JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY
HYDERABAD COLLEGE OF ENGINEERING HYDERABAD
(AUTONOMOUS)
Kukatpally, Hyderabad – 500 085

ACADEMIC REGULATIONS 2021
(AsperAICTE
ModelCurriculum)
For CBCS Based M.Tech. (Regular/Full Time) Programmes
(Effective for the students admitted into I year from the Academic Year
2021-22 and onwards)

1.0   Post-Graduate Degree Programmes in Engineering & Technology (PGP in E & T):

JNTUHCEH offers 2 Year (4 Semesters) full-time Master of Technology (M.Tech.) Degree Programmes, under Choice Based Credit System (CBCS) with effect from the Academic Year 2021 - 22 onwards in the different branches of Engineering & Technology with different specializations.

2.0   Eligibility for Admission:

2.1   Admissions to the PGPs shall be made subject to the eligibility, qualification and specializations prescribed by JNT University Hyderabad or any other order of merit approved by the government of Telangana, from time to time, for each   Specialization under each M.Tech. Programme.

2.2   Admission to the PGP shall be made either on the basis of - the Rank/ Percentile earned by the student in the relevant qualifying GATE Examination / the Merit Rank obtained by the qualifying student at an Entrance Test conducted by the Telangana State Government (PGECET) for M.Tech. Programmes / an Entrance Test conducted by the Jawaharlal Nehru Technological University Hyderabad / on the basis of any other order of merit approved by the University, subject to reservations as prescribed by the Government 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-CEH are of Semester Pattern, with 4 Semesters constituting 2 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   UGC/ AICTE specified Definitions/ Descriptions are adopted appropriately for various terms and abbreviations used in these PGP - Academic Regulations, as listed below.

3.2.1 Semester Scheme:

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

3.2.2 Credit Courses:

All Subjects (or Courses) are to be registered by a student in a Semester to earn Credits. Credits shall be assigned to each Subject/ Course in a 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) or Tutorial (T) Courses;
- One credit for Two hours/ Week/ Semester for   Laboratory/ Practical (P) Courses.

Other s t u d e n t activities like Study Tour, Guest Lecture, Conference/ Workshop Participations, Technical Paper Presentations etc., and identified Audit Courses if any, will not carry Credits.

3.2.3 Subject/ Course Classification:

The College has followed the guidelines issued by AICTE/UGC. All Subjects/Courses offered for the PGP in E&T are broadly classified as Program Core, Program Elective, Open Elective, Audit Course, and Technical Seminar, Industrial Training and Dissertation.

3.2.4 Course Nomenclature:

The Curriculum Nomenclature or Course-Structure Grouping for the M.Tech. Degree Programmes is as listed below …

S. No.	Broad Course Classification	Course Group/ Catego	Courses Description
1.	Core Courses (CoC)	PC- Program Core	Includes core subjects related to the Parent Discipline/ Department/ Branch of Engg.
		Dissertation	M.Tech. Project or PG Project or PG Major Project
		Technical Seminar	Seminar based on core contents related to parent discipline/department/branch of Engineering
		Minor Courses	1 or 2 Credit courses
		Audit Courses	Mandatory courses (non credit)
2.		PE Program Electives	Includes Elective subjects related to the Parent Discipline/ Department/ Branch of Engg.

	Elective Courses (E ℓC)	OE-Open Electives	Elective subjects which include inter-disciplinary subjects in an area outside the parent discipline/department/branch of Engineering(only one subject)

*   Students be encouraged to go to Industrial Training/Internship for at least 2-3 months during semester / Summer break.

4.0 **Course Work:**

4.1 A Student, after securing admission, shall pursue and complete the M.Tech. PGP in a minimum period of 2 Academic Years (4 Semesters), and within a maximum period of 4 Academic Years (8 Semesters) starting from the Date of Commencement of I Year I Semester.

4.2 Each student shall register for and secure the specified number of Credits required for the completion of the PGP and Award of the M.Tech. Degree in respective Branch of Engineering with the chosen Specialization.

4.3 I Year is structured to provide typically 18 Credits in each of the I and II Semesters, and II Year 16 credits in each of the III & IV semesters, totaling to 68 Credits for the entire M.Tech. Programme.

5.0 **Course Registration:**

5.1   A 'Faculty Advisor' shall be assigned to each M.Tech. Programme with respective Specialization advise, who will the Students about the M.Tech. Programme Specialization, its Course Structure and Curriculum, Choice/ Option for Subjects/ Courses, based on the competence, progress, pre-requisites and interest of the students.

5.2 A Student may be permitted to Register for Subjects/ Courses of 'his CHOICE' with a typical total of 18 Credits per Semester in I Year (Minimum being 15 Credits and Maximum being 21 Credits, permitted deviation being ± 15%), and 16 Credits (inclusive of Project) per III Semester in II Year (Minimum being 14 Credits and Maximum being 21 Credits), 16 credits (inclusive of Project) per IV Semester in II Year (minimum being 16 Credits and maximum 21 Credits), based on his interest, competence, progress, and 'PRE-REQUISITES' as indicated for various Subjects/ Courses, in the Department Course Structure (for the relevant Specialization) and Syllabus contents for various Subjects/ Courses.

5.3 Choice for 'additional Subjects/ Courses' in any Semester (above the typical 18/16 Credit norm, and within the Maximum Permissible Limit of 21/21 Credits, during I/ II Years as applicable) must be clearly indicated in the Registration, which needs the specific approval and signature of the Faculty Advisor/ Counselor on hard-copy.

5.4 Withdraw of Subjects/ Courses in any Semester of I Year may be permitted, ONLY AFTER obtaining prior approval and signature from the Faculty Advisor (subject to retaining a minimum of 15 Credits), 'within 15 Days of Time' from the beginning of the current Semester.

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6.0   Attendance Requirements:

6.1   A Student shall be eligible to appear for the Semester End Examination (SEE) of any Subject, if he acquires a minimum of 75% of attendance in class work in that Subject for that Semester.

6.2   The Technical Seminar Presentation shall be evaluated for only if the student ensures a minimum of 75% of his attendance in Technical Seminar Presentation Classes during that Semester.

6.3   Condoning of shortage of attendance up to 10% (65% and above, and below 75%) in each Subject (Theory / Practicals / Technical Seminar etc.) of a Semester may be granted by the College Academic Council on Medical grounds, based on the Student's representation with supporting evidence to be submitted by the student as and when such requirement arise but not at the end semester.

6.4   A stipulated fee per Subject, (Theory / Practicals /Technical Seminar etc.) shall be payable towards condoning of shortage of attendance after getting the approval of college academic council for the same.

6.5   Shortage of Attendance below 65% in any Subject,(Theory / Practicals / Technical Seminar etc.) shall in NO case be condoned.

6.6   A Student, whose shortage of attendance is not condoned in any Subject(s) , Lab or Technical Seminar in any Semester, is considered as 'Detained in that Subject(s), Lab or Technical Seminar', and is not eligible to write Semester End Examination (s) of such Subject(s), Lab (and in case of Technical Seminars, his Technical Seminar Report or Presentation are not eligible for evaluation) in that Semester; and he has to seek Re-registration for those Subject(s), Lab or Technical Seminar in subsequent Semesters, and attend the same as and when offered.

6.7   A student fulfilling the attendance requirement in the present semester shall not be eligible for readmission into the same class.

7.0   Academic Requirements:

The following Academic Requirements have to be satisfied, in addition to the attendance requirements mentioned in Item No. 6. The performance of the student in each semester shall be evaluated subject – wise, with a maximum of 100 marks per subject / course (theory / practical), on the basis of Continuous Internal Evaluation and Semester End Examination.

7.1   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% Marks (28 out of 70 Marks) in the Semester End Examination, and a minimum of 50% of marks in the sum total of the 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 that Subject.

7.2   A Student shall be deemed to have satisfied the academic requirements and earned the Credits allotted to - Technical Seminar, if he secures not less than 50% of the total Marks to be awarded. The Student would be treated as failed, if he - (i) does not present the Technical Seminar as required, or (ii) secures less than 50% of Marks(<50Marks)in Technical Seminar.

7.3 A Student shall - register for all Subjects covering 68 Credits as specified and listed in the Course Structure for the chosen PGP Specialization, put up all the Attendance and Academic requirements for securing 68 Credits obtaining a minimum of B Grade or above in each Subject and 'earn all 68 Credits securing Semester Grade Point Average (SGPA) □ 6.0 (in each Semester) and final Cumulative Grade Point Average (CGPA) (ie., CGPA at the end of PGP) □ 6.0, to successfully complete the PGP.

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

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

7.4 Marks and Letter Grades obtained in all those Subjects covering the above specified 68 Credits alone shall be considered for the calculation of final CGPA, which shall be indicated in the Grade Card / Marks Memo of II Year II Semester.

7.5 If a student registers for 'extra Subjects' (in the parent Department or other Departments /Branches of Engg.)Other than those listed Subjects totaling to 68 Credits as specified in the Course Structure, the performances in those 'extra Subjects' (although evaluated and graded using the same procedure as that of the required 68 Credits) will not be taken into account while calculating the SGPA and CGPA. For such 'extra Subjects' registered, % 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 6 and 7.1 – 7.4 above.

7.6 Students who fail to earn 68 Credits as per the specified Course Structure, and as indicated above, within 4 academic years from the date of commencement of their I Year I Semester, shall forfeit their seats in M.Tech. Programme and their admissions shall stand cancelled.

7.7 When a Student is detained due to shortage of attendance in any Subject (s) (Theory/Practicals/Technical Seminar etc.,) in any Semester, no Grade Allotment will be made for such Subject (s) (Theory/Practicals/ Technical Seminar etc.,) and SGPA/ CGPA calculations of that Semester will not include the performance evaluations of such Subject(s) (Theory/Practicals/ Technical Seminar etc.,) in which he got detained. However, he becomes eligible for re-registration of such Subject (s) (Theory/Practicals/ Technical Seminar etc.,)/ in the subsequent Semester(s), as and when next offered, with the Academic Regulations of the Batch into which he /she gets re-registered , by paying the stipulated fees per Subject. In all these re-registration cases, the Student shall have to secure a fresh set of Internal Marks (CIE) and Semester End Examination Marks (SEE) for performance evaluation in such Subject(s), and subsequent SGPA/ CGPA calculations.

7.8 A Student eligible to appear in the Semester End Examination in any Subject, but absent at it or failed (failing to secure B Grade or above), may reappear for that Subject at the supplementary examination (SEE) as and when conducted. In such cases, his Internal Marks (CIE) assessed earlier for that Subject/ Course will be carried over, and added to the marks to be obtained in the supplementary examination (SEE), for evaluating his performance in that Subject.

8.0   Evaluation - Distribution and weightage of Marks:

8.1   The performance of a Student in each Semester shall be evaluated Subject-wise (irrespective of Credits assigned) with a maximum of 100 Marks for Theory or Practical's or Technical Seminar or Drawing/Design etc;.

8.2 a) For Theory Subjects (inclusive of Minor Courses), during the Semester, there shall be 2 mid-term examinations for 25 marks (with duration of 120 minutes). Further, there will be an allocation of 5 marks for Assignment.

b)   The first mid-term examination shall be conducted for the first 50% of the syllabus, and the second mid-term examination shall be conducted for the remaining 50% of the syllabus.

c)   First Assignment should be submitted before the conduct of the first mid-term examinations, and the Second Assignment should be submitted before the conduct of the second mid-term examinations. The Assignments shall be as specified by the concerned subject teacher.

d)   The first mid-term examination Marks and first Assignment Marks shall make one set of CIE Marks , and the second mid-term examination Marks and second Assignment Marks shall make second set of CIE Marks; and the better of these two sets of marks shall be taken as the final marks secured by the Student towards Continuous Internal Evaluation in that Theory Subject.

8.3   For Practical Subjects, there shall be a Continuous Internal Evaluation (CIE) during the Semester for 30 Internal Marks, and 70 Marks are assigned for Lab./ Practical's Semester End Examination (SEE). Out of the 30 Marks for Internals, day-to-day work assessment in the laboratory shall be evaluated for 20 Marks; and the performance in an internal Lab./Practical Test shall be evaluated for 10 marks, there shell be two internal Lab./Practical Test in a semester and the better of these two shell be taken as final marks. The SEE for Lab./ Practicals shall be conducted at the end of the Semester by the concerned Lab teacher and another faculty member of the same Department as assigned by the Head of the Department.

8.4   There shall be a Technical Seminar Presentation in I Year II Semester, for the Seminar the Student shall collect the information on a specialized topic, prepare a Report on the topic and submit to the Department at the time of Seminar Presentation. The Continuous Internal Evaluation (CIE) -30 Marks given by the faculty handling the Technical Seminar. The Technical Seminar Presentation shall be evaluated by a Committee Consisting of Head of the Department, and Senior faculty assigned by Head of the Department, for 70 marks (external).

8.5 a) Registration of Project work: The Project shall start immediately after the completion of I year II semester. Every Student must compulsory register for his M.Tech. Project Work, within the 4 weeks after the completion of I year II Semester. The student registered for the Project work shall work for two semesters. After Registration, the Student has to present in Project Work Review -I in consultation with his Project Guide the title, objective and plan of action of his project work to the Project Review Committee (PRC-I) for approval within 6 weeks after the completion of I year II Semester. Only after obtaining the approval of the PRC, the student can initiate the Project work.

b) A Project Review Committee (PRC) shall be constituted by Head of the Department and shall consist of the Head of the department (Chairperson) Project Guide and one senior faculty member of the Department.

c) If a student wishes to change his Guide 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/Guide 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 Guide or topic as the case may be.

8.6 a) The PRC will monitor the progress of the Project Work. Project work Review-II will be held at the end of the III Semester (II Year I Semester). Project work Review- III will be held at the end of the IV Semester (II year II Semester) before the submission of Project Report/ Dissertation.

b) The Project Work Review-II There shall be a Dissertation-I/Industrial Project during the III Semester (II Year I Semester). The Dissertation-I/Industrial Project shall be evaluated by the PRC for 70 Marks (consider as PRC II) the student has to get 40% (28 marks out of 70 marks for success full completion). Project guide will give CIE marks for 30 marks. A student has to secure a minimum 50% (CIE + PRC II) of marks to be declared successful. If he fails to obtain the minimum marks, he has to reappear for the Dissertation-I/Industrial Project during the supplementary examinations.

c) The Project Work Review-III in II Year II Semester carries 100 internal marks. Evaluation should be done by the PRC for 50 marks and the Guide will evaluate it for the other 50 marks. The PRC will examine the overall progress of the Project Work and decide whether the Project is eligible for final submission or not. A student has to secure a minimum 50% marks to be declared successful in Project Work Review-III. If he fails to obtain the required minimum marks, he has to reappear for supplementary examination as and when conducted. For External Project Evaluation (Viva-Voce examination) will be conducted after submission of project report at the end of II Year II Semester, the marks allotted is 100 and it is evaluated by the external examiner. The student has to secure a minimum of 50% marks in External Project Evaluation (Viva-Voce examination) for success full completion. If he fails to obtain the minimum marks, he has to reappear during the supplementary examinations as on when conducted.

d) Project Work Reviews-II and III shall be conducted as per the schedule. The unsuccessful student may be given one more chance as Supplementary. Supplementary will be conducted only for unsuccessful students. The unsuccessful students in Project Work Review-II shall reappear for it at the time of Project Work Review-III as supplementary student. These students shall reappear for Project Work Review-III in the next academic year at the time of Project Work Review-II only after successful completion of Project Work Review-II. The unsuccessful students in Project Work Review III shall reappear for Project Work Review III in the next academic year only at the time of Project Work Review II as supplementary students.

e) After successful completion of PRC III, a soft copy of the project should be submitted to the Head of the Department for the ANTIPLAGIARISM check. The Head of the Department should carry out plagiarism check and submitted the report to the Principal. The Dissertation 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 Dissertation after one month. The maximum number of re-submissions of Dissertation after plagiarism check is limited to TWO.

f)   The Student shall be allowed to submit his Project Dissertation, only on the successful completion of all the prescribed PG Subjects (Theory and Practical's.), Technical Seminar, etc. (securing B Grade or above), and after obtaining all approvals from PRC.

g)   The Dissertation will be adjudicated by an external examiner selected by the College. For this the Head of the Department shall submit a panel of three examiners from among the list of experts in the relevant specialization as submitted with the help of project supervisor concerned. In such cases, the M.Tech. Dissertations will be sent to an External Examiner nominated by the Principal of the College, on whose 'approval', the Student can appear for the M.Tech. External Project Viva-voce Examination, which shall be conducted by a Board, consisting of the PG Project Supervisor, Head of the Department, and the External Examiner who adjudicated the M.Tech. Project Work and Dissertation. The Board shall jointly declare the Project Work Performance as 'satisfactory', or 'unsatisfactory'; and in successful cases, the External Examiner shall evaluate the Student's Project Work presentation and performance for 100 Marks.

h)   If the report of the external examiner is unsatisfactory, the student shall revise and resubmit the Project after ONE semester, or as per the time specified by the External examiner. If the resubmitted report is again evaluated by the external examiner and examiner is unsatisfactory again then the Dissertation shall be summarily rejected. No further correspondence in this matter will be entertained, if there is no specific recommendation for resubmission by the external examiner.

i)   If the report of the examiner is satisfactory, the Head of the Department shall coordinate and make arrangements for the conduct of External Project Viva-Voce examination. The External 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 Dissertation. The student has to secure a minimum of 50% of marks in external Project (Viva-Voce) examination.

j)   If he /she fails to fulfill the requirements as specified in 8.6 (i), 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).

k)   If the student's oral presentation is not satisfactory, the board may defer it and the student has to re-appear for the oral presentation before the same board for the award of degree.

l)   The External Project Viva-Voce External examination marks must be submitted to the Principal on the day of the examination.

9.0   Re-Admission / Re-Registration:

9.1   Re-Admission for Discontinued Students:
Students, who have discontinued the M.Tech. Degree Programme due to any reasons what so ever, may be considered for 'Readmission' into the same Degree Programme (with same specialization) with the Academic Regulations of the Batch into which he gets Re-admitted, with prior permission from the concerned authorities, subject to Item 4.1.

9.2   Re-Registration for Detained Students:
       When any Student is detained in a Subject (Theory / Practical / Seminar etc.) due to
       shortage of attendance in any Semester, he may be permitted to re-register for the same
       Subject 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 when offered in the sub-sequent Semester(s), with the Academic Regulations of the
       Batch into which he seeks re-registration, with prior permission from the concerned
       authorities, subject to Item 4.1.

10.0   Examinations and Assessment – The Grading System

10.1   Marks will be awarded to indicate the performance of each student in each Theory
       Subject, or Practical, or Technical Seminar, Project, etc., based on the % 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.

10.2   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
Greater than or equal to 90%	O (Outstanding)	10
≥ 80 and less than 90%	A+ (Excellent)	9
≥ 70% and less than 80%	A (Very Good)	8
≥ 60% and less than 70%	B+ (Good)	7
≥ 50% and less than 60%	B (Average)	6
Below 50%	F (FAIL)	0
Absent	Ab	0

10.3   A student obtaining F Grade in any Subject shall be considered 'failed' and is be
       required to reappear as 'Supplementary Student' in the Semester End Examination (SEE),
       as and when conduct. In such cases, his Internal Marks (CIE Marks) in those Subjects will
       remain the same as those he obtained earlier.

10.4   If a student not appear for the examinations, 'Absent' Grade will be allocated to him for
       any subject and shall be considered 'failed' and will be required to reappear as
       'Supplementary Student' for the Semester End Examination (SEE), as and when
       conducted.

10.5   A Letter Grade does not imply any specific % of Marks; it is only the range of
       percentage of marks.

10.6   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.

10.7   A student earns Grade Point (GP) in each Subject/ Course, on the basis of the Letter Grade obtained by him in that Subject/ Course (excluding Audit non-credit Courses). Then 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

10.8   The Semester Grade Point Average (SGPA) is calculated by dividing the Sum of Credit Points ($\sum$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

$$\text{SGPA} = \left\{ \sum_{i=1}^{N} C_i G_i \right\} / \left\{ \sum_{i=1}^{N} C_i \right\} \text{…. For each Semester,}$$

where 'i' is the Subject indicator index (takes 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 ith Subject, and G_i represents the Grade Points (GP) corresponding to the Letter Grade awarded for that i^{th} Subject.

Illustration of calculation of SGPA

Course / Subject	Credits	Letter Grade	Grade Point	Credit Points
Course 1	3	A	8	3*8=24
Course 2	3	O	10	3*10=30
Course 3	4	B+	7	4*7=28
Course 4	3	B	6	3*6=18
Course 5	2	A+	9	2*9=18
Course 6	1.5	B	6	1.5*6=9
Course 7	1.5	O	10	1.5*10=15
	18			142

SGPA=142/18=7.89

10.9   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 II Semester onwards, at the end of each Semester, as per the formula

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

(ie., upto and inclusive of S Semesters, S $\geq$ 1),

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' from the 1st Semester onwards upto and inclusive of the Semester S (obviously M > N), 'j' is the Subject indicator index (takes 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 j^{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.

Llustration of calculation of CPGA

Semester	Credits	SGPA	Credits * SGPA
Semester I	18	7	18*7=126
Semester II	18	6	18*6=108

Semester III	16	6.5	16*6.5=104
Semester IV	16	8	16*8=128
	68		466

CGPA =466/68 =6.85

10.10   For Merit Ranking or Comparison Purposes or any other listing, ONLY the 'ROUNDED OFF' values of the CGPAs will be used.

10.11   For Calculations listed in Item 10.7 – 10.10, performance in failed Subjects/ Courses (securing F Grade) will also be taken into account, and the Credits of such Subjects/ Courses will also be included in the multiplications and summations. However, Mandatory Courses (Audit Course) will not be taken into consideration.

10.12   A student shall be declared successful or 'passed' in a Semester, only when he gets a SGPA ≥ 6.00 (at the end of that particular Semester); and a student shall be declared successful or 'passed' in the entire PGP, only when gets a CGPA ≥ 6.00; subject to the condition that he secures a GP ≥ 6 (B Grade or above) in every registered Subject/ Course in each Semester (during the entire PGP) for the Award of Degree as required.

10.13   Passing Standards:

10.13.1 A Student shall be declared successful or 'passed' in a Semester, only when he gets a SGPA ≥ 6.00 (at the end of that particular Semester); and a Student shall be declared successful or 'passed' in the entire PGP, only when gets a CGPA ≥ 6.00; subject to the condition that he secures a GP ≥ 6 (B Grade or above) in every registered Subject/ Course in each Semester (during the entire PGP), for the Award of the Degree, as required.

10.13.2 After the completion of each Semester Memorandum of Marks shall be issued to all the Registered Students of that Semester, indicating the Letter Grades and Credits earned. It will show the details of the Courses Registered (Course Code, Title, No. of Credits, Grade Earned), Credits earned SGPA and CGPA etc.

11.0   Declaration of Results: Same standards as UG to be adopted

11.1   Computation of SGPA and CGPA are done using the procedure listed in 10.7 – 10.10.

11.2   For Final % of Marks equivalent to the computed CGPA, the following formula may be used.

% of Marks =   (CGPA – 0.5) x 10

12.0   Award of Degree and Class:

12.1   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 GP $\geq$ 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 specialization as he was admitted.

12.2   A Student with final CGPA (at the end of the PGP) < 6.00 will not be eligible for the Award of M.Tech. Degree.

13.0   Withholding of Results:

13.1   If a Student has not paid fees to University/ College at any stage, or has pending dues against his name due to any reason whatsoever, or if any case of indiscipline is   pending against him, the result of the Student may be withheld, and he will not be allowed to go into the next higher Semester. The Award or issue of the Degree may also be withheld in such cases.

14.0   Transitory Regulations: To be adopted from the university

14.1   A Student - who has discontinued for any reason, or who has been detained for want of attendance as specified, or who has failed after having undergone PGP, may be considered eligible for readmission to the same PGP with same set of Subjects/ Courses (or equivalent Subjects/ Courses as the case may be), and same   Professional Electives (or from same set/category of Electives or equivalents as suggested), as and when they are offered (within the time-frame of 4 years from the   Date of Commencement of his I Year I Semester).

15.0   Student Transfers:

15.1   There shall be no Branch/ Specialization transfers after the completion of Admission Process.

15.2   There shall be no transfer among the Constituent Colleges and Units of Jawaharlal Nehru Technological University Hyderabad.

16.0   Scope:
  i)   Where the words "he", "him", "his", occur in the write-up of regulations, they include "she", "her", "hers".
  ii) Where the words "Subject" or "Subjects", occur in these regulations, they also imply "Course" or   "Courses".
  iii)   The Academic Regulations should be read as a whole, for the purpose of any interpretation.
  iv) In case of any doubt or ambiguity in the interpretation of the above regulations, the decision of the V i c e -Chancellor/ Principal is final.
  v) The College may change or amend the Academic Regulations, and/ or Course Structure,   and/ or   Syllabi at any time, and the changes or amendments made shall be applicable to all Students with effect from the dates as notified by the University/ College.

17. MALPRACTICES RULES:

	Nature of Malpractices	Punishment
	If the student:	
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 of 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 student which can be used as an aid in the subject of the examination)	Expulsion from the examination hall and cancellation o f t h e performance in that subject only.
1 (b)	Gives assistance or guidance or receives it from any other student orally or by any other body language methods or communicates through cell Phones with any student or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation o f the performance in that subject only of all the students 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 of the examination (theory or practical) in which the student is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the student 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 student is to be cancelled.

3	Impersonates any other student in Connection with the examination.	The student who has impersonated shall be expelled from examination hall. The student is also debarred and forfeits the seat. The performance of the original student 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 student is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the student 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 student 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 student is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the student 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 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.	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 student(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The students also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.
7	Leaves the exam hall taking away answer script or intentionally tears 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 student 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 student is also debarred for two consecutive semesters from class work and all examinations. The continuation of the course by the student 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 student 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 student is also debarred and forfeits the seat.

9	If student of the college, who is not a student 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 student 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 student is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a 8police 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 student 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 student 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 College / University for further action to award suitable punishment	

18. GENERAL:

  ☐ 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.

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

  ☐ The Academic Regulations should be read as a whole for the purpose of any interpretation.

  ☐ The University/College reserves the right of altering the Academic Regulations and/or Syllabus/Course Structure, as and when necessary. The modifications or amendments may be applicable to all the students on rolls, as specified by the University/College.

  ☐ Wherever the words 'he' o r 'h i m' or 'his' occur in the above regulations, they will also include 'she' or 'her' or 'hers'.

  ☐ Wherever the word 'Subject' occurs in the above regulations, it implies the 'Theory
        o   Subject', 'Practical Subject' or 'Lab.' and 'Seminar'.

  ☐ In case of any ambiguity or doubt in the interpretations of the above regulations, the decision of the Vice-Chancellor will be final.

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