



# JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

(Established by Act No.30 of 2008)

Kukatpally, Hyderabad-500085, Telangana State (India)

## Academic Regulations of M.Tech (Regular/Full Time) Programmes, 2017-18 (R17) (CBCS) (Effective for the students admitted into I year from the Academic Year 2017-18 and onwards)

**1.0 Post-Graduate Degree Programmes in Engineering & Technology (PGP in E & T)**  
Jawaharlal Nehru Technological University Hyderabad (JNTUH) 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 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 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.

### **3.0 M.Tech. Programme (PGP in E & T) Structure**

**3.1** The M.Tech Programmes in E & T of JNTUH 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.

**3.2** 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.

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

#### **3.3.1 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 'Seminar', or 'Comprehensive Viva', or 'Project', or 'Technical Paper Writing' as the case may be.

### 3.3.2 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 identified mandatory courses, if any, will not carry credits.

### 3.3.3 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 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 subjects related to the parent discipline/department/ branch of Engineering
		Project Work	M.Tech Project or PG Project or Major Project
		Seminar, Technical Paper Writing	Seminar/Colloquium based on core contents related to parent discipline/department/branch of Engineering
		Comprehensive Viva-Voce	Viva-voce covering all the PG subjects studied during the course work and related aspects
2	Elective Courses (EIE)	PE - Professional Electives	Includes elective subjects related to the parent discipline/department/branch of Engineering
		OE - Open Electives	Elective subjects which include interdisciplinary subjects or subjects in an area outside the parent discipline/department/branch of Engineering
<b>Total number of Credits</b>			

## 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 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 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 on the basis of a unit system with each subject being considered a unit.

- 5.1 Attendance in all classes (Lectures/Laboratories/Seminar) is compulsory. The minimum required attendance in each theory 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. 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 seminar presentation will be eligible for evaluation, only if he ensures a minimum of 75% of his attendance in seminar presentation classes 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 of a semester shall be granted by the College Academic Committee.
- 5.4 Shortage of Attendance below 65% in any subject shall in **no case be condoned**.
- 5.5 A Student, whose shortage of attendance is **not condoned** in any subject(s) in any semester, is considered detained in that subject(s) and is not eligible to write Semester End Examination(s) of such subject(s) in that semester, and he has to seek re-registration for those subject(s) in subsequent semesters, and attend the same as and when offered.
- 5.6 A student fulfills the attendance requirement in the present semester, shall not be eligible for readmission into the same class.



- 5.7 A prescribed fee per subject shall be payable for condoning shortage of attendance.
- 5.8 A student shall put in a minimum required attendance in at least three theory subjects in I Year I semester for promotion to I Year II Semester.

## 6.0 Academic Requirements

The following academic requirements have to 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), on the basis of 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 secures not less than 40% of marks (30 out of 75 marks) in the End Semester Examination, and 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 a subject/ course, if he secures not less than 50% of the total marks. The student is deemed to have failed, if he (i) does not attend the comprehensive viva-voce as per the schedule given, or (ii) does not present the seminar as required, or (iii) does not present the Technical Paper Writing as required. In such a case, he may reappear for comprehensive viva-voce in supplementary examinations and for seminar/ technical paper writing, in the subsequent semesters, as and when scheduled.
- 6.3 A student shall register for all subjects for total of 88 credits as specified and listed in the course structure for the chosen specialization, put in required the attendance and fulfill the academic requirements for securing 88 credits obtaining a minimum of 'B' Grade or above in each subject, and all 88 credits securing Semester Grade Point Average (SGPA)  $\geq 6.0$  (in each semester) and final Cumulative Grade Point Average (CGPA) (i.e., CGPA at the end of PGP)  $\geq 6.0$ , 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 Marks and Letter Grades obtained in all those subjects covering the above specified 88 credits alone shall be considered for the calculation of final CGPA, which will be indicated in the Grade Card /Marks Memo of second year second semester.
- 6.5 If a student registers for extra subject(s) (in the parent department or other departments/ branches of Engineering) other than those listed subjects totaling to 88 credits as specified in the course structure, the performance in extra subject(s) (although evaluated and graded using the same procedure as that of the required 88 credits) will not be taken into account while calculating the SGPA and CGPA. For such extra subject(s) registered, percentage of



marks and Letter Grade alone will be indicated in the Grade Card/Marks Memo, as a performance measure, subject to completion of the attendance and academic requirements as stated in items 5 and 6.1 - 6.3.

- 6.6** 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 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 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.
- 6.7** 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.
- 6.8** A Student who fails to earn 88 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. The M.Tech. project work (major project) will also be evaluated for 100 marks.

- 7.1** For the theory subjects 75 marks shall be awarded for the performance in the Semester End Examination and 25 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. Each Mid-Term Examination shall be conducted for a total duration of 120 minutes with Part 'A' as compulsory consisting of 5 questions carrying 2 marks each (10 marks), and Part 'B' with 3 questions to be answered out of 5 questions, each question carrying 5 marks (15 marks). The details of the Question Paper pattern for Semester End Examination (Theory) are given below:
- The Semester End Examination will be conducted for 75 marks. It consists of two parts. i).Part A for 25 marks, ii). Part B for 50 marks.
  - Part A is compulsory and consists of 5 questions, one from each unit and carrying 5 marks each.
  - Part B consists of 5 questions carrying 10 marks each. There will be two questions from each unit and only one should be answered.
- 7.2** For practical subjects, 75 marks shall be awarded for performance in the Semester End Examinations and 25 marks shall be awarded for day-to-day performance as Internal Marks.



- 7.3** 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 Evaluation 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.
- 7.4** There shall be two seminar presentations during I year I semester and II semester respectively. For seminar, a student shall collect the literature on the advanced topic in relevant fields and critically review the literature and submit it to the department in a form of report and shall make an oral presentation before the Department Academic Committee consisting of Head of the Department, seminar coordinator and two other senior faculty members of the department. For each Seminar there will be only internal evaluation for 100 marks. A candidate has to secure a minimum of 50% of marks to be declared successful. If he fails to obtain the minimum mark, he has to reappear for the seminar during the supplementary examinations. The word 'Seminar' implies presentation of Technical Report, presentation/ discussion on the state of Art of Technology.
- 7.5** Technical Paper Writing shall cover concepts of abstract, introduction, material and methods, conclusion, references, acknowledgement etc of advanced topics in a branch of Engineering through the medium of attending seminars/ referring to peer reviewed journals, which will enhance the skill of writing technical reports. The students shall not be required to give oral presentation of technical paper. The report shall be presented as a printed document for evaluation. Evaluation shall be made solely by the teacher, but may be moderated by committees appointed by the Head of the Department as per Institute rules.
- 7.6** There shall be a Comprehensive Viva-Voce in II year I Semester. The Comprehensive Viva-Voce is intended to assess the student's understanding of various subjects he has studied during the M.Tech. course of study. The Head of the Department shall be associated with the conduct of the Comprehensive Viva-Voce through a Committee. The Committee shall consist of Head of the Department, one senior faculty member and an external examiner. The external examiner shall be appointed by the Principal of the college concerned and this is to be informed to the Director of Evaluation within two weeks. 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. There are no internal marks for the Comprehensive Viva-Voce and it is evaluated for a maximum of 100 marks. A candidate has to secure a minimum of 50% of marks to be declared successful. If he fails to obtain the minimum marks, he has to reappear for the viva-voce during the supplementary examinations.
- 7.7** Every candidate shall be required to submit a thesis or dissertation on a topic approved by the Project Review Committee.
- 7.8** A Project Review Committee (PRC) shall be constituted with the Head of the Department as Chairperson, Project Supervisor and one senior faculty member of the Departments offering the M. Tech. programme.
- 7.9** Registration of Project Work: A candidate is permitted to register for the project work after satisfying the attendance requirement in all the subjects, both theory and practicals.
- 7.10** After satisfying 7.9, a candidate has to present in Project Work Review I, in consultation with his Project Supervisor, the title, objective and plan of action of his project work to the





Project Work Review Committee (PRC) for approval within four weeks from the commencement of Second year First Semester. Only after obtaining the approval of the PRC can the student initiate the Project work.

- 7.11** If a candidate wishes to change his supervisor or topic of the project, he can do so with the approval of the PRC. However, the PRC shall examine whether or not the change of topic/supervisor leads to a major change of his initial plans of project 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 project progress report in two stages at least with a gap of **three** months between them.
- 7.13** The work on the project shall be initiated at the beginning of the II year and the duration of the project is two semesters. A candidate is permitted to submit Project Thesis only after successful completion of all theory and practical courses with the approval of PRC not earlier than 40 weeks from the date of approval of the project work. For the approval of PRC the candidate shall submit the draft copy of thesis to the Head of the Department and make an oral presentation before the PRC.
- 7.14** The Project Work Review II in II Year I Sem. carries internal marks of 100. Evaluation should be done by the PRC for 50 marks and the Supervisor will evaluate the work for the other 50 marks. The Supervisor and PRC will examine the Problem Definition, Objectives, Scope of Work, Literature Survey in the same domain and progress of the Project Work. A candidate has to secure a minimum of 50% of marks to be declared successful in Project Work Review II. If he fails to obtain the minimum required marks, he has to reappear for Project Work Review-II as and when conducted.
- 7.15** The Project Work Review III in II Year II Sem. carries 100 internal marks. Evaluation should be done by the PRC for 50 marks and the Supervisor will evaluate it for the other 50 marks. The PRC will examine the overall progress of the Project Work and decide whether or not the Project is eligible for final submission. A candidate has to secure a minimum of 50% of marks to be declared successful in Project Work Review III. If he fails to obtain the required minimum marks, he has to reappear for Project Work Review III as and when conducted. For Project 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 Project Evaluation (Viva-Voce) examination.
- 7.16** Project 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 Project Work Review II (Phase II) shall reappear for it at the time of Project Work Review III (Phase I). These students shall reappear for Project Work Review III in the next academic year at the time of Project Work Review II only after completion of Project Work Review II, and then Project Work Review III follows. The unsuccessful students in Project Work Review III (Phase II) shall reappear for Project Work Review III in the next academic year only at the time of Project Work Review II (Phase I).
- 7.17** After approval from the PRC, 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 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 Project 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 Project Thesis certified by the supervisor shall be submitted to the College/School/Institute, after submission of a research paper related to the project 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 University. For this, the Principal of the College/School/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.

**7.20** 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 Project work 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 Project Viva- Voce examination. The Project 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 Project Evaluation (Viva-Voce) examination.

**7.22** If he fails to fulfill the requirements as specified in 7.21, he will reappear for the 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 the award of the degree, unless he is asked to revise and resubmit his project 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 Project Viva-Voce External examination marks must be submitted to the University on the day of the examination.

## **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, subject to item 6.6.

**8.2** If a student is detained in a subject (s) due to shortage of attendance in any semester, he 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 seeks re-registration, with prior permission from the authorities concerned, subject to item 3.2

- 8.3** A candidate shall be given one chance to re-register for a maximum of two subjects, if the internal marks secured by a candidate are less than 50% and failed in those subjects. 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/Practicals, or Seminar, or Technical Paper Writing or Project, etc., based on the % 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/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% ( $\geq 80\%$ , $< 90\%$ )	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 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 gets **GP ≥ 6 (B Grade or above)**.
- 9.9 The Semester Grade Point Average (SGPA) is calculated by dividing the Sum of Credit Points ( $\Sigma CP$ ) 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

$$\text{SGPA} = \{ \sum_{i=1}^N C_i G_i \} / \{ \sum_{i=1}^N C_i \} \dots \text{For each Semester,}$$

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  $i^{\text{th}}$  Subject, and  $G_i$  represents the Grade Points (GP) corresponding to the Letter Grade awarded for that  $i^{\text{th}}$  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

$$\text{CGPA} = \{ \sum_{j=1}^M C_j G_j \} / \{ \sum_{j=1}^M C_j \} \dots \text{for all S Semesters registered}$$

(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 1<sup>st</sup> 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  $j^{\text{th}}$  Subject, and  $G_j$  represents the Grade Points (GP) corresponding to the Letter Grade awarded for that  $j^{\text{th}}$  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*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
	21			159

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

### Illustration of calculation of CGPA

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 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 **88** 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 and 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	$\geq 7.75$
First Class	$6.75 \leq \text{CGPA} < 7.75$
Second Class	$6.00 \leq \text{CGPA} < 6.75$

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. Transitory Regulations

**12.1** A student who has been detained in any semester of I Year of R13/R15 Regulations due to lack of attendance, shall be permitted to join the same semester of I Year of R17 Regulations and he is required to complete the study of M.Tech programme within the stipulated period of four academic years from the date of first admission in I Year I semester. The R17 Academic Regulations under which a student has been readmitted shall be applicable to that student from that semester.

**12.2** Candidate detained due to shortage of attendance in one or more subjects is eligible for re-registration of maximum of two earlier or equivalent subjects at a time as and when offered.

**12.3** The candidate who fails in any subject under R13/R15 regulations will be given two chances to pass the same subject in the same regulations; otherwise, he has to identify an equivalent subject and fulfill the academic requirements of that subject as per R17 Academic Regulations.

**12.4** For student readmitted to R17 Regulations, the maximum credits that a student acquires for the award of the degree, shall be the sum of the total number of credits secured in R13/R15 regulations of his/her study including R17 Regulations.

**12.5** If a student readmitted to R17 Regulations, has any subject with 80% of syllabus common with his/her previous regulations, that particular subject in R17 regulations will be substituted by another subject to be suggested by the university.

## 13.0 General

**13.1 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.

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

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

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

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

**13.6** 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.



**MALPRACTICES RULES**  
**DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS**

<b>S.No</b>	<b>Nature of Malpractices/Improper conduct</b>	<b>Punishment</b>
	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 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 subject of the examination).	Expulsion from the examination hall and cancellation of the performance in that subject only.
(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 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.  The Hall Ticket of the candidate is to be cancelled and sent to the University.
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 University 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.
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 University 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	Incase 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.





	act of misconduct or mischief which result in damage to or destruction of property in 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 University 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	Expulsion from the examination hall and



	examination hall.	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 it shall be reported to the University for further action to award suitable punishment.	

#### **Malpractices identified by squad or special invigilators**

1. Punishments to the candidates as per the above guidelines.
2. Punishment for institutions: (if the squad reports that the college is also involved in encouraging malpractices)
  - (i) A show cause notice shall be issued to the college.
  - (ii) Impose a suitable fine on the college.
  - (iii) Shifting the examination centre from the college to another college for a specific period of not less than one year