# UNIVERSITY COLLEGE OF ENGINEERING, SCIENCE AND TECHNOLOGY, HYDERABAD (AUTONOMOUS) LAWAHADI AL NEHDILTECHNOLOGICAL LINUVEDSITY HYDERABAD

### JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD Kukatpally, Hyderabad – 500085

# ACADEMIC REGULATIONS 2022 (R22) Under Choice Based Credit System (CBCS) For M.TECH (Regular) Programme

1.0 Post-Graduate Degree Programmes in Engineering & Technology (PGP in E & T) JNTUH University College of Engineering, Science and Technology Hyderabad (JNTUH UCESTH) offers Two Years (Four Semesters) full-time Master of Technology (M.Tech.) programme under Choice Based Credit System (CBCS) in different specializations with effect from the academic year 2022-23.

#### 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 the Government of Telangana (i.e. PGECET) for M.Tech. programme / 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 The Structure of M. Tech. Programme (PGP in E & T)

- **3.1** Each M.Tech. programmes in E & T is of semester pattern, with two academic years consisting of **four** semesters. Each academic year is of 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 two-year M. Tech. program consists of **68** credits and the student has to register for all 68 credits and earn all 68 credits for the award of M.Tech. degree. There is **NO** exemption of credits in any case.
- **3.3** The student shall fulfill all the academic requirements for the award of M.Tech. degree within four years (double the duration of the course) from the date of commencement of first year first semester, failing which the student shall be forfeited the seat in M. Tech. programme.



**3.4** UGC/ AICTE specified definitions/descriptions are adopted appropriately for various terms.

#### 3.4.1 Semester Scheme

Each Semester shall have 'Continuous Internal Evaluation (CIE)' and 'Semester End Examination (SEEs)'. 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 a 'Theory Subject', or a 'Laboratory Course', or a 'Design/Drawing Subject', or 'Mini Project with Seminar', or 'Dissertation', as the case may be.

#### 3.4.2 Credit Courses

All subjects/courses are to be registered by the student in a semester to earn credits which shall be assigned to each subject/course in an L: T: P: C (Lecture Periods: Tutorial Periods: Practical Periods: Credits) structure based on the following general pattern:

- One credit for one hour/week/semester for theory/lecture (L) courses or tutorials (T)
- One credit for two hours/ week/semester for laboratory/ practical (P) courses

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

#### 3.4.3 Subject Course Classification

All subjects/courses offered for the Post-Graduate Programme in E & T (M. Tech. Degree Programme) are broadly classified as follows. The college follows the guidelines of AICTE/UGC.

S. No.	Broad Course Classification	Course Group/ Category	Course Description
1	Core Courses (CoC)	PC- Professional Core	Includes subjects related to the parent discipline/department/ branch of Engineering
		Dissertation	M. Tech. Project or PG Project or Major Project
		Mini Project with Seminar	Seminar based on core contents related to Parent Discipline / Department/ Branch of Engineering
2	Elective Courses (E1E)	PE - Professional Electives	Includes elective subjects related to the parent discipline/department/branch of Engineering
		OE – Open	Elective subjects which include inter-
		Electives	disciplinary subjects or subjects in an area outside the parent discipline/department/branch of Engineering
3	Mandatory Courses		Non-Credit Audit Courses

#### 4.0 Course Registration



- 4.1 A 'faculty advisor/mentor shall be assigned to each specialization. A mentor will provide information about the course structure and curriculum to the mentees. A mentor will also assist the mentees in choosing the subjects/courses, based on their competence, performance, fulfillment of prerequisites and interest.
- 4.2 The academic section of the college invites 'registration forms' from students before the beginning of the semester through 'on-line registration', ensuring 'date and time stamping'. The online registration requests for any 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 faculty advisor/mentor which shall be submitted to the college academic section forwarded through the Head of the Department. A copy of it shall be retained with the Head of the Department, faculty advisor/mentor and the student.
- 4.4 If the student submits ambiguous choices or multiple options or erroneous entries during online 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 or inter-changed; furthermore, alternative choices will not be considered. However, if the subject/course that has already been listed for registration (by the Head of Department) in a semester could not be offered due to any unforeseen or unexpected reasons, then the student shall be allowed to exercise an alternative choice either a new subject (added in the list by the Head of the Department) or an existing subject (subject to the availability of seats). Such alternative arrangements will be made by the Head of the 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

In the M.Tech programme, each subject (Theory/Practical/Seminar) is an independent entity. Henceforth, attendance is calculated subject-wise and not aggregated.

- 5.1 Attendance in all subjects (Theory/Practical/Mandatory Audit Course) is compulsory. The minimum required attendance in each theory subject including the attendance of mid-term examinations is 75%. Two periods of attendance shall be given for each theory subject 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%.
- **Mini Project with Seminar** is eligible for evaluation only if the student ensures a minimum of 75% in seminar presentation classes of Mini Project with Seminar during the



semester.

- 5.3 Condoning of shortage of attendance: Shortage of attendance up to 10% (65% and above, and below 75%) considering the days of attendance in sports, games, NCC, and NSS activities, and days of absence due to medical reasons can be condoned in each subject/course (Theory/Practical/Audit Course/Mini Project with Seminar) by the College Academic Committee on genuine and valid grounds based on the student's representation with supporting evidence.
- **5.4** A prescribed fee per subject shall be payable by students whose shortage of attendance is condoned.
- 5.5 Shortage of Attendance below 65% in any subject shall in **no case be condoned.**
- 5.6 A student whose shortage of attendance is not condoned in a subject/course (Theory/Practical/Mandatory Non-Credit Audit Course/Mini Project with Seminar) is considered detained in that subject and is not eligible to appear for Semester End Examination in that subject. Marks earned in the CIE of the subject become void and henceforth the subject is not graded. In case of Mini Project with Seminar, it shall not be evaluated and graded.

The student may seek re-registration of the detained subjects (Theory/Practical/Audit Course/Mini Project with Seminar) as and when the subjects are offered by the department with the academic regulations of the batch into which he is re-registered; in case if there are any Professional Electives and/or Open Electives, the same may also be re-registered if offered, however, if those electives are not offered in later semesters, then alternative electives may be chosen from the same set of elective subjects offered under that category.

- **5.7** A student who fulfills the attendance requirement in a subject is not eligible for reregistration.
- **5.8** A student shall put in a minimum attendance in at least **three theory subjects (excluding mandatory non-credit audit course)** in I year I semester for promotion to I year II semester.

A student shall put in a minimum attendance in at least **three theory subjects** (**excluding mandatory non-credit audit course**) in I year II semester for promotion to II year I semester.

#### **6.0** Academic Requirements

The following academic requirements must be satisfied, in addition to the attendance requirements mentioned in Item no. 5. The performance of the candidate in each semester shall be evaluated subject- wise, with a maximum of 100 marks per subject/course (theory/practical), based on Continuous Internal Evaluation and Semester End Examination.



- A student is deemed to have satisfied the academic requirements and earned the credits allotted to **Theory/Practical** subjects if he secures not less than:
  - 40% of marks (16 out of 40 marks) in the CIE
  - 40% of marks (24 out of 60 marks) in the SEE
  - 50% of marks in the sum total of CIE and SEE

In terms of letter grades, this implies securing 'B' grade or above in a subject.

- A student is deemed to have satisfied the academic requirements and earned the credits allotted to **Mini Project with Seminar** if the student secures not less than 50% marks (i.e. 50 out of 100 allotted marks). The student would be treated as failed, if the student (i) does not submit a seminar report on Mini Project or does not make a presentation of the same before the evaluation committee as per schedule or (ii) secures less than 50% marks in the evaluation of Mini Project with Seminar. The failed student shall reappear for the above evaluation when the notification for supplementary examination is issued.
- A student is deemed to have satisfied the academic requirements and earned the credits allotted to **Dissertation Stage I, Dissertation Stage II, and Dissertation Viva-Voce** if the student secures not less than 50% marks (i.e. 50 out of 100 allotted marks). If the student fails to obtain the minimum required marks he has to reappear for the same as and when conducted.
- 6.4 A student has to secure not less than 50% of marks (i.e. 50 out of 100 allotted marks) in the CIE for passing the Mandatory Non-Credit **Audit Courses**. No marks or letter grades shall be allotted for Mandatory Non-Credit Audit Courses. Only Pass/Fail shall be indicated in Grade Card.
- 6.5 A student shall register for all subjects totaling 68 credits as specified and listed in the course structure of the chosen specialization. The student shall fulfill the attendance and the academic requirements for 68 credits obtaining a minimum of 'B' grade or above in each subject, securing  $CGPA \ge 6.0$  in PGP at the end of the course, and shall pass all the Mandatory Non-Credit Audit Courses to complete the PGP successfully.
- Note: (1) The SGPA will be computed and printed on the marks memo only if the candidate passes in all the subjects offered and gets a minimum of B grade in all the subjects.
  - (2) CGPA is calculated only when the candidate passes in all the subjects offered in all the semesters
- 6.6 Marks and Letter Grades obtained in the subjects covering specified 68 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 'additional/extra subjects' (in the parent department or other departments/branches of engineering) other than the subjects listed in the course structure of parent department totaling above 68 credits, then the performance in those 'extra



subjects' although evaluated and graded using the same procedure as that of courses listed in the course structure will not be considered while calculating the SGPA and CGPA. For 'extra subjects' registered, grade point and letter grade will be indicated in the grade card as a performance measure, subject to completion of the attendance and academic requirements as stated in regulations of Items 5 and 6.1 to 6.3.

- A student eligible to appear in the Semester End Examination for any subject/course, but is absent or failed (thereby failing to secure 'B' grade or above) may reappear for that subject/course in the supplementary examination as and when conducted. In such cases, marks earned in CIE in that subject/course will be carried over, and added to the marks obtained in the supplementary SEE for evaluating performance in that subject.
- A Student who fails to earn **68** credits as per the specified course structure, and as indicated above, within four academic years from the date of commencement of his first year first semester shall be forfeit his seat in M.Tech. programme and his admission **shall stand cancelled**.

#### 7.0 Evaluation - Distribution and Weightage of Marks

The performance of a student in each semester shall be evaluated subject- wise irrespective of credits assigned) for a maximum of 100 marks.

- 7.1 The performance of a student in every subject/course (Theory/Practical) will be evaluated for 100 marks each, with 40 marks allotted for CIE (Continuous Internal Evaluation) and 60 marks for SEE (Semester End-Examination).
- **7.2 Continuous Internal Evaluation of a Theory subject** is done through mid-term examinations for 30 marks, assignments for 5 marks and viva-voce/PPT/Poster Presentation/Case Study on a topic in the concerned subject for 5 marks during a semester as follows:
  - (i) There shall be two mid-term examinations during the semester conducted for 30 marks consisting of two parts with a total duration of 2 hours: Part A for 10 marks and Part B for 20 marks.
  - (ii) Part A is an objective paper or a quiz and shall consist of multiple-choice questions, fill-in the blanks, match the following, etc. for a total of 10 marks.
  - (iii) Part B is a descriptive paper and shall contain 6 questions out of which, the student needs to answer 4 questions each carrying 5 marks.
  - (iv) While the first mid-term examination shall be conducted for the first 50% syllabus, the second mid-term examination shall be conducted for the remaining 50% of the syllabus. The average of the two mid-term examinations shall be taken as final marks.
  - (v) Two assignments are evaluated for 5 marks each. The first assignment should be submitted before the conduct of the first mid-term examination.



- and the second assignment should be submitted before the conduct of the second mid-term examination. The assignments shall be given by the subject teachers. The average of the two assignments shall be taken as the final marks.
- (vi) The remaining 5 marks may be evaluated by conducting viva-voce in the subject or by evaluating the performance of the student in PPT/Poster/Case-Study presentation on a topic in the concerned subject before second mid-term examination.
- 7.3. **The Semester End Examination for theory subjects** will be conducted by the college examination branch for 60 marks consisting of two parts: Part A of 10 marks and Part-B of 50 marks.
  - (i) Part-A is a compulsory question which consists of ten sub-questions from all units carrying equal marks.
  - (ii) Part-B consists of ten questions (numbered from 2 to 11) with two questions from each unit with "either" "or" choice. This means that the student should answer five questions from either of the two questions from each unit.
  - (iii) The duration of Semester End Examination is 3 hours.
- 7.4 **Continuous Internal Evaluation of a practical subject** is done for 40 marks during the semester as follows:
  - (i) A write-up on day-to-day experiments in the laboratory (in terms of aim, components/procedure, expected outcome) shall be evaluated for 10 marks
  - (ii) 10 marks are awarded either for the performance in viva-voce (or) case study presentation (or) application development (or) poster presentation.
  - (iii) Internal practical examination shall be conducted by the concerned laboratory teacher for 10 marks.
  - (iv) The remaining 10 marks are awarded for laboratory project, which consists of the design (or) software/hardware model presentation (or) app development (or) prototype presentation at the end of the completion of laboratory course and before semester end practical examination.
- 7.5 **The Semester End Examination for a practical subject** shall be conducted with an external examiner and the laboratory teacher. The external examiner shall be appointed by the Principal/Vice-Principal.

The Semester End Examination (SEE) for a practical subject shall be held for 3 hours for a total of 60 marks evaluated as follows:

- (i) 10 marks for write-up
- (ii) 15 marks for experiment/program
- (iii) 15 marks for evaluation of results



- (iv) 10 marks for presentation on another experiment/program in the same laboratory course and
- (v) 10 marks for viva-voce on concerned laboratory course.
- 7.6 **Mandatory Non-Credit Audit Courses** are evaluated for 100 marks. A student shall secure 50% of marks (50 marks out of 100 marks) in the CIE for passing the same in PGP. No marks or letter grades shall be allotted for Mandatory Non-Credit Audit Courses. Only Pass/Fail shall be indicated in the Grade Card.
- 7.7 The student is eligible to appear in a SEE of a Theory/Practical subject of PGP if the student scores ≥ 40% of marks (i.e. 16 marks out of 40 marks) in CIE. In case, the student appears in a SEE without scoring a minimum of 40% of marks in CIE, his performance in SEE for that subject shall stand cancelled in spite of appearing in the SEE.
- 7.8 In each of the Theory/Practical subjects of PGP, the student shall earn 40% of marks (i.e. 16 marks out of 40 marks) in CIE, 40% of marks (i.e. 24 marks out of 60) in SEE and a total of 50% of marks (i.e. 50 marks out of 100 marks) in CIE and SEE taken together.
- 7.9 The Mini Project with Seminar in I year II semester is evaluated for 100 internal marks (CIE). The Departmental Academic Committee (DAC) will review the progress of the Mini Project during seminar presentations and evaluate the same for 50 marks. Mini Project viva-voce will be evaluated by the DAC for another 50 marks before the SEEs. Students shall carry out the Mini Project in consultation with the supervisor assigned by the Head of the Department.

A Mini Project with Seminar shall comprise of a critical review of literature or a project implementation. A student shall submit the work carried out as part of Mini Project in the form of a report and present the same before the DAC.

A DAC is composed of the Head of the Department, supervisor and two other senior faculty members of the department.

A student has to secure a minimum of 50% of marks in the overall evaluation of Mini Project with Seminar which consists of seminar presentations and viva-voce, to be declared successful. The failed student shall reappear for the above evaluation when the notification for supplementary examination is issued.

- **7.10 Registration of Dissertation Work**: A student is permitted to register for the dissertation work after satisfying the attendance requirement in all the subjects (Theory/Practical/Mini Project with Seminar/Mandatory Non-Credit Audit Courses)
  - (a) The Dissertation Work shall start immediately after the completion of the I year II semester and shall continue through II year I and II semesters under the supervision of the dissertation guide/supervisor assigned by the Head of the Department.
  - (b) A student is required to submit a **dissertation** on a topic approved by the Dissertation Review Committee (DRC). The DRC monitors the progress of the dissertation work



in two stages viz. Dissertation Stage-I and Dissertation Stage-II. A DRC shall be constituted with the Head of the Department as chairperson, dissertation supervisor, and a senior faculty of the department.

- (c) **Dissertation Stage I** is initiated in II year I semester upon satisfying the attendance requirement stated above. **Dissertation Stage I comprises of Dissertation Review I** and **Dissertation Review II**.
- (d) In consultation with the supervisor, the student shall present the dissertation proposal viz. the title, objective and plan of action of the dissertation work to be carried out before the DRC for approval within four weeks from the commencement of II year I semester in **Dissertation Work Review-I**. Only after obtaining the approval of the DRC, the student can initiate the dissertation work and submit the final dissertation not earlier than 40 weeks from the date of approval or registration.

The student can change the supervisor or topic of the dissertation with the approval of the DRC. However, the DRC shall examine whether or not the change of the topic/supervisor leads to a major change of his initial plans of dissertation proposal. If so, the student's date of registration for the dissertation work starts from the date of change of supervisor or topic as the case may be and the student can submit the final dissertation upon completion of 40 weeks from the new date of registration.

- (e) The DRC monitors the progress of the dissertation work through Dissertation Work Review-II and Dissertation Work Review-III in II year I semester and II year II semester respectively.
- (f) Dissertation Stage-I in II year I semester carries 100 internal marks (CIE) and is evaluated by the supervisor and DRC. While supervisor evaluates for 50 marks the DRC evaluates for the remaining 50 marks through **Dissertation Work Review II**. The supervisor and the DRC examine the problem definition, objectives and scope of the work, literature survey and progress of the dissertation work. A student shall secure a minimum of 50% of marks to be declared successful in Dissertation Stage I. If the student fails to obtain minimum marks, he shall reappear for the same as and when scheduled.
- (g) The dissertation work initiated in II year I semester shall continue through II year II semester. **Dissertation Stage-II** is evaluated in II year II semester for 100 internal marks (CIE) by supervisor and DRC. While supervisor evaluates for 50 marks the DRC evaluates for the remaining 50 marks through **Dissertation Review III**. The DRC will examine the overall progress of the dissertation work and decide whether or not the dissertation is eligible for final submission. A student shall secure a minimum of 50% of marks to be declared successful in Dissertation Stage-II. If the student fails to obtain minimum marks, he shall reappear for the same as and when scheduled.



(h) Dissertation Work Reviews II and III shall be conducted in two phases: Phase I (Regular) and Phase II (Supplementary). Phase II will be conducted only for unsuccessful students in Phase I. The unsuccessful students of Phase II in Dissertation Work Review-II shall reappear for the same at the time of the Phase I of Dissertation Work Review III. These students shall appear for Dissertation Work Review III in the next academic year at the time of Phase I of Dissertation Work Review-III shall reappear in the next academic year in Phase I of Dissertation Work Review-III.

A student shall present the progress of the dissertation through Dissertation Reviews II and III with at least a gap of three months between the reviews.

- (i) A student is eligible to make **final submission of the dissertation** after satisfying the following requirements:
  - ➤ Completion of 40 weeks duration from the date of registration
  - ➤ Successful completion of the following viz. all the Theory, Practical and Mandatory Non-Credit Audit Courses, Mini Project with Seminar and Dissertation Stage-I.
  - ➤ Seek the approval for submission by submitting the draft of the dissertation and making an oral presentation of the work carried out before the DRC in Dissertation Work Review III. That is successfully complete Dissertation Stage-II.
  - > Publish a research paper in a UGC approved journal.
- (j) After approval for submission, a soft copy of the thesis shall be submitted for antiplagiarism check. The plagiarism report should be included in the final dissertation. The dissertation shall be accepted for submission, if the similarity index is less than 30%. Otherwise, the student shall resubmit the modified dissertation after one month. The maximum number of resubmissions of dissertation after plagiarism check is limited to two. After two resubmissions the student shall re-register for the dissertation work and work for two semesters. After three attempts, the admission is liable to be cancelled.

Three copies of the dissertation certified by the supervisor shall be submitted to the department. A copy of published research paper shall be attached to the dissertation.

(k) The Head of the Department shall submit a panel of three external examiners for adjudication of dissertation. Principal shall appoint one of the examiners for adjudication of the same.

If the report of the external examiner is unsatisfactory, the student shall revise and resubmit the dissertation. If the report of the examiner is unsatisfactory again, the dissertation shall be summarily rejected. Subsequent actions for such dissertations may be considered only on the specific recommendations of the external examiner



and/or DRC. No further correspondence will be entertained, if there are no specific recommendations for resubmission.

(l) If the report of the examiner is satisfactory, the Head of the Department shall coordinate and conduct **Dissertation Viva-Voce.** The dissertation viva-voce shall be conducted by a board consisting of supervisor, Head of the Department and the external examiner who adjudicated the dissertation. The external examiner evaluates the dissertation for 100 marks (SEE). The student shall secure a minimum of 50% of marks (50 marks out of 100 marks) in the evaluation of dissertation viva-voce.

If the student fails in the dissertation viva-voce, he shall reappear for the dissertation viva-voce only after three months. If the student fails again, he will not be eligible for the award of the degree unless he is asked to revise and resubmit the dissertation work by the board within a specified time period.

#### 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 5.6.

- 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 in the same category (core or elective). If the same subject(s) is not offered by the department he may choose an equivalent subject suggested by the Board of Studies of the department, as and when offered in the subsequent semester(s) governed by 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 student shall be given one-time chance to re-register and attend the classes for a maximum of two subjects in a semester if the student secures less than minimum marks in the CIE of a subject but fulfilled the attendance requirement. The student must reregister for the failed subjects within four weeks of commencement of the class work in the next academic year and secure the required minimum attendance. In the event of the student taking this chance, his marks in the CIE and SEE obtained in the previous attempt shall stand cancelled.

#### 9.0 Examinations and Assessment - The Grading System

9.1 Grades will be awarded to indicate the performance of students in each Theory Subject, Laboratory/Practical subjects, Mini Project with Seminar, Dissertation, etc., based on the percentage of marks obtained in CIE + SEE as specified in Item 7 above.



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	Letter Grade	<b>Grade Points</b>
(Class Intervals)	(UGC Guidelines)	
Greater than or equal to 90%	O (Outstanding)	10
Greater than 80 and less than 90%	A <sup>+</sup> (Excellent)	9
Greater than 70 and less than 80%	A (Very good)	8
Greater than 60 and less than 70%	B+ (Good)	7
Greater than 50 and less than 60%	B (Above Average)	6
Below 50%	F (Fail)	0
Absent	Ab	0

- **9.3** A student who has obtained an **'F'** grade in any subject is deemed to have **'failed'** and is required to reappear as a 'supplementary student' in the Semester End Examination, as and when conducted. In such cases, marks scored in CIE (internal marks) in those subjects will remain the same as those obtained earlier.
- **9.4** To a student who has not appeared for an examination in any subject, 'Ab' grade will be allocated in that subject, and he is deemed to have 'Failed'. A student will be required to appear as a 'supplementary student' in the Semester End Examination, as and when conducted. In such a case, the marks scored in CIE (internal marks) in those subjects will remain the same as those obtained earlier.
- **9.5** A letter grade does not indicate any specific percentage of marks secured by the student it only indicates 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 secured in that subject/course (excluding Mandatory Courses). 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)  $\times$  No. of Credits for a Course

- 9.8 The student passes the Subject/ Course only when he gets  $GP \ge 6$  (B Grade or above).
- **9.9** 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:

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

where 'i' is the subject indicator index (takes into account all subjects in a semester),



'N' is the number of subjects registered in the semester (as specifically required and listed in the course structure of the parent department),  $C_i$  is the number of credits allotted to the  $i^{th}$  subject, and  $G_i$  represents the Grade Points (GP) corresponding to the Letter Grade awarded for the  $i^{th}$  subject.

**9.10** The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a student in 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

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

where 'M' is the total number of subjects (as specifically required and listed in the course structure of the parent department) the student has 'registered' from the 1<sup>st</sup> semester onwards up to and inclusive of the semester S, 'j' is the subject indicator index (takes into account all subjects from 1 to S semesters),  $C_j$  is the number of credits allotted to the j<sup>th</sup> subject, and  $G_j$  represents the Grade Points (GP) corresponding to the Letter Grade awarded for the j<sup>th</sup> 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	Grad e point	Credit Points
Course	4	A	8	4*8 = 32
Course	4	O	10	4*10 = 40
Course	4	В	6	4*6 = 24
Course	3	В	6	3*6 = 18
Course	3	A	9	3*9 = 27
Course	3	В	6	3*6 = 18
	21			159

$$SGPA = 59/21 = 7.57$$

#### 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



$$CGPA = 612/96 = 6.37$$

#### 10.0 Award of Degree and Class

10.1 If a student who registers for all the specified subjects/courses as listed in the course structure, satisfies all the course requirements, and passes the examinations prescribed in the entire PG Programme (PGP), and secures the required number of 68 credits (with CGPA ≥6.0) shall be declared to have 'QUALIFIED' for the award of the M.Tech. Degree in the chosen branch of engineering and technology with the specialization that he was admitted into.

#### 10.2 Award of Class

After a student has earned the requirements prescribed for the completion of the programme and is eligible for the award of M.Tech. Degree, he shall be placed in one of the following three classes based on the CGPA:

Class Awarded	CGPA
First Class with Distinction	≥ 7.75
First	6.75≤ CGPA < 7.75
Second	6.00≤ 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 General

- **12.1 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.
- 12.2 Credit Point: It is the product of grade point and number of credits for a course.
- 12.3 Wherever the words "he", "him", "his", occur in the regulations, they shall include "she", "her".
- **12.4** The academic regulation should be read as a whole for the purpose of any interpretation.
- 12.5 In case of any ambiguity in the academic regulations, course structure and/or syllabus, students may contact the chairperson, Board of Studies (i.e. Head of the Department) for clarification or resolving.



**12.6** 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

	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 the same. Material shall also 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 practical 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.  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.  Assaults the officer-in-charge or any person on duty in or outside the examination hall or any of his relations whether by words, either spoken or written or by signs. Indulges in any other act of misconduct or mischief which results 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 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.



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 college, who is not a candidate for the particular examination or any person not connected with the college indulges in any malpractice or improper conduct mentioned in clause 6 to 8.	Student of the colleges expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred and forfeits the seat. Person(s) who do not belong to the College will be handed over to police and, a police case will be registered against them.
10	Comes in a drunken condition to the examination hall.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year.



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

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