** only.
- 3.0 M.Tech. Programme Structure**
  - 3.1** The M.Tech. Programs in MLRITM are of Semester pattern, consisting of **Two** academic years, each academic year having **Two** Semesters (Odd and Even Semesters). Each Semester shall be of 20 weeks duration (inclusive of Examinations).
  - 3.2** The two-year M.Tech. Programme consists of **68** credits and the student has to register for all **68** credits and earn all **68** credits for the award of M.Tech. Degree.
  - 3.3** The student shall not take more than four academic years to fulfill all the academic requirements for the award of M.Tech. Degree from the date of commencement of first semester, failing which the student shall forfeit the seat in M.Tech. Programme.

**3.4** **UGC/AICTE** specified definitions/ descriptions are adopted appropriately for various terms and abbreviations used in these PG academic regulations, as listed below:

#### **3.4.1 Semester Scheme**

There shall be a minimum of 15 weeks of instruction, excluding the continuous internal exams, practical exams and semester-end exams. Around 15 instruction hours, 30 instruction hours and 45 hours of learning need to be followed per one credit of theory course, practical course and project / field-based learning respectively. In each semester, there shall be ‘Continuous Internal Assessment (CIA)’ and ‘Semester End Examination (SEE)’ under Choice Based Credit System (CBCS). The curriculum / course structure suggested by AICTE is followed as a reference document.

#### **3.4.2 Credit Courses**

All courses are to be registered by the student in a semester to earn credits which shall be assigned to each subject / course in an L: T: P: C (Lecture Periods: Tutorial Periods: Practical Periods: Credits) structure based on the following general pattern:

- One credit for one hour / week / semester for theory / lecture (L) courses.
- One credit for two hours / week / semester for laboratory / practical (P) courses or tutorials (T).
- One credit is allocated for three hours per week in a semester for Project / Mini-Project session.

#### **3.4.3 Course Classification**

All courses offered for the Post-Graduate M.Tech. Degree Programme are broadly classified as follows. The institute has followed in general the guidelines issued by AICTE/UGC/university.

S.No.	Broad Course Classification	Course Group/ Category	Course Description
1	Core Courses (CoC)	PC-Professional Core	Includes subjects related to the parent discipline / department / branch of Engineering
		Dissertation	M.Tech. Project or PG Project or Major Project
		Mini Project with Seminar	Seminar based on core contents related to Parent Discipline / Department / Branch of Engineering
2	Elective Courses (EE)	PE-Professional Electives	Includes elective subjects related to the parent discipline / department / branch of Engineering
		OE-Open Electives	Elective subjects which include inter-disciplinary subjects or subjects in an area outside the parent discipline / department / branch of Engineering
3	Audit Courses	--	Non-Credit Audit Courses

#### **4.0 Course Registration**

- 4.1** A ‘Faculty Advisor or Mentor’ shall be assigned to each specialization, who will advise on the Post Graduate Programme, its Course Structure and Curriculum, Choice/Option for Courses, based on his competence, progress, pre-requisites and interest.
- 4.2** The academic section of the college invites ‘registration forms’ from students within 15 days from the commencement of class work through ‘on-line submissions’, ensuring ‘date and time stamping’. The on-line registration requests for any ‘current semester’ shall be completed before the commencement of SEE (Semester End Examinations) of the ‘preceding semester’.
- 4.3** A Student can apply for on-line Registration, only after obtaining the ‘written approval’ from his Faculty Mentor, which should be submitted to the College Academic Section through the Head of Department (a copy of it being retained with Head of Department, Faculty Mentor and the Student).
- 4.4** If the Student submits ambiguous choices or multiple options or erroneous entries during on-line Registration for the Course(s) under a given / specified Course Group / Category as listed in the Course Structure, only the first mentioned Course in that Category will be taken into consideration.
- 4.5** Course Options exercised through on-line Registration are final and cannot be changed, nor can they be inter-changed; further, alternate choices also will not be considered. However, if the Course that has already been listed for Registration by the institute in a Semester could not be offered due to unforeseen or unexpected reasons, then the Student will be allowed to have alternate choice either for a new course, if it is offered, or for another existing course (subject to availability of seats). Such alternate arrangements will be made by the Head of Department, with due notification and time-framed schedule, within the first week from the commencement of Class-work for that Semester.

#### **5.0 Attendance Requirements**

Attendance is calculated separately for each subject.

- 5.1** Attendance in all classes (Lectures / Laboratories) is compulsory. The minimum required attendance in each theory course (*also Audit Courses*) including the attendance of continuous internal examination / Laboratory etc. is 75%. Two periods of attendance for each theory course shall be considered, if the student appears for the continuous internal examination of that course. A student shall not be permitted to appear for the Semester End Examinations (SEE), if his attendance is less than 75%.
- 5.2** A student's Seminar report and presentation on Mini Project shall be eligible for evaluation, only if he ensures a minimum of 75% of his attendance in Seminar presentation classes on Mini Project during that Semester.
- 5.3** **Condoning of shortage of attendance** (between 65% and 75%) up to a maximum of 10% (considering the days of attendance in sports, games, NCC, NSS activities and Medical grounds) in each course (Theory / Lab / Mini Project with Seminar) of a semester shall be granted by the College Academic Committee on genuine reasons.

**5.4** A prescribed fee per subject shall be payable for condoning shortage of attendance after getting the approval of College Academic Committee for the same. The College Academic Committee shall maintain relevant documents along with the request from the student.

**5.5** Shortage of Attendance below 65% in any subject shall in **no case be condoned**.

**5.6** A Student, whose shortage of attendance is not condoned in any course(s) (Theory/Lab/Mini Project with Seminar) in any Semester, is considered as ‘Detained in that course(s), and is not eligible to write Semester End Examination(s) of such Course(s), (in case of Mini Project with Seminar, his/her Mini Project with Seminar Report or Presentation are not eligible for evaluation) in that Semester; and he/she has to seek re-registration for those Course(s) in subsequent Semesters, and attend the same as and when offered.

**5.7** A student fulfills the attendance requirement in the present semester, shall not be eligible for readmission into the same class.

**5.8** **a)** A student shall put in a minimum required attendance in at least **three theory courses (excluding Audit course)** in I semester for promotion to II semester.

**b)** A student shall put in a minimum required attendance in at least **three theory Courses (excluding Audit course)** in II semester for promotion to III Semester.

## **6.0 Academic Requirements**

The following academic requirements must be satisfied, in addition to the attendance requirements mentioned in item no. 5. The performance of the candidate in each semester shall be evaluated course-wise, with a maximum of 100 marks per course (theory / practical), based on Continuous Internal Assessment and Semester End Examination.

**6.1** A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each course, if he secures not less than:

- 40% of Marks (24 out of 60 marks) in the Semester End Examination and
- A minimum of 50% of marks in the sum total of CIA (Continuous Internal Assessment) and SEE (Semester End Examination) taken together; in terms of Letter Grades this implies securing ‘B’ Grade or above in a course.

**6.2** A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to Mini Project with seminar, if student secures not less than 50% marks (i.e. 50 out of 100 allotted marks). The student would be treated as failed, if student (i) does not submit a seminar report on Mini Project or does not make a presentation of the same before the evaluation committee as per schedule or (ii) secures less than 50% marks in Mini Project with seminar evaluation. The failed student shall reappear for the above evaluation when the notification for supplementary examination is issued.

**6.3** A student shall register for all Courses for total of **68** credits as specified and listed in the course structure for the chosen specialization, put in the required attendance and fulfill the academic requirements for securing **68** credits obtaining a minimum of ‘B’ Grade or above in each course, and shall **pass all the Audit Courses** to complete the M.Tech. Programme successfully.

**Note:(1)The SGPA will be computed and printed on the grade memo only if the Candidate passes in all the courses offered and gets minimum B grade in all the courses.**  
**(2) CGPA is calculated only when the candidate passes in all the courses offered in all the semesters**

**6.4** Letter Grades obtained in all those courses covering the above specified **68** credits alone shall be considered for the calculation of final CGPA, which will be indicated in the Consolidated Grade Memo.

**6.5** When a student is detained due to shortage of attendance in any course(s) in any semester, shall not be permitted to write the Semester End Examinations. However, he is eligible for re-registration of such course(s) in the subsequent semester(s), as and when next offered, with the academic regulations of the batch into which he is re-registered, by paying the prescribed fees per Course. In all these re-registration cases, the student shall have to secure a fresh set of internal marks and Semester End Examination marks for performance evaluation in such course(s), and SGPA/CGPA calculations.

**6.6** A student eligible to appear for the Semester End Examination in any course, but absent from it or failed (failing to secure 'B' Grade or above), may reappear for that course at the supplementary examination as and when conducted. In such cases, his Internal Marks assessed earlier for that Course will be carried over, and added to the marks secured in the supplementary examination, for the purpose of evaluating his performance in that course.

**6.7** A student, who fails to earn **68** credits as per the specified course structure, and as indicated above, within **four** academic years from the date of commencement of his first semester, shall forfeit his seat in M.Tech. Programme and his admission **shall stand cancelled**.

## **7.0 Evaluation - Distribution and Weightage of Marks**

The performance of a student in each semester shall be evaluated course- wise (irrespective of credits assigned) for a maximum of 100 marks.

**7.1** The performance of a student in every course (including Practicals and Project) will be evaluated for 100 marks each, with 40 marks allotted for CIA (Continuous Internal Assessment) and 60 marks for SEE (Semester End-Examination).

**Table-5: Outline for Continuous Internal Assessments (CIA-1 and CIA-2) and SEE:**

Activities	CIA-1	CIA-2	SEE	Total Marks
Continuous Internal Examination (CIE)	30 marks	30 marks		30 marks
Assignment	05 marks	05 marks		05 marks
Comprehensive Assessment Tool (CAT)	05 marks	05 marks		05 marks
Semester End Examination (SEE)			60 marks	60 marks
Total				100 marks

**7.2** In CIE, for theory courses, during a semester, there shall be two mid-term examinations. Each CIE consists of two parts i) Part – A for 10 marks, ii) Part – B for 20 marks, with a total duration of two hours as follows.

Continuous Internal Examination for 30 marks:

a. Part - A: Objective / Short answer questions for 10 marks, 02 questions from full units and

one question from half unit.

b. Part - B: Descriptive paper for 20 marks, shall contain 6 questions out of which, the student have to answer 4 questions, each carrying 5 marks.

The average of the two CIE's shall be taken as the final marks for CIE (for 30 marks).

While the CIE - I shall be conducted on 50% of the syllabus, the CIE - II shall be conducted on the remaining 50% of the syllabus. Questions will be drawn from the CIE syllabus, ensuring uniform coverage of all topics.

The remaining 10 marks of Continuous Internal Assessment are distributed as follows:

#### **7.2.1 Assignment:**

Five (5) marks are allocated for assignments. The first assignment should be submitted before the conduct of the first mid-term examination, and the second assignment should be submitted before the conduct of the second mid-term examination. The average of the two assignments shall be taken as the final marks for assignment (for 5 marks).

#### **7.2.2 Comprehensive Assessment Tool (CAT):**

In order to encourage innovative methods while delivering a course, the faculty members are encouraged to use the CAT for 5 marks. This CAT enables faculty to design own assessment patterns during the CIA. The CAT enhances the autonomy (freedom and flexibility) of individual faculty and enables them to create innovative pedagogical practices. Through this CAT, a classroom can be converted into an effective learning center. The CAT may include Quiz, Certificate of completion from Tech talk, term paper, open ended experiments, Concept video, MOOCs, Inter-institute participation in hackathons etc, Language Proficiency test. However, it is mandatory for a faculty to obtain prior permission from the concerned HOD and spell out the teaching / assessment pattern of the CAT prior to commencement of the semester.

- The Student, in each course, shall have to earn 40% of marks (i.e. 24 marks out of 60) in SEE and Overall 50% of marks (i.e. 50 marks out of 100 marks) both CIA and SEE marks taking together.

The details of the end semester question paper pattern are explained in the next clause:

#### **7.3 Semester End Examination (SEE)**

The semester end examinations (SEE), for theory courses, will be conducted for 60 marks consists of two parts viz. i) Part-A for 10 Marks ii) Part-B for 50 Marks.

- Part-A is compulsory, consists of five short answer questions covering all units of syllabus; each question carries two marks.
- Part-B consists of five questions carrying 10 marks each. There shall be two questions asked in the question paper from each unit with either-or choice and the student should answer either of the two questions. The student shall answer one question from each of five units.

- The duration of the Semester End Examination is three hours.

**7.4** For practical Courses there shall be a Continuous Internal Assessment (CIA) during the semester for 40 marks and 60 marks for semester end examination. Out of the 40 marks for internal evaluation:

1. 10 marks for a write-up on day-to-day experiments in the laboratory (in terms of aim, components/ procedure, expected outcome).
2. 10 marks for the Continuous internal practical examination conducted by the laboratory faculty concerned.
3. 10 marks for viva-voce (or) tutorial (or) case study (or) application (or) poster presentation of the course concerned.
4. The remaining 10 marks are for Laboratory Report / open ended experiments/ Project and Presentation, which consists of the Design (or) Software / Hardware Model Presentation (or) App Development (or) Prototype Presentation / submission and Global Certifications which shall be evaluated after completion of laboratory course and before semester end practical examination.

In the Semester End Examination, held for 3hours, total 60marks are divided and allocated as shown below:

1. 10 marks for write-up
2. 15 marks for experiment / program
3. 15 marks for evaluation of results
4. 10 marks for presentation on another experiment / program in the same laboratory course and
5. 10 marks for viva-voce on concerned laboratory course.

- The Student, in each Course, shall have to earn 40% of marks (i.e. 24 marks out of 60) in SEE and Overall 50% of marks (i.e. 50 marks out of 100 marks) both CIE and SEE marks taking together.

**7.5** For conducting laboratory end examinations of all PG Programmes, one internal examiner and one external examiner are to be appointed by the Principal of the College. The external examiner should be selected from outside the College concerned but within the cluster. No external examiner should be appointed from any other College in the same cluster / any other cluster which is run by the same Management.

**7.6** There shall be Mini Project with Seminar during II semester for internal evaluation of 100 marks. The Departmental Academic Committee (DAC) will review the progress of the mini project during the seminar presentations and evaluate the same for 50 marks. Mini Project Viva Voce will be evaluated by the DAC for another 50 marks before the semester end examinations. Student shall carryout the mini project in consultation with the mini project supervisor which may include critically reviewing the literature, project implementation and submit it to the department in the form of a report and shall make an oral presentation before the DAC consisting of Head of the Department, Mini Project supervisor and two other senior faculty members of the department. The student has to secure a minimum of 50% of marks in i) seminar presentation

and ii) mini project viva voce, to be declared successful. If he fails to obtain the minimum marks, he has to reappear for the same as and when scheduled.

- 7.7** Every candidate shall be required to submit a dissertation on a topic approved by the Dissertation Review Committee.
- 7.8** The M.Tech. Dissertation shall be prepared in the structure prescribed by the institute, adhering to the style files and formatting guidelines. To facilitate this process, each institution will organize a brief orientation session for the entire class/section at the beginning of the final semester, guiding the students on the required structure and formatting of the dissertation.
- 7.9** A Dissertation Review Committee (DRC) shall be constituted with the Head of the Department as Chairperson, Dissertation Supervisor and one senior faculty member of the Department offering the M.Tech. programme
- 7.10** **Registration of Dissertation Work:** A candidate is permitted to register for the Dissertation Work after satisfying the attendance requirement in all the courses, both theory and laboratory
- 7.11** After satisfying the previous clause, a candidate must present in Dissertation Work Review - I, in consultation with his Dissertation Supervisor, the title, objective and plan of action of his Dissertation work to the Dissertation Review Committee (DRC) for approval within four weeks from the commencement of Second year First Semester. Only after obtaining the approval of the DRC can the student initiate the Dissertation work.
- 7.12** If a candidate wishes to change his supervisor or topic of the Dissertation, he can do so with the approval of the DRC. However, the DRC shall examine whether or not the change of topic/supervisor leads to a major change of his initial plans of Dissertation proposal. If yes, his date of registration for the project work starts from the date of change of Supervisor or topic as the case may be.
- 7.13** A candidate shall submit his Dissertation progress report in two stages at least with a gap of three months between them.
- 7.14** The work on the Dissertation shall be initiated at the beginning of the III semester and the duration of the Dissertation is two semesters. A candidate is permitted to submit Dissertation Thesis only after successful completion of all theory and practical courses with the approval of DRC not earlier than 40 weeks from the date of approval of the Dissertation work. For the approval of DRC, the candidate shall submit the draft copy of thesis to the Head of the Department and make an oral presentation before the DRC
- 7.15** The Dissertation Work Review - II in III Semester carries 100 internal marks. Evaluation should be done by the DRC for 50 marks and the Supervisor will evaluate the work for the other 50 marks. The Supervisor and DRC will examine the Problem Definition, Objectives, Scope of Work, Literature Survey in the same domain and progress of the Dissertation Work. A candidate has to secure a minimum of 50% of marks to be declared successful in Dissertation Work Review - II. If he fails to obtain the minimum required marks, he has to reappear for Dissertation Work Review - II as and when conducted.

**7.16** The Dissertation Work Review - III in IV Semester carries 100 internal marks. Evaluation should be done by the DRC for 50 marks and the Supervisor will evaluate it for the other 50 marks. The DRC will examine the overall progress of the Dissertation Work and decide whether or not the Dissertation is eligible for final submission. A candidate has to secure a minimum of 50% of marks to be declared successful in Dissertation Work Review - III. If he fails to obtain the required minimum marks, he has to reappear for Dissertation Work Review - III as and when conducted. For Dissertation Evaluation (Viva Voce) in IV Semester there are external marks of 100 and it is evaluated by the external examiner. The candidate has to secure a minimum of 50% marks in Dissertation Evaluation (Viva-Voce) examination.

**7.17** Dissertation Work Reviews - II and III shall be conducted in phase I (Regular) and Phase II (Supplementary). Phase II will be conducted only for unsuccessful students in Phase I. The unsuccessful students in Dissertation Work Review - II (Phase II) shall reappear for it at the time of Dissertation Work Review - III (Phase I). These students shall reappear for Dissertation Work Review - III in the next academic year at the time of Dissertation Work Review - II only after completion of Dissertation Work Review - II, and then Dissertation Work Review - III follows. The unsuccessful students in Dissertation Work Review - III (Phase II) shall reappear for Dissertation Work Review - III in the next academic year only at the time of Dissertation Work Review - II (Phase I).

**7.18** After approval from the DRC, a soft copy of the thesis should be submitted for Anti-Plagiarism check and the plagiarism report should be submitted to the University and be included in the final thesis. The Thesis will be accepted for submission, if the similarity index is less than 30%. If the similarity index is more than the required percentage, the student is advised to revise the thesis and re-submit the soft copy of the thesis after one month. The maximum number of re-submissions of thesis after plagiarism check is limited to TWO. The candidate has to register for the Dissertation work and work for two semesters. After three attempts, the admission is liable to be cancelled.

**7.19** **Student has to publish paper in Scopus / WoS journals to before going to external viva-voce examination.**

**7.20** Three copies of the Dissertation Thesis certified by the supervisor shall be submitted to the Institute, after submission of a research paper related to the Dissertation work in a **Scopus / WoS** approved journal. A copy of the submitted research paper shall be attached to thesis.

**7.21** The thesis shall be adjudicated by an external examiner selected by the institute. For this, the Principal of the Institute shall submit a panel of **three** examiners from among the list of experts in the relevant specialization as submitted by the supervisor concerned and Head of the Department.

**7.22** If the report of the external examiner is unsatisfactory, the candidate shall revise and resubmit the Thesis. If the report of the examiner is unsatisfactory again, the thesis shall be summarily rejected. Subsequent actions for such dissertations may be considered, only on the specific recommendations of the external examiner and/or Dissertation Review Committee. No further correspondence in this matter will be entertained, if there is no specific recommendation for resubmission.

**7.23** If the report of the examiner is satisfactory, the Head of the Department shall coordinate and decide for the conduct of Dissertation Viva-Voce examination. The Dissertation Viva-Voce examination shall be conducted by a board consisting of the Supervisor, Head of the Department and the external examiner who adjudicated the Thesis. The candidate has to secure a minimum of 50% of marks in Dissertation Evaluation (Viva-Voce) examination.

**7.24** If he fails to fulfill the requirements as specified in the above clause, he will reappear for the Dissertation Viva-Voce examination only after three months. In the reappeared examination also, if he fails to fulfill the requirements, he will not be eligible for award of the degree, unless he is asked to revise and resubmit his Dissertation Work by the board within a specified time period.

**7.25** The Dissertation Viva-Voce External examination marks must be submitted to the exambranch on the same day of the examination.

**7.26** For Audit courses, a student has to secure 40 marks out of 100 marks (i.e. 40% of the marks allotted) in the continuous internal evaluation for passing the course. These marks should also be uploaded along with the internal marks of other courses

**7.27** No marks or letter grades shall be allotted for Audit Courses. Only Pass/Fail shall be indicated in Grade Card.

## **8.0 Re-Admission / Re-Registration**

### **8.1 Re-Admission for Discontinued Student**

A student, who has discontinued the M. Tech. degree programme due to any reason whatsoever, may be considered for 'readmission' into the same degree programme (with the same specialization) with the academic regulations of the batch into which he gets readmitted, with prior permission from the authorities concerned

**8.2** If a student is detained in a course (s) due to shortage of attendance in any semester, he may be permitted to re-register for the same course(s) or the student may register in an equivalent course, If the same course is not available, as suggested by the Board of Studies of that department, in the subsequent semester(s), with the academic regulations of the batch into which he seeks re-registration, with prior permission from the authorities concerned.

**8.3** A candidate shall be given chance to re-register any number of courses, if the candidate failed in these courses due to securing less than 40% marks in CIA. A candidate must re-register for failed courses within four weeks of commencement of the class work, in the next academic year and secure the required minimum attendance. In the event of the student taking this chance, his Continuous Internal Assessment marks and Semester End Examination marks obtained in the current semester only will be accepted, if he secures pass grade

## **9.0 Examinations and Assessment – The Grading System**

**9.1** Grades will be awarded to indicate the performance of each student in each Theory Course, or Lab / Practicals, or Mini Project with Seminar, Dissertation, etc., based on the percentage of marks obtained in CIA + SEE (Continuous Internal Assessment + Semester End Examination, both taken together) as specified in Item 7 above, and a corresponding Letter Grade shall be

given.

**9.2** As a measure of the student's performance, a 10-point Absolute Grading System using the following Letter Grades (UGC Guidelines) and corresponding percentage of marks shall be followed:

% of Marks Secured in a Course (Class Intervals)	Letter Grade (UGC Guidelines)	Grade Points
90% and above ( $\geq 90\%, \leq 100\%$ )	O (Outstanding)	10
Below 90% but not less than 80% ( $\geq 80\%, < 100\%$ )	A <sup>+</sup> (Excellent)	9
Below 80% but not less than 70% ( $\geq 70\%, < 80\%$ )	A (Very Good)	8
Below 70% but not less than 60% ( $\geq 60\%, < 70\%$ )	B <sup>+</sup> (Good)	7
Below 60% but not less than 50% ( $\geq 50\%, < 60\%$ )	B (Above Average)	6
Below 50% ( $< 50\%$ )	F (Fail)	0
<b>Absent</b>	<b>Ab</b>	<b>0</b>

**9.3** A student obtaining 'F' Grade in any Course is deemed to have 'failed' and is required to reappear as 'Supplementary Candidate' for the Semester End Examination (SEE), as and when conducted. In such cases, his Internal Marks (CIA Marks) in those courses will remain as obtained earlier.

**9.4** If a student has not appeared for the examinations, 'Ab' Grade will be allocated to him for any course and shall be considered 'failed' and will be required to reappear as 'Supplementary Candidate' for the Semester End Examination (SEE), as and when conducted.

**9.5** A Letter Grade does not imply any specific marks percentage; it is only the range of percentage of marks.

**9.6** In general, a student shall not be permitted to repeat any Course (s) only for the sake of 'Grade Improvement' or 'SGPA / CGPA Improvement'.

**9.7** A student earns Grade Point (GP) in each Course, on the basis of the Letter Grade obtained by him in that Course. The corresponding 'Credit Points' (CP) are computed by multiplying the Grade Point with Credits for that particular Course.

$$\text{Credit Points (CP)} = \text{Grade Point (GP)} \times \text{Credits} \dots \text{For a Course}$$

**9.8** The student passes the Course only when he gets **GP  $\geq 6$  (B Grade or above)**.

**9.9** The Semester Grade Point Average (SGPA) is calculated by dividing the Sum of Credit Points secured from all Courses registered in a Semester, by the total number of credits offered in that Semester. SGPA is rounded off to two decimal places. SGPA is thus computed as

$$SGPA = \frac{\sum_{i=1}^n (C_i G_i)}{\sum_{i=1}^n C_i}$$

Where 'i' is the Course indicator index (taking into account all Courses in a Semester), 'N' is the no. of Courses 'Registered' for the Semester (as specifically required and listed under the Course Structure of the parent Department),  $C_i$  is the no. of Credits allotted to the  $i^{\text{th}}$  Course, and  $G_i$  represents the Grade Points (GP) corresponding to the Letter Grade awarded for that  $i^{\text{th}}$

Course.

**9.10** The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a student over all Semesters considered for registration. The CGPA is the ratio of the Total Credit Points secured by a student in all registered Courses in all Semesters, and the Total Number of Credits registered in all the Semesters. CGPA is rounded off to two decimal places. CGPA is thus computed from the I Year Second Semester onwards, at the end of each Semester, as per the formula

$$CGPA = \sum_{j=1}^m (C_j G_j) / \sum_{j=1}^m C_j$$

**(i.e., up to and inclusive of S Semesters, S≥2),**

Where 'M' is the total no. of Courses (as specifically required and listed under the Course Structure of the parent Department) the Student has 'registered'.  $C_j$  is the no. of Credits allotted to the  $j^{\text{th}}$  Course, and  $G_j$  represents the Grade Points (GP) corresponding to the Letter Grade awarded for that  $j^{\text{th}}$  Course. After registration and completion of I Semester however, the SGPA of that Semester itself may be taken as the CGPA, as there are no cumulative effects.

#### **Illustration of calculation of SGPA**

Course/Course	Credits	Letter Grade	Grade points	Credit Points
Course1	4	A	8	4*8=32
Course2	4	O	10	4*10=40
Course3	4	B	6	4*6=24
Course4	3	B	6	3*6=18
Course5	3	A+	9	3*9=27
Course6	3	B	6	3*6=18
	21			159

$$SGPA = 159/21 = 7.57$$

#### **Illustration of calculation of CGPA**

Semester	Credits	SGPA	Credits*SGPA
I Semester	24	7	24*7=168
II Semester	24	6	24*6=144
III Semester	24	6.5	24*6.5=156
IV Semester	24	6	24*6=144
	96		612

$$CGPA = 612/96 = 6.37$$

#### **10.0 Award of Degree and Class**

**10.1** If a student who registers for all the specified Courses as listed in the Course Structure, satisfies all the Course Requirements, and passes the examinations prescribed in the entire PG Programme, and secures the required number of 68 Credits (with  $CGPA \geq 6.0$ ), shall be declared to have 'qualified' for the award of the M.Tech. Degree in the chosen Branch of

Engineering/Technology with the specialization that he was admitted into

## **10.2 Award of Class**

After a student has earned the requirements prescribed for the completion of the programme and is eligible for the award of M.Tech. Degree, he shall be placed in one of the following three classes based on the CGPA:

<b>Class Awarded</b>	<b>CGPA</b>
First Class with Distinction	$\geq 7.50$
First Class	$6.50 \leq \text{CGPA} < 7.50$
Second Class	$6.00 \leq \text{CGPA} < 6.50$

A student with final CGPA (at the end of the PGP)  $< 6.00$  shall not be eligible for the Award of Degree.

## **11.0 Withholding of Results**

If the student has not paid the dues, if any, to the University or if any case of indiscipline is pending against him, the result and degree of the student will be withheld and he will not be allowed into the next semester.

## **12.0 Conversion of CGPA into equivalent Percentage of Marks**

The following formula shall be used for the conversion of CGPA into equivalent marks, whenever it is necessary

$$\text{Percentage (\%)} \text{ of Marks} = (\text{Final CGPA} - 0.5) \times 10$$

## **13.0 Mapping with the Sustainable Development Goals**

All the courses specified in the course structure of every programme are mapped with the one or more sustainable development goals.

## **14.0 General**

**14.1 Credit:** A unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week.

**14.2 Credit Point:** It is the product of grade point and number of credits for a course.

**14.3** Wherever the words “he”, “him”, “his”, occur in the regulations, they shall include “she”, “her”.

**14.4** The academic regulation should be read as a whole for the purpose of any interpretation

**14.5** In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the University is final.

**14.6** The University may change or amend the academic regulations or syllabi at any time and the changes or amendments made shall be applicable to all the students with effect from the dates notified by the University

## **15.0 Malpractice Rules**

<b>S.No.</b>	<b>Nature of Malpractices / Improper conduct</b>	<b>Punishment</b>
	<i>If the candidate:</i>	

1. (a)	<p>Possesses or keeps accessible in examination hall, any paper, note book, programmable calculator, cell phone, pager, palm computer or any other form of material concerned with or related to the course of the examination (theory or practical) in which he/she is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in The course of the examination)</p>	<p>Expulsion from the examination hall and cancellation of the performance in that course only.</p>
(b)	<p>Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or person in or outside the exam Hall in respect of any matter.</p>	<p>Expulsion from the examination hall and cancellation of the performance in that course only of all the candidates involved. In case of an outsider, he/she will be handed over to the police and a case is Registered against him.</p>
2.	<p>Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the course of the examination (theory or practical) in which the candidate is appearing.</p>	<p>Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the courses of that Semester/year.</p> <p>The Hall Ticket of the candidate is to be cancelled and sent to the Controller of Examinations.</p>
3.	<p>Impersonates any other candidate in connection with the examination.</p>	<p>The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the courses of the examination (including practical and project work) already appeared and shall not be allowed to appear for examinations of the remaining courses of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with Forfeiture of seat. If the imposter is an Outsider, he will be handed over to the police and a case is registered against him.</p>

4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with Forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that course.
6.	Refuses to obey the orders of the Controller of Examinations /Additional Controller of Examinations/any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walkout, or threatens the COE or any person on duty in or outside the examination hall of any injury to his/her person or to any of his/her relations whether by words, either spoken or written or by signs or by visible representation, assaults the COE or any person on duty in or outside the examination hall or any of his/her relations, or indulge in any act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the Institute premises or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt The orderly conduct of the examination.	In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that course and all other courses the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the courses of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.
7.	Leaves the exam hall taking away answer script or intentionally tears off the script or any part thereof inside or outside the examination hall.	Expulsion from the examination hall and cancellation of performance in that course and all the other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all semester end examinations. The

		continuation of the Course by the candidate is course to the Academic regulations in connection with forfeiture of seat.
8.	Possess any lethal weapon or firearm in the examination hall.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The candidate is also debarred and forfeits the seat.
9.	If student of the college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the college is expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The candidate is also debarred and forfeits the seat.  Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10.	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/ year.
11.	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that course and all other courses the candidate has appeared including practical examinations and project work of that semester / year examinations.
12.	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the University for further action to award suitable punishment.	



