JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
INSTITUTE OF SCIENCE & TECHNOLOGY
(AUTONOMOUS)
Kukatpally, Hyderabad – 500 085

ACADEMIC REGULATIONS 2021-22

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)

ACADEMIC REGULATIONS 2021-22

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

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

JNTUH offers 2 Year (4 Semesters) full-time Master of Technology (M.Tech.) Degree Programmes, under Choice Based Credit System (CBCS) at its Autonomous Institute – Institute of Science & Technology with effect from the Academic Year **2021-22** onwards in different branches of Science & 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 Institute of Science & Technology, JNT University Hyderabad, for each Specialization under each M.Tech. Programme, from time to time.

2.2   Admission to the PGP shall be made either on the basis of - the Rank/ Percentile earned by the candidate in the relevant qualifying GATE Examination/the Merit Rank obtained by the qualifying candidate 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-IST 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.

3.2.0   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

3.3.0   **UGC/ AICTE** specified Definitions/ Descriptions are adopted appropriately for various terms and abbreviations used in these PGP - Academic Regulations, as listed below.

3.3.1   **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 'Mini Project with Seminar', 'Project', as the case may be.

3.3.2 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) Courses; and,
- 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 Participation, Technical Paper Presentations etc., and identified Mandatory Courses if any, will not carry Credits.

3.3.3 Subject/ Course Classification:

The Institute 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 Mini Project with Seminar, Industrial Training and Dissertation.

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/ Category	Courses Description
1.	Core Courses (CoC)	PC- Program Core	Includes core subjects related to the Parent Discipline/ Department/ Branch of Engg.
		Project work (Dissertation)	M.Tech. Project or PG Project or PG Major Project
		Mini Project with Seminar	Seminar based on core contents related to parent discipline/department/branch of Engineering
		Audit Courses	Mandatory courses (non credit)
2.	Elective Courses (EC)	PE– Program Electives	Includes Elective subjects related to the Parent Discipline/ Department/ Branch of Engg.
		OE-Open Electives	Elective subjects include inter-disciplinary subjects. In an area outside the parent discipline /department/ branch of engineering

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

Course Work:

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 (starting from the Date of Commencement of I Year I Semester).

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.

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.

4.0   Course Registration:

4.1   A 'Faculty Advisor' shall be assigned to each M.Tech. Programme with respective Specialization, who will advise 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.

4.2   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 13 credits and maximum being 19 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 centre course structure (for the relevant specialization) and syllabus contents for various subjects/ courses.

4.3   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.

4.4   Withdrawal 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.

5.0   Attendance Requirements:

5.1   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.

5.2   A Student's Mini Project with Seminar Report and Mini Project with Seminar Presentation shall be eligible for evaluation, only if he ensures a minimum of 75% of his attendance in Mini Project with Seminar Presentation Classes during that Semester.

5.3   Condoning of shortage of attendance up to 10% (65% and above, and below 75%) in each

Subject (Theory / Practicals / Mini Project with Seminar/project work, etc.) of a Semester may be granted by the Institute 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 of the semester. Such requests shall not be entertained once the percentage of attendance is calculated and displayed at the end of semester class work.

5.4 A stipulated fee per Subject, (Theory / Practicals / Mini Project with Seminar/Project work etc.) shall be payable towards condoning of shortage of attendance after getting the approval of Institute academic council for the same.

5.5 Shortage of Attendance below 65% in any Subject, (Theory / Practicals / Mini Project with Seminar etc.) shall in NO case be condoned.

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

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

6.0 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 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/she 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.

6.2 A Student shall be deemed to have satisfied the academic requirements and earned the Credits allotted to - Mini Project with Seminar, if he/she secures not less than 50% of the total Marks to be awarded for each of them. The Student would be treated as failed, if he / she - (i) does not present the Mini Project with Seminar as required, or (ii) secures less than 50% of Marks (< 50 Mark) in Mini Project with Seminar. In such case of Mini Project with seminar, he/she has to reappear in the next subsequent semesters, as and when scheduled.

6.3 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 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 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.

6.5 If a student registers for 'extra Subjects' (in the parent Centre 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.

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.

6.6 When a Student is detained due to shortage of attendance in any Subject (s) (Theory/Practicals/Mini Project with Seminar etc.,) in any Semester, no Grade Allotment will be made for such Subject (s) (Theory/Practicals/Mini Project with Seminar etc.,) and SGPA/ CGPA calculations of that Semester will not include the performance evaluations of such Subject(s) (Theory/Practicals/Mini Project with Seminar etc.,) in which he got detained. However, he / she becomes eligible for re-registration of such Subject (s) (Theory/Practicals/Mini Project with 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.

6.7 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.

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) with a maximum of 100 Marks for Theory or Practicals or Mini Project with Seminar etc; however, the M.Tech. Project Work (Major Project) will be evaluated for 200 Marks.

7.1 For the theory subjects 70 marks shall be awarded for the performance in the Semester End Examination and 30 marks shall be awarded for Continuous Internal Evaluation (CIE) (25marks for mid exams and 5marks for assignment). 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 70 marks. It consists of two parts. i) Part A for 20 marks, ii) Part B for 50 marks.

➢ Part A is compulsory and consists of 5 questions, one from each unit and carrying 4 marks each.

➢ Part B consists of 5 questions carrying 10 marks, each with internal choice. There will be two questions from each unit and only one should be answered.

7.2   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./ Practicals Semester End Examination (SEE). Out of the 30 Marks for Internals, day-to-day work assessment in the laboratory shall be evaluated for 15 Marks; and the performance in an internal Lab/Practical Test shall be evaluated for 15 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 Centre as assigned by the Head of the Department.

7.3   There shall be a Mini Project with Seminar Presentation in I Year II Semester, for the Seminar the Student shall collect the information on a specialized topic, prepare a Mini Project Report and submit to the Centre at the time of Mini Project with Seminar Presentation. The Continuous Internal Evaluation (CIE) -30Marks given by the faculty handling the Mini Project with Seminar. Mini Project with Presentation (along with the Mini Project Report) shall be evaluated by Departmental review committee (DRC) consisting of Head of the Department, Mini Project Guide and Senior faculty member assigned by Head of the Department for 70 marks.

7.4

a)   Every student shall be required to do project work.

b)   The work on the project shall be initiated at the beginning of the II year and the duration of the project is two semesters.

c)   **Registration of Project work** : Every Student must compulsorily register for his M.Tech. Project Work, within the 4 weeks after the completion of I year II Semester. After Registration, the Student has to present, in consultation with his Project Guide, the title, objectives and plan of action of his project work to the Project Review Committee (PRC) for approval within 4 weeks from the commencement of Second year First Semester. Only after obtaining the approval of the PRC, the student can initiate the Project work.

d)   A Project Review Committee (PRC) shall be constituted with the Head of the Centre as Chairperson, Project Guide and one senior faculty member of the Departments offering the M.Tech. programme. (*Committee shall not be less than 3 members and constituted with

the Head of the Centre as Chairperson, Project Supervisor and one senior faculty member of the Centre offering the M. Tech. programme. In case HOD is a supervisor then one more senior faculty member will be included in the committee to maintain not less than 3 members)The PRC will monitor the progress of the Project Work and review, through Project work Review – I and Project work Review –II Presentations – one at the end of the II Year I Semester, and another before the submission of M.Tech. Project Work Report.

e) If a candidate 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.

f) A candidate shall submit his project progress report in two stages at least, with a gap of three months between them.

g) **The Project Work Review I** in II Year I Semester carries internal marks of 100. Evaluation should be done by the PRC. The PRC will examine the Problem Definition, Objectives, Scope of Work, Literature Survey in the same domain and progress of the dissertation. A candidate has to secure a minimum of 50% of marks to be declared successful in Project Work Review I. If he/she fails to obtain the minimum required marks, he/she has to reappear for Project Work Review-I as and when conducted.

h) **The project work Review II and Viva- voce:**

In II Year II Semester, Project work review II carries 30 internal marks and viva-voce, 70 external marks. The PRC will examine the overall progress of the Project Work during internal evaluation and decide whether the Project is eligible for final submission or not. A candidate has to secure a minimum 50%of marks to be declared successful in project.

i) **Project Work Review** I and II shall be conducted in phase I (Regular) and Phase II (Supplementary). Phase II will be conducted only for unsuccessful students in Phase I. The unsuccessful students in Project Work Review I (Phase II, supplementary) shall reappear for it at the time of Project Work Review II (Phase I, regular). The unsuccessful students in project work review II (phase I regular) shall reappear for it at the time of project review II (Phase II supplementary). The unsuccessful students in Phase II of Project work Review II have to reappear for it at the time of Project work review – I in the next academic year only.

j) After approval from the PRC, a soft copy of the thesis should be submitted to the Head of the Centre for the ANTIPLAGIARISM check and the Head of the Centre will submit the plagiarism report to the Director of the Institute. The project work report (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. After three attempts, the admission is liable to be cancelled.

k) 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.), Mini Project with Seminar, etc. (securing B Grade or above), and after obtaining all approvals from PRC.

l) Before the submission of the Dissertation students are encouraged to submit a Research Paper related to Project Work in a UGC approved journal (students are encouraged to publish the work in peer reviewed journals). A copy of the submitted research paper may be attached to the project report Dissertation. Three copies of the Project Dissertation certified by the Guide shall be submitted to the Head of the Department.

m) The project report Dissertation will be adjudicated by an external examiner selected by the Institute. For this the Head of the Centre shall submit a panel of three examiners from among the list of experts in the relevant specialization as submitted with the help of supervisor concerned. In such cases, the M.Tech. Dissertations will be sent to an External Examiner nominated by the Director of the Institute, on whose 'approval', the Student can appear for the M.Tech. 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 / 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 70 Marks .

n) If the report of the external examiner is unsatisfactory, the candidate shall revise and resubmit the Thesis 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.

o) If the report of the examiner is satisfactory, the Head of the Centre 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 Centreand the external examiner who adjudicated the Dissertation. The candidate has to secure a minimum of 50% of marks in Project Evaluation (Viva-Voce) examination.

p) If he /she fails to fulfill the requirements as specified in 8.6 (n), he will reappear for the Viva-Voce examination only after three months. In the reappeared examination also, if he/she fails to fulfill the requirements, he/ she will not be eligible for the award of the degree, unless he/she is asked to revise and resubmit his project work by the board within a specified time period (within four years from the date of commencement of his first year first semester).

q) If the candidates oral presentation is not satisfactory, the board may defer it and the candidate has to re-appear for the oral presentation before the same board for the award of degree.

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

8.0   Re-Admission / Re-Registration:

8.1   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 she/he gets readmitted, with prior permission from the concerned authorities, subject to Item 4.1.

8.2   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/she 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.

9.0   Examinations and Assessment – The Grading System

9.1   Marks will be awarded to indicate the performance of each student in each Theory Subject, or Practical, or Mini Project with Seminar, Project, etc., based on the % marks obtained in CIE + SEE (Continuous Internal Evaluation + Semester End Examination, both taken together) as specified in Item 6 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
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**

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

9.4 If a student does 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 Candidate' for the Semester End Examination (SEE), as and when conducted.

9.5 A Letter Grade does not imply any specific % of Marks, 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 (excluding Mandatory non-credit Courses). Then the corresponding 'Credit Points' (CP) are computed by multiplying the Grade Point with Credits for that particular Subject/ Course.

$$\textbf{Credit Points (CP) = Grade Point (GP) x Credits …. For a Course}$$

9.8 The Semester Grade Point Average (SGPA) is calculated by dividing the Sum of Credit Points (ΣCP) secured from ALL Subjects/ Courses registered in a Semester, by the Total Number of Credits registered during that Semester. SGPA is rounded off to TWO Decimal Places. SGPA is thus computed as

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

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

$$\textbf{SGPA}=142/18=7.89$$

9.9 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 second Semester onwards, at the end of each Semester, as per the formula

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

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

Illustration of calculation of CGPA

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

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

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.

A student shall be declared successful or 'passed' in a Semester, only when he/she 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/she 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.

9.10   Passing Standards:

A Student shall be declared successful or 'passed' in a Semester, only when he/she 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.

10.14.2 After the completion of each Semester, a Grade Card or Grade Sheet (or Transcript) 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.

9.11   Declaration of Results:

Computation of SGPA and CGPA are done using the procedure listed in 10.7 – 10.10. For Final % of Marks equivalent to the computed CGPA, the following formula may be used.

% of Marks = (CGPA – 0.5) x 10

10.0   Award of Degree and Class:

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 ≥ 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/she was admitted.

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

11.0   Withholding of Results:

If a Student has not paid fees to University/ Institute 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/she 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.

12.0   Transitory Regulations:

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).

13.0   Student Transfers:

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

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 Vice-Chancellor/ Director is final.
v.   The Institute 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/ Institute.

14.0 MALPRACTICES RULES:

	Nature of Malpractices	Punishment
	If the candidate:	
1 (a)	Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject 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 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.
1 (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 of 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.
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 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 examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.
6	Refuses to obey the orders of the Chief Superintendent / Assistant – Superintendent / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in-charge, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction of property in the examination hall or any part of the Institute campus or engages in any other act which in the opinion of	In case of students of the Institute, they shall be expelled from examination halls and cancellation of their performance in that subject and all other subjects the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the subjects of that semester/year. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them.

	the 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 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 Institute, who is not a candidate for the particular examination or any person not connected with the Institute indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the Institute 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 Institute 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 candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.

11	Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.	Cancellation of the performance in that subject and all other subjects the candidate has appeared including practical examinations and project work of that semester / year examinations.
12	If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Institute for further action to award suitable punishment.	

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/Institute 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 candidates on rolls, as specified by the University/Institute.

- Wherever the words 'he' or 'him' 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 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 Director will be final.

******