



CMR ENGINEERING COLLEGE

Kandlakoya, Hyderabad

(Autonomous Institute, Approved by AICTE, Affiliated to JNTUH)



Established: 2010

EAMCET Code: CMRN

Academic Regulations, Course Structure and Detailed Syllabus under Autonomous Status

MASTER OF TECHNOLOGY (M.TECH)

(CMREC – R25 Regulations)

(Applicable for the batch admitted from 2025-2026)



CMR ENGINEERING COLLEGE
(Approved by AICTE, Affiliated to JNTU, Hyderabad)
UGC AUTONOMOUS



**Academic Regulations of M.Tech (Regular/Full Time) Programmes,
2025-26(R25) (CBCS)**

(Effective for the students admitted into I year from the Academic Year 2025-26 and onwards)

- 1.0 Post-Graduate Degree Programmes in Engineering & Technology (PGP in E & T)**
CMR Engineering College offers **Two** Years (**Four** Semesters) full-time Master of Technology (M. Tech) Degree programmes, under Choice Based Credit System (CBCS) at its constituent (non-autonomous) and affiliated colleges in different branches of Engineering and Technology with different specializations.
- 2.0 Eligibility for Admissions**
 - 2.1** Admission to the PGPs shall be made subject to eligibility, qualification and specializations prescribed by the Institute 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 State Government (PGECET) 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.
- 3.1 M.Tech Programme (PGP in E & T) Structure**
 - 3.2** The M.Tech programmes in E & T of CMR Engineering College are of Semester pattern, with **Four** Semesters consisting of **Two** academic years, each academic year having **Two** Semesters (First/Odd and Second/Even Semesters). Each Semester shall be of 22 weeks duration (inclusive of Examinations), with a minimum of 90 instructional days per Semester.
 - 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 year 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

Each Semester shall have 'Continuous Internal Evaluation (CIE)' and 'Semester End Examination (SEE)'. Choice Based Credit System (CBCS) and Credit Based Semester System (CBSS) are taken as 'references' for the present set of Regulations. The terms 'SUBJECT' and 'COURSE' imply the same meaning here and refer to 'Theory Subject', or 'Lab Course', or 'Design/Drawing Subject', or 'Mini Project with Seminar', or 'Dissertation', as the case may be.

3.4.2 Credit Courses

All subjects/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)

Other student activities like study tour, guest lecture, conference/workshop participations, technical paper presentations and mandatory courses (**Audit Courses**) will not carry any credits.

3.4.3 Subject Course Classification

All subjects/courses offered for the Post-Graduate Programme in E & T (M.Tech degree Programme) are broadly classified as follows. The college has followed in general the guidelines issued by AICTE/UGC.

| 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 (ElC) | 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 Counselor' shall be assigned to each specialization, who will advise on the Post Graduate Programme (PGP), its Course Structure and Curriculum, Choice/Option for Subjects/ 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 SEEs (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 Advisor, 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 Advisor and the Student).
- 4.4 If the Student submits ambiguous choices or multiple options or erroneous entries during ON-LINE Registration for the Subject(s) / Course(s) under a given/ specified Course Group/ Category as listed in the Course Structure, only the first mentioned Subject/ Course in that Category will be taken into consideration.
- 4.5 Subject/ 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 Subject/ Course that has already been listed for Registration by the college 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 Subject, if it is offered, or for another existing Subject (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

The programmes are offered based on a unit system with each subject being considered a unit. Attendance is calculated separately for each subject.

- 5.1 Attendance in all classes (Lectures/Laboratories) is compulsory. The minimum required attendance in each theory subject (*also mandatory (audit) courses*) including the attendance of mid-term examination / Laboratory etc. is 75%. Two periods of attendance for each theory subject shall be considered, if the student appears for the mid-term examination of that subject. ***This attendance should also be included in the fortnightly upload of attendance to the Examination Branch. The attendance of mandatory (audit) courses should be submitted.*** 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\she 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 subject (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 Subject(s) (Theory/Lab/Mini Project with Seminar) in any Semester, is considered as 'Detained in that Subject(s), and is not eligible to write Semester End Examination(s) of such Subject(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 Subject(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 subjects (excluding mandatory (audit) course)** in first Year I semester for promotion to first Year II Semester.
- b) A student shall put in a minimum required attendance in at least **three theory subjects (excluding mandatory (audit) course)** in first Year II semester for promotion to second Year I 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 subject-wise, with a maximum of 100 marks per subject / course (theory / practical), based on Internal Evaluation and Semester End Examination.

- 6.1 A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/course, if he\she secures not less than
- 40% of marks (24 out of 60 marks) in the End Semester Examination;

- A minimum of 50% of marks in the sum total of CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together; in terms of Letter Grades and this implies securing 'B' Grade or above in a subject.

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 subjects 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 subject, and all **68** credits securing Semester Grade Point Average (**SGPA**) ≥ 6.0 (in each semester) and final Cumulative Grade Point Average (**CGPA**) (i.e., CGPA at the end of PGP) ≥ 6.0 , and shall *pass all the mandatory(audit) courses* to complete the PGP successfully.

Note: (1) The SGPA will be computed and printed on the marks memo only if the candidate passes in all the subjects offered and gets minimum B grade in all the subjects.

(2) CGPA is calculated only when the candidate passes in all the subjects offered in all the semesters

6.4 Letter Grades obtained in all those subjects 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 subject(s) in any semester, no Grade allotment will be made for such subject(s). However, he\she is eligible for re-registration of such subject(s) in the subsequent semester(s), as and when next offered, with the academic regulations of the batch into which he\she is re-registered, by paying the prescribed fees per subject. 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 subject(s), and SGPA/CGPA calculations.

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

- 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 year 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 subject - wise (irrespective of credits assigned) for a maximum of 100 marks.

- 7.1** For the theory subjects 60 marks shall be awarded for the performance in the Semester End Examination (SEE) and 40 marks shall be awarded for Continuous Internal Evaluation (CIE). The Continuous Internal Evaluation shall be made based on the average of the marks secured in the two Mid-Term Examinations conducted, first Mid-Term examinations in the middle of the Semester and second Mid-Term examinations during the last week of instruction.

7.2 Continuous Internal Evaluation (CIE):

Each Mid-Term Examination shall be conducted for a total duration of 120 minutes with

1. Mid-Term Examination for 30 marks:

- a. PART 'A' compulsory consisting of 5 questions carrying 2 marks each (10 marks),
- b. PART 'B' with 4 questions to be answered out of 5 questions, each question carrying 5 marks (20 marks).

The average of the two Mid Term Examinations shall be taken as the final marks for Mid Term Examination for 30 marks.

The remaining 10 marks of Continuous Internal Assessment (out of 40) are distributed as:

- 2.** 5 marks for Assignment. (Average of 2 Assignments each for 5 marks)
- 3.** Course Viva-Voce/PPT/Poster Presentation/ Case Study on a topic in the concerned course for 5 marks.

While the first mid-term examination shall be conducted on 50% of the syllabus, the second Mid-term examination shall be conducted on the remaining 50% of the syllabus.

Five (5) marks are allocated for assignments (as specified by the course teacher concerned). 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.

Course Viva-Voce/PPT/Poster Presentation/ Case Study on a topic in the concerned course for five marks before II Mid-Term Examination.

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

7.3 Semester End Examination (SEE):

- i. The details of the Question Paper pattern for Semester End Examination (Theory) are given below:
- ii. The Semester End Examination will be conducted for 60 marks. It consists of two parts.
 - 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 (numbered from 2 to 11) carrying 10 marks each. Each of these questions is from each unit and may contain sub-questions. For each question there will be an “either” “or” choice, which means that there will be two questions from each unit and the student should answer either of the two questions.
- The duration of Semester End Examination is 3 hours.

7.4 For practical subjects, 60 marks shall be awarded for performance in the Semester End Examinations and 40 marks shall be awarded for day-to-day performance as Internal Marks.

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

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

1. 10 marks for write-up
 2. 15 for experiment/program
 3. 15 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. 16 marks out of 40 marks) in CIE, 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.

The student is eligible to write Semester End Examination of the concerned course, if the student scores $\geq 40\%$ (16 marks) of 40 Continuous Internal Examination (CIE) marks.

In case, the student appears for Semester End Examination (SEE) of the concerned course but not scored minimum 40% of CIE marks (16 marks out of 40 internal marks), his performance in that course in SEE shall stand cancelled inspite of appearing the SEE.

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 I year 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\she fails to obtain the minimum marks, he\she 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 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.
- 7.9 Registration of Dissertation Work: A candidate is permitted to register for the Dissertation Work after satisfying the attendance requirement in all the subjects, both theory and laboratory.
- 7.10 After satisfying 7.7, 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.
- 7.11 If a candidate wishes to change his supervisor or topic of the Dissertation, he\she 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.
- 7.12 A candidate shall submit his Dissertation progress report in two stages at least with a gap of **three** months between them.
- 7.13 The work on the Dissertation shall be initiated at the beginning of the II year 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.

- 7.14 The Dissertation Work Review-I** in II Year I Sem. carries internal marks of 100. 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 - I. If he\she fails to obtain the minimum required marks, he\she has to reappear for Dissertation Work Review - I as and when conducted.
- 7.15 The Dissertation Work Review-II** in II Year II Sem. 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-II. If he\she fails to obtain the required minimum marks, he\she has to reappear for Dissertation Work Review-II as and when conducted. For Dissertation Evaluation (Viva Voce) in II Year II Sem. 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.
- 7.16** Dissertation Work Reviews-I and II 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-I (Phase II) shall reappear for it at the time of Dissertation Work Review-II (Phase I). These students shall reappear for Dissertation Work Review-II 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-II follows. The unsuccessful students in Dissertation Work Review-II (Phase II) shall reappear for Dissertation Work Review-II in the next academic year only at the time of Dissertation Work Review-II (Phase I).
- 7.17** 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 college 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 has more than the required percentage, the student is advised to modify accordingly 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. The college authorities are advised to make plagiarism check of every soft copy of theses before submissions.
- 7.18** Three copies of the Dissertation Thesis certified by the supervisor shall be submitted to the College/School/Institute, after submission of a research paper related to the Dissertation work

in a UGC approved journal. A copy of the submitted research paper shall be attached to thesis.

- 7.19** The thesis shall be adjudicated by an external examiner selected by the Principal. The 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.
- 7.20** 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.
- 7.21** If the report of the examiner is satisfactory, the Head of the Department shall coordinate and make arrangements 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.
- 7.22** If he\she fails to fulfill the requirements as specified in 7.19, he\she will reappear for the Dissertation Viva- Voce examination only after three months. In the reappeared examination also, if he\she fails to fulfill the requirements, he\she will not be eligible for the award of the degree, unless he\she is asked to revise and resubmit his Dissertation Work by the board within a specified time period (within **four** years from the date of commencement of his first year first semester).
- 7.23** The Dissertation Viva-Voce External examination marks must be submitted to the Examination Branch on the day of the examination.
- 7.24** 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 subject/course. These marks should also be uploaded along with the internal marks of other subjects.
- 7.25** No marks or letter grades shall be allotted for mandatory (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\she gets readmitted, with prior permission from the authorities concerned.

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

8.3 A candidate shall be given one chance to re-register and attend the classes for a maximum of two subjects, if the internal marks secured by a candidate are less than 50% and failed in those subjects but fulfilled the attendance requirement. A candidate must re-register for failed subjects within four weeks of commencement of the class work and secure the required minimum attendance. In the event of the student taking this chance, his Continuous Internal Evaluation (internal) marks and Semester End Examination marks obtained in the previous attempt stand cancelled.

9.0 Examinations and Assessment - The Grading System

9.1 Grades will be awarded to indicate the performance of each student in each Theory Subject, or Lab/Practical's, or Mini Project with Seminar, Dissertation, etc., based on the percentage of marks obtained in CIE + SEE (Continuous Internal Evaluation + 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 Subject (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% ($\geq 80\%$, $< 90\%$) | A ⁺ (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 ⁺ (Good) | 7 |
| Below 60% but not less than 50% ($\geq 50\%$, $< 60\%$) | B (above Average) | 6 |
| Below 50% ($< 50\%$) | F (FAIL) | 0 |
| Absent | Ab | 0 |

9.3 A student obtaining F Grade in any Subject 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 (CIE Marks) in those subjects 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 subject 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 Subject/ Course (s) only for the sake of 'Grade Improvement' or 'SGPA/ CGPA Improvement'.
- 9.7** A student earns Grade Point (GP) in each Subject/ Course, on the basis of the Letter Grade obtained by him in that Subject/ Course. The corresponding 'Credit Points' (CP) are computed by multiplying the Grade Point with Credits for that particular Subject/ Course.

Credit Points (CP) = Grade Point (GP) x Credits For a Course

- 9.8** The student passes the Subject/ Course only when he/she 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 (ΣCP) secured from ALL Subjects/ Courses registered in a Semester, by the Total Number of Credits registered during that Semester. SGPA is rounded off to TWO Decimal Places. SGPA is thus computed as

$$SGPA = \frac{\sum_{i=1}^N C_i G_i}{\sum_{i=1}^N C_i}$$

For each Semester, where 'i' is the Subject indicator index (taking into account all Subjects in a Semester), 'N' is the no. of Subjects '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^{th} Subject, and G_i represents the Grade Points (GP) corresponding to the Letter Grade awarded for that i^{th} Subject.

- 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

$$CGPA = \frac{\sum_{j=1}^M C_j G_j}{\sum_{j=1}^N C_j}$$

for all S Semesters registered (ie., upto and inclusive of S Semesters, $S \geq 2$), where 'M' is the TOTAL no. of Subjects (as specifically required and listed under the Course Structure of

the parent Department) the Student has ‘REGISTERED’ for from the 1st Semester onwards upto and inclusive of the Semester S (obviously $M > N$), ‘j’ is the Subject indicator index (taking into account all Subjects from 1 to S Semesters), C_j is the no. of Credits allotted to the jth Subject, and G_j represents the Grade Points (GP) corresponding to the Letter Grade awarded for that jth Subject. After registration and completion of I Year 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/Subject | Credits | Letter Grade | Grade points | Credit Points |
|----------------|---------|--------------|--------------|--------------------|
| Course 1 | 4 | A | 8 | $4 \times 8 = 32$ |
| Course 2 | 4 | O | 10 | $4 \times 10 = 40$ |
| Course 3 | 4 | B | 6 | $4 \times 6 = 24$ |
| Course 4 | 3 | B | 6 | $3 \times 6 = 18$ |
| Course 5 | 3 | A+ | 9 | $3 \times 9 = 27$ |
| Course 6 | 3 | B | 6 | $3 \times 6 = 18$ |
| | 21 | | | 159 |

$$\text{SGPA} = 159/21 = 7.57$$

Illustration of calculation of CGPA

| Semester | Credits | SGPA | Credits * SGPA |
|--------------|---------|------|-----------------------|
| Semester I | 24 | 7 | $24 \times 7 = 168$ |
| Semester II | 24 | 6 | $24 \times 6 = 144$ |
| Semester III | 24 | 6.5 | $24 \times 6.5 = 156$ |
| Semester IV | 24 | 6 | $24 \times 6 = 144$ |
| | 96 | | 612 |

$$\text{CGPA} = 612/96 = 6.37$$

10.0 Award of Degree and Class

10.1 If a student who registers for all the specified Subjects/ Courses as listed in the Course Structure, satisfies all the Course Requirements, and passes the examinations prescribed in the entire PG Programme (PGP), and secures the required number of **68** Credits (with CGPA ≥ 6.0), shall be declared to have ‘QUALIFIED’ for the award of the M.Tech degree in the chosen Branch of Engineering and Technology with the specialization that he\she 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\she shall be placed in one of the following three classes based on the CGPA:

| Class Awarded | CGPA |
|------------------------------|--------------------------------|
| First Class with Distinction | ≥ 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 Examination Branch or if any case of indiscipline is pending against him, the result and degree of the student will be withheld and he/she will not be allowed into the next semester.

12.1 General

12.2 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.

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

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

12.5 The academic regulation should be read as a whole for the purpose of any interpretation.

12.6 In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the College is final.

12.7 The College 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 college.

MALPRACTICES RULES

DISCIPLINARY ACTION FOR IMPROPER CONDUCT IN EXAMINATIONS

| S.No | Nature of Malpractices/Improper conduct | Punishment |
|-------|---|---|
| | If the candidate: | |
| 1.(a) | Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject to the examination (theory or practical) in which he/she is appearing but has not made use of (material shall include any marks on the | Expulsion from the examination hall and cancellation of the performance in that subject only. |

| | | |
|-----|---|--|
| | body of the candidate which can be used as an aid in the subject of the Examination). | |
| (b) | 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 persons in or outside the exam hall in respect of any matter. | Expulsion from the examination hall and cancellation of the performance in that subject 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. |
| 2. | Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject to the examination (theory or practical) in which the candidate is appearing. | Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. |
| 3. | Impersonates any other candidate in connection with the examination. | 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 subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all Institute 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\she will be handed over to the |

| | | |
|----|--|---|
| | | police and a case is registered against him. |
| 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 subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all Institute 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 subject. |
| 6. | Refuses to obey the orders of the Chief Superintendent/Assistant – Superintendent/ 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 walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in- charge, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in | In case of students of the college, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects 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. |

| | | |
|----|--|---|
| | the examination hall or any part of the College campus 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. | |
| 7. | Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall. | Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all Institute examinations. The continuation of the course by the candidate is subject 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 subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects 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 colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects 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 subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects 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 subject and all other subjects 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 Exam branch for further action to award suitable punishment. | |

Malpractices identified by squad or special invigilators:

1. Punishments to the candidates as per the above guidelines.