



VARDHAMAN
COLLEGE OF ENGINEERING

Academic Regulations
of
Master of Technology (M.Tech.)

Under
Choice Based Credit System (CBCS)

M. Tech. - Regular Two-Year Degree Program
(For batches admitted from the Academic Year 2025 - 2026)

October 2025



VARDHAMAN COLLEGE OF ENGINEERING
(Autonomous)

Affiliated to JNTUH, Approved by AICTE, Accredited by NAAC with A++ Grade
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Academic Regulations of M.Tech. (Regular/Full Time) Programme Under Choice Based Credit System (CBCS) 2025–2026 (R25)

1.0 Preface

Vardhaman College of Engineering (VCE) offers **Two** Years (**Four** Semesters) full-time Master of Technology (**M.Tech.**) Degree programme, under Choice Based Credit System (**CBCS**). The regulations presented here are applicable to the students admitted from the academic year 2025-2026 and onwards until new regulation hereafter come into existence. This regulation is named as **VCE M.Tech. R-25**.

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 GATE Examination/ the merit rank obtained by the qualified student in an entrance test conducted by Telangana 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 instruction for the entire PG programme will be **ENGLISH** only.

3.0 M.Tech. Programme Structure

- 3.1** The M.Tech. Programs of VCE are of Semester pattern, consisting of **Two** academic years, each academic year having **Two** Semesters (Odd and Even Semesters).
- 3.2** The two-year M. Tech. program 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 year first semester, failing which the student shall forfeit the seat in M. Tech. programme.
- 3.4** **UGC/ AICTE** spspecified definitions/descriptions are adopted appropriately for various terms and abbreviations used in these PG academic regulations, as listed below:

Semester Scheme:

There shall be a minimum of 15 weeks of instruction, excluding the mid-term 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 Evaluation (CIE)' and 'Semester End Examination (SEE)' under Choice Based Credit System (CBCS). The curriculum/course structure suggested by AICTE is followed as a reference document.

Credit Courses:

All courses offered in each semester are to be registered by the student. Against each course in the course structure, the L: T: P: SL: H: C (Lecture periods: Tutorial periods: Practical periods: Self Learning: Total Hours: Credits) pattern has been defined.

- * One credit is allocated for one hour per week in a semester for lecture (L) or Tutorial (T) session and one hour per week in a semester as self-learning hours.
- * One credit for 15 classroom instruction (lecture (L)/tutorial (T)) hours and 15 self-learning hours per

semester for theory courses.

- * One credit is allocated for two hours per week in a semester for Laboratory/ Practical (P) session.
- * One credit for 30 laboratory instruction (LI) hours per semester for practical courses.
- * One credit is allocated for three hours per week in a semester for Project/Mini-Project session.
- * One credit for 45 field work/internship/mini-project/capstone or major project hours per semester for experiential courses.
- * *For example, a theory course with three credit weightage requires three hours of classroom instruction per week, totaling approximately 45 hours of classroom instruction and 45 hours of self-learning over the entire semester.*

Course Classification

All courses offered for the Post-Graduate M.Tech. Degree program are broadly classified as follows. The University 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 courses related to the parent discipline/department/ branch of Engineering
2		Dissertation	M. Tech. Project or PG Project or Major Project
3		Mini Project with Seminar	Seminar based on core contents related to Parent Discipline/ Department/ Branch of Engineering
4	Elective Courses (EtC)	PE – Professional Electives	Includes elective courses related to the parent discipline/department/branch of Engineering
5		OE – Open Electives	Elective courses which include inter-disciplinary courses or courses 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 / mentor shall be assigned to a group of around 20 students, who will advise the students about the Post Graduate programme, its course structure and curriculum, choices/options of the courses, based on their competence, progress, pre-requisites and interest.
- 4.2** The Academic Office of the College invites Registration Forms from students 15 days before the commencement of class work through online submissions, ensuring date and time stamping. Registration requests for any current semester shall be completed two weeks before the commencement of Semester End Examinations (SEEs) 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 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. further, alternate choices will not be considered. However, if the Course that has already been listed for Registration by the University 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 course.

- 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 mid-term examination / Laboratory etc. is 75%. Two periods of attendance for each theory course shall be considered, if the student appears for the mid-term examination of that course. **This attendance should also be included in the attendance uploaded every fortnight in the University Website. The attendance of Audit Courses should be uploaded separately to the University.** 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 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 course shall be payable for condoning shortage of attendance after getting the approval of the 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 course 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 the Semester End Examination(s) of such course(s) in that semester. He/She has to seek re-registration for those courses in subsequent semesters and attend the same as and when offered.
- 5.7 A student who 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 the minimum required attendance in at least three theory courses (excluding Audit course) in First Year I Semester for promotion to First Year II Semester.
(b) A student shall put in the minimum required attendance in at least three theory courses (excluding 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 clause 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 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 course, if he secures not less than:

- 40% of marks (24 out of 60 marks) in the Semester End 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, 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 the student secures not less than 50% marks (i.e. 50 out of 100 marks). The student shall be treated as failed if the student (i) does not submit a Seminar Report on Mini Project or does not make a presentation 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 a total of 68 credits as specified in the course structure for the chosen specialization, put in the required attendance, and fulfill the academic requirements for securing 68 credits by 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) SGPA will be computed and printed on the marks memo only if the candidate passes in all the courses offered and secures a minimum of 'B' Grade in all courses.

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

6.4 Letter Grades obtained in all those courses covering the above specified 68 credits alone shall be considered for calculation of the 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, the student shall not be permitted to write the Semester End Examinations. However, the student is eligible for re-registration of such course(s) in subsequent semester(s), as and when next offered, with the academic regulations of the batch into which the student is re-registered, by paying the prescribed fee per course. In all such re-registration cases, the student must secure a fresh set of internal marks and Semester End Examination marks for performance evaluation 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 semester end 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 within four academic years from the date of commencement of First Year First Semester shall forfeit the seat in the M.Tech. programme and the 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 CIE (Continuous Internal Evaluation) and 60 marks for SEE (Semester End-Examination). The Continuous Internal Evaluation for theory courses 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 In CIE, for theory courses, during a semester, there shall be two mid-term examinations. Each Mid-Term Examination consists of two parts: (i) **Part–A** for 10 marks, and (ii) **Part–B** for 20 marks, with a total duration of two hours, as follows:

1. Mid-Term Examination for 30 marks:

(a) Part–A: Objective/quiz paper for 10 marks.

(b) Part–B: Descriptive paper for 20 marks.

The Objective/Quiz paper is set with multiple-choice, fill-in-the-blanks and match-the-following type questions for a total of 10 marks.

The Descriptive paper shall contain six full questions, out of which the student has to answer four questions, each carrying five 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. Five (5) marks for Assignments (Average of two 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.

Details of Semester End Examination paper pattern are explained in the next clause.

7.3 The Semester End Examinations (SEE) for theory courses will be conducted for 60 marks consisting of two parts: (i) Part–A for 10 marks, and (ii) Part–B for 50 marks.

- Part–A is a compulsory question which consists of ten sub-questions with uniform coverage from all units carrying equal marks.

- Part–B consists of five questions (numbered from 2 to 6) 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 three hours.

7.4 For practical courses there shall be a Continuous Internal Evaluation (CIE) during the semester for 40 marks and 60 marks for semester end examination.

Internal Evaluation (40 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. Write-up: 10 marks
2. Experiment/Program: 15 marks
3. Evaluation of Results: 15 marks
4. Presentation on another experiment/program: 10 marks
5. Viva-Voce: 10 marks

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 and this is to be informed to the Director of University Examinations within two weeks, before commencement of the lab end examinations. 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 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 University, 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 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.
- 7.15 The Dissertation Work Review - II** in II Year I 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% 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 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% 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 II Year II 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 Examination section 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** Three copies of the Dissertation Thesis certified by the supervisor shall be submitted to the College.
- 7.20** The thesis shall be adjudicated by an external examiner selected by the Principal. For this, the Head of Department shall submit a panel of three examiners from among the list of experts in the relevant specialization.
- 7.21** 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.
- 7.22** 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.
- 7.23** 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.
- 7.24** Viva-Voce external marks must be submitted to the Examination section of VCE on the same day of examination.
- 7.25** For Audit courses, the student must secure 40 out of 100 marks (40%) in CIE to pass. Marks shall be uploaded along with internal marks of other courses.
- 7.26** No marks or grades shall be allotted for Audit Courses. Only Pass/Fail shall be indicated in the 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 CIE. 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 Evaluation (internal) 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 CIE + SEE (Continuous Internal Evaluation + Semester End Examination, both taken together), 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)	Meaning	Grade Points
90% and above ($\geq 90\%$ and $\leq 100\%$)	O	Outstanding	10
Below 90% but not less than 80% ($\geq 80\%$ and $< 90\%$)	A+	Excellent	9
Below 80% but not less than 70% ($\geq 70\%$ and $< 80\%$)	A	Very Good	8
Below 70% but not less than 60% ($\geq 60\%$ and $< 70\%$)	B+	Good	7
Below 60% but not less than 50% ($\geq 50\%$ and $< 60\%$)	B	Above Average	6
Below 40% ($< 40\%$)	F	Fail	0
Absent	Ab	Absent	0

- 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 (CIE 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.

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

- 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

$$SGPA(S_i) = \frac{\sum_{i=1}^N C_i \times G_i}{\sum_{i=1}^N C_i} \dots \text{Foreach Semester}$$

where 'i' is the course indicator index (considering 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^{th} course, and G_i represents the grade points (GP) corresponding to the letter grade awarded for that i^{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:

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

(i.e., up to and inclusive of S semesters, $S \geq 2$),

where 'M' is the total no. of courses corresponding to the best 160 credits from the courses registered in all eight semesters, 'j' is the course indicator index (takes into account all courses from 1 to 8 semesters), C_j is the no. of credits allotted to the j^{th} course, and G_j represents the grade points (GP) corresponding to the letter grade awarded for that j^{th} course. After registration and completion of I year I semester, the SGPA of that semester itself may be taken as the CGPA, as there are no cumulative effects.

Illustration of calculation of SGPA:

Course (i)	Credits (C _i)	Letter Grade	Grade Points (G _i)	Credit Points C _i × G _i
Course 1	4	A	8	4 × 8 = 32
Course 2	4	O	10	4 × 10 = 40
Course 3	4	B	6	4 × 6 = 24
Course 4	3	B	6	3 × 6 = 18
Course 5	3	A+	9	3 × 9 = 27
Course 6	3	B	6	3 × 6 = 18
	∑ C _i = 21			∑ C _i × G _i = 159

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

Illustration of Calculation of CGPA from SGPA:

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

Class Awarded	CGPA
First Class with Distinction	≥7.50
First Class	6.50 ≤ CGPA < 7.50
Second Class	6.00 ≤ 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.

$$\text{Percentage(\%)\textit{of Marks}} = (\textit{FinalCGPA} - 0.5) * 10$$

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.



Vision

To be a pioneer institute and leader in engineering education to address societal needs through education and practice.

Mission

- To adopt innovative student centric learning methods.
- To enhance professional and entrepreneurial skills through industry institute interaction.
- To train the students to meet dynamic needs of the society.
- To promote research and continuing education.

Quality Policy

We at Vardhaman College of Engineering, endeavor to uphold excellence in all spheres by adopting the best practices in effort and effect.



VARDHAMAN
COLLEGE OF ENGINEERING

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(Autonomous)

Affiliated to **JNTUH**, Approved by **AICTE**, Accredited by **NAAC** with **A++** Grade
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