



**MAHATMA GANDHI INSTITUTE OF TECHNOLOGY (Autonomous)**  
Kokapet (Village), Gandipet (Mandal), Hyderabad-500075

**Revised Academic Regulations of M.Tech Degree Program**  
**with effect from the Academic Year 2022 - 2023 (MR22)**

**Note:**

- i. The academic regulations should be read as a whole, for the purpose of any interpretation
- ii. In case of any doubt or ambiguity in the interpretation of the above rules and regulations, the decision of the Institute is final
- iii. Any reference to the College or Institute in these Regulations stands for Mahatma Gandhi Institute of Technology (Autonomous).

Mahatma Gandhi Institute of Technology (MGIT), established in the year 1997 by Chaitanya Bharathi Educational Society (CBES), was conferred autonomous status by the University Grants Commission, New Delhi and Jawaharlal Nehru Technological University (JNTUH) Hyderabad for a period of 10 years with effect from the academic year 2021-22. Consequently, the Institute is at liberty to prescribe its own courses that determine learning outcomes based on local needs and required skills. Autonomy enables the Institute to promote healthy practices such as community services and extension activities. Academic independence is the major advantage for an autonomous system

In accordance with the guidelines of the University Grants Commission (UGC), All India Council for Technical Education (AICTE) and Jawaharlal Nehru Technological University Hyderabad (JNTUH), MGIT is implementing Outcome Based Education (OBE) with Choice Based Credit System (CBCS) in Post Graduate program. The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a “cafeteria” type approach in which the student can take courses and acquire more than the required credits and adopt an interdisciplinary approach to learning.

**Choice Based Credit System (CBCS):** The choice based credit system enables a student to obtain a degree by accumulating the required number of credits prescribed for that degree. Under CBCS, the requirement for awarding degree is prescribed in terms of number credits to be completed by the students. The number of credits earned by the student reflects the knowledge acquired by him/her. Each course is assigned with a fixed number of credits based on the contents to be learnt. The student also has the choice in selecting the courses offered by the other Departments. The letter grade, grade points and the credit points earned for each of the course reflect the student’s proficiency in that course.

### 1. Eligibility for Admission

Admission to the post graduate programme shall be made on the basis of either the merit rank or Percentile obtained by the qualified student in the relevant qualifying GATE Examination/ the merit rank obtained by the qualified student in an entrance test conducted by Telangana State Government (PGECET) for M.Tech. programmes / an entrance test conducted by JNTUH/ on the basis of any other exams approved by the University, subject to reservations as laid down by the Govt. from time to time.

### 2. Medium of Instruction

The medium of instruction shall be English for all courses, examinations, seminar presentations and project work. The program curriculum will comprise courses of study as prescribed in the course structure and in accordance with the prescribed syllabus.

### 3. M.Tech Programs offered

MGIT is offering Master of Technology (M.Tech) degree programs in Five disciplines. The various programs offered are given in Table-1.

**Table-1: M.Tech Programs offered**

S. No.	Title of the program	Branch Code	Abbreviation
1.	Computer Aided Structural Engineering	20	CASE
2.	Digital Electronics and Communication Engineering	38	DECE
3.	Power Electronics and Electric Drives	54	PEED
4.	Mechatronics	80	MCT
5.	Artificial Intelligence	A9	AI

#### 3.1 Structure of M.Tech Program

The structure of the M.Tech programs offered at MGIT is based on outcome based education with **Choice Based Credit System (CBCS) and Credit Based Semester System (CBSS)**, in accordance with the guidelines of the UGC and the model curriculum suggested by the AICTE.

The M.Tech program offered at MGIT follows semester pattern. The duration of M.Tech program shall be two academic years (four semesters). Each academic year shall have two semesters (one odd and one even).

**Each Semester shall be of 22 Weeks duration inclusive of Examinations with a minimum of 90 instructional days per Semester.** The academic activities to be performed in an year along with their tentative timeframe are listed in the academic calendar given in Table-2.

**Table-2: Structure of Academic Calendar**

S. No.	Event	Duration
<b>Odd Semester</b>		
1.	First Spell of Instructions	8 Weeks
2.	First Internal Examination	1 Week
3.	Second Spell of Instructions	8 Weeks
4.	Second Internal Examination	1 Week
5.	Semester End Examinations of Mandatory courses, Laboratory courses and preparatory holidays for theory examinations	2 Weeks
6.	Semester End Theory Examinations	2 Weeks
7.	<b>Supplementary Examinations of Even Semesters</b>	<b>2 Weeks</b>
<b>Even Semester</b>		
8.	First Spell of Instructions	8 Weeks
9.	First Internal Examination	1 Week
10.	Second Spell of Instructions	8 Weeks
11.	Second Internal Examination	1 Week
12.	Semester End Examinations of Mandatory courses, Laboratory courses and preparatory holidays for theory examinations	2 Weeks
13.	Semester End Theory Examinations	2 Weeks
14.	<b>Summer Holidays and Supplementary Examinations of Odd Semesters</b>	<b>6 Weeks</b>

Each semester is structured to provide credits totaling to 68 for the entire M.Tech program. Each semester shall have Continuous Internal Evaluation (CIE) and Semester End Examinations (SEE). **There is NO exemption of credits in any case.**

A student who pursues and registers for all the specified courses as listed in the M.Tech program structure and secures the required number of 68 credits in a normal (minimum) period of two academic years (four semesters) and a maximum period of four academic years (eight semesters) from the date of commencement of the first semester, shall be declared to have qualified for the award of M.Tech degree in the chosen specialization of engineering selected at the time of admission.

### 3.2 Credit Structure

Every course in the M.Tech program has a Lecture – Tutorial – Practical or Drawing – Credit (L:T:P/D:C) component. Based on L:T:P/D:C structure, the credits are allotted to a course using the criteria shown in Table-3.

**Table-3: Contact hours and Credit Structure**

S. No.	Type of Course	Component	Contact hours / week / semester	Credits
1	Theory	Lecture (L)	1	1
		Tutorial (T)	1	1
2	Laboratory	Practical (P)	1	0.5

Depending on the complexity and volume of the course, the number of contact hours per week in a semester will be assigned.

Each M.Tech program shall consist of a number of courses and each course shall be assigned with credits. The curriculum shall comprise theory courses, elective courses, laboratory courses, mandatory courses, seminar, mini – project, internship, and project work. However, mandatory courses do not carry any credits.

### 3.3 Subject Course Classification

In accordance with the guidelines issued by UGC and AICTE, all the courses offered for the post graduate program are broadly classified as shown in Table-4.

**Table-4: Classification of Courses**

S. No.	Broad Course Classification	Course Group / Category	Course Description
1.	Core Courses (CC)	Professional Core (PC)	Includes courses related to the parent Discipline/Department / Branch of Engineering
		Dissertation	M.Tech Project or the PG Project
		Mini Project with Seminar	Seminar based on core contents related to parent Discipline/Department/Branch of Engineering
2.	Elective Courses (EC)	Professional Electives (PE)	Includes elective courses related to the parent Discipline / Department / Branch of Engineering
		Open Electives (OE)	Interdisciplinary courses or courses in an area outside the parent Discipline / Department / Branch of Engineering
3	Mandatory Courses	-	credit courses common to all specializations
4	Audit Courses (AC)	-	Non - credit audit courses

### 4. Course Registration

The following guidelines are designed for course registration:

- 4.1 A faculty member shall be appointed as a mentor, who will advise the students about the M.Tech program, its course structure, curriculum, choice / option for courses, based on their competence, progress, pre-requisites and interest.
- 4.2 The students shall register for all the prescribed courses and additional courses if any at the beginning of each semester as per the schedule mentioned in the Almanac released in the beginning of the academic year. Additional courses will be offered based on progress, SGPA / CGPA and fulfillment of the pre- requisites, if any for the course.
- 4.3 The registration shall be organized by the Department or the Academic Section of the Institute.
- 4.4 A course may have one or more of its preceding course(s) as pre-requisite(s).

- 4.5 The Academic Section of the Institute invites “registration forms” from students before the beginning of the semester through ‘on-line registration’ ensuring “date and time stamping”. The on-line requests for any given semester shall be completed before the commencement of Semester End Examinations (SEE) of the preceding semester.
- 4.6 A student can apply for on-line registration, only after obtaining the written approval of his / her mentor, which should be submitted to the Academic Section of the Institute through the Head of the Department concerned. A copy of it shall be retained with Head of the Department, mentor and the student.
- 4.7 Course options exercised by the students through on-line registration are final and cannot be changed or interchanged. Further, alternate choices will not be considered. However, if the course that has been listed for registration by the Head of the Department in a semester could not be offered due to any unforeseen or unexpected reasons, then the student shall be allowed to have alternate choice for a new course, subject to offering of such a course and availability of seats in it. Such alternate arrangements shall be made by the Head of the Department, with due notification and time framed schedule, within the first week of the commencement of class work for that semester.

## 5. Attendance Requirements

It is desirable for a student to have 100% attendance in each course. **The M.Tech program is offered based on unit system with each course being considered a unit. Attendance is calculated separately for each course.** A student shall be eligible to appear for the Semester End Examinations, if he / she acquires a minimum of 75% attendance separately in each of the credit courses and mandatory non-credit courses offered. Two periods of attendance for each theory course shall be considered, if he / she appears for the Internal examination of that course. A Student’s Mini Project with Seminar shall be eligible for evaluation, only if he/she ensures a minimum of 75 % of attendance in Mini Project with Seminar during that semester.

- 5.1 Shortage of attendance in each course (Theory/Lab/Mini project with Seminar) upto 10 % i.e. attendance from 65 % to less than 75 % may be condoned by the Institute Academic Committee on genuine and valid medical grounds, based on student’s representation with supportive evidence. Such students shall pay a stipulated fee for condoning shortage of attendance (10 %). **Shortage of attendance below 65 % in any course shall in no case be condoned.**

- 5.2** Students whose shortage of attendance is not condoned in any course of a given semester are not eligible to appear for Semester End Examinations of that course. They get detained and their registration for that semester stands cancelled.
- 5.3** Students having less than 65% attendance are required to seek Re-registration for those courses in subsequent semesters as and when offered.
- 5.4** A student fulfilling the attendance requirement of a given semester is not eligible for readmission into that semester.
- 5.5 (a)** A student shall put in a minimum required attendance in at least **three theory courses (excluding mandatory audit course)** in I semester for promotion to II Semester.
- (b)** A student shall put in a minimum required attendance in at least **three theory courses (excluding mandatory audit course)** in II semester for promotion to III-Semester.

## **6. 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 Internal Evaluation and Semester End Examination.

- 6.1** A student shall be deemed to have satisfied the academic requirements and earned the credits for each theory and practical, if he /she secures not less than;
- 40 % of Marks (24 out of 60 marks) in the Semester End Examination;
  - 40% of Marks in the internal examinations (16 out of 40 marks allotted for CIE) and
  - A minimum of 50% of marks in the sum total of CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together; in terms of Letter Grades this implies securing 'B' Grade or above in a subject.
- 6.2** A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to Mini Project with seminar, if student secures not less than 50% marks (i.e. 50 out of 100 allotted marks). The student would be treated as failed, if 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 Mini Project with seminar evaluation. The failed student shall reappear for the above evaluation when the notification for supplementary examination is issued.
- 6.3** A student shall register for all subjects for total of 68 credits as specified and listed in the course structure for the chosen specialization, put in the required attendance and fulfill the academic

requirements for securing 68 credits obtaining a minimum of 'B' Grade or above in each subject, and all 68 credits securing Semester Grade Point Average (SGPA)  $\geq 6.0$  (in each semester) and final Cumulative Grade Point Average (CGPA) (i.e., CGPA at the end of PGP)  $\geq 6.0$ , and shall pass all the mandatory 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 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 will be indicated in the Grade Card /Marks Memo of Fourth semester.
- 6.5** If a student registers for extra subject(s) (in the parent department or other departments/branches of Engineering) other than those listed subjects totaling to 68 credits as specified in the course structure, the performance in extra subject(s) (although evaluated and graded using the same procedure as that of the required 68 credits) will not be considered while calculating the SGPA and CGPA. For such extra subject(s) registered, percentage of marks and Letter Grade alone will be indicated in the Grade Card/Marks Memo, as a performance measure, subject to completion of the attendance and academic requirements as stated in items 5 and 6.1- 6.3.
- 6.6** When a student is detained due to shortage of attendance in any subject(s) in any semester, no Grade allotment will be made for such subject(s). However, he is eligible for re-registration of such subject(s) in the subsequent semester(s), as and when next offered, with the academic regulations of the batch into which he is re-registered, by paying the prescribed fees per subject. In all these re-registration cases, the student shall have to secure a fresh set of internal marks and Semester End Examination marks for performance evaluation in such subject(s), and SGPA/CGPA calculations.
- 6.7** A student eligible to appear for the Semester End Examination in any subject, but absent from it or failed (failing to secure 'B' Grade or above), may reappear for that subject at the supplementary examination as and when conducted. In such cases, his Internal Marks assessed earlier for that subject will be carried over, and added to the marks secured in the supplementary examination, for the purpose of evaluating his performance in that subject.
- 6.8** A Student who fails to earn 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 forfeit his seat in M.Tech programme and his admission shall stand cancelled.

## 7. Evaluation - Distribution and Weightage of Marks

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

**7.1** The performance of a student in every subject/course (including practicals and Project) will be evaluated for 100 marks each, with 40 marks allotted for CIE (Continuous Internal Evaluation) and 60 marks for SEE (Semester End-Examination). The Continuous Internal Evaluation shall be made based on the average of the marks secured in the two Mid-Term Examinations conducted, first Mid-Term examinations in the middle of the Semester and second Mid-Term examinations during the last week of instruction.

**7.2** In CIE, for theory subjects, during a semester, there shall be two mid-term examinations. Each Mid-Term examination consists of two parts i.e **Part – A** for 10 marks, **Part – B** for 20 marks with a total duration of 2 hours as follows:

i) Mid-Term Examination for **30 marks**:

- a. Part - A: Objective/quiz paper for 10 marks.
- b. Part – B: Descriptive paper for 20 marks.

- The objective/quiz paper is set with multiple choice, fill-in the blanks and match the following type of questions for a total of 10 marks. The descriptive paper shall contain 6 full questions out of which, the student has to answer 4 questions, each carrying 5 marks. The average of the two Mid Term Examinations shall be taken as the final marks for Mid Term Examination (for 30 marks).

The remaining 10 marks of Continuous Internal Assessment (out of 40) are distributed as:

ii) Assignment for **5 marks**. (Average of 2 Assignments each for 5 marks)

iii) Subject Viva-Voce/PPT/Poster Presentation/ Case Study on a topic in the concerned Subject for **5 marks**.

- The first CIE shall be conducted on 50% of the syllabus and the second CIE shall be conducted for the remaining 50% of the syllabus.
- Five (5) marks are allocated for assignments (as specified by the subject teacher concerned). The first assignment should be submitted before the conduct of the first CIE, and the second assignment should be submitted before the conduct of the second CIE. The average of the two assignments shall be taken as the final marks for assignment (for 5 marks).
- Subject Viva-Voce/PPT/Poster Presentation/ Case Study on a topic in the subject concerned for 5 marks will be evaluated by concerned faculty member before CIE II.
- The student has to get minimum of 40% of Marks in the internal examinations (16 out of 40 marks allotted for CIE).



- There is ***NO Special Internal Exam / Computer Based Test (CBT) for MR22 regulations*** even if any student is absent, due to any extraordinary circumstances, for 1<sup>st</sup> Internal Examination / 2<sup>nd</sup> Internal Examination / or both in any course.

The details of the end semester question paper pattern are as follows:

**7.3** The Semester End Examinations (SEE), for theory subjects, will be conducted for 60 marks consisting of two parts viz. i) **Part- A** for 10 marks, ii) **Part - B** for 50 marks.

- Part-A is a compulsory question which consists of ten sub-questions from all units carrying equal marks.
- Part-B consists of five questions (numbered from 2 to 6) carrying 10 marks each. Each of these questions is from each unit and may contain sub-questions. For each question there will be an “either” “or” choice, which means that there will be two questions from each unit and the student should answer either of the two questions.
- The duration of Semester End Examination is 3 hours.

#### **7.4 Evaluation of Laboratory Courses**

For practical subjects there shall be a Continuous Internal Evaluation (CIE) during the semester for 40 marks and 60 marks for semester end examination. Out of the 40 marks for internal evaluation:

1. A write-up on day-to-day experiment in the laboratory (in terms of aim, components/procedure, expected outcome) which shall be evaluated for **10 marks**
2. **10 marks** for viva-voce (or) tutorial (or) case study (or) application (or) poster presentation of the course concerned.
3. Internal practical examinations (CIE-I and CIE-II) shall be conducted by the laboratory teacher concerned one week before the commencement of CIE-I and CIE-II respectively which shall be evaluated for **10 marks** each.
4. The remaining **10 marks** are for Laboratory Project, which consists of the Design (or) Software / Hardware Model Presentation (or) App Development (or) Prototype Presentation submission which shall be evaluated after completion of laboratory course and before semester end practical examination.

The Semester End Examination shall be conducted with an external examiner and the laboratory teacher. The external examiner shall be appointed by the Principal among the panel submitted by the Chairman of Board of Studies concerned. The panel of examiners shall be drawn from the cluster college as given by the institute.

In the Semester End Examination, held for 3 hours, total 60 marks are divided and allocated as shown below:

1. 10 marks for write-up

2. 15 for experiment/program
  3. 15 for evaluation of results
  4. 10 marks for presentation on another experiment/program in the same laboratory course and
  5. 10 marks for viva-voce on concerned laboratory course
- ***The Student, in each course, shall have to 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 Overall 50% of marks (i.e. 50 marks out of 100 marks) both CIE and SEE marks taking together.***
  - ***The student is eligible to write Semester End Examination of the concerned subject, if the student scores  $\geq 40\%$  (16 marks) of 40 Continuous Internal Examination (CIE) marks.***
  - ***In case, the student appears for Semester End Examination (SEE) of the concerned subject but not scored minimum 40% of CIE marks (16 marks out of 40 internal marks), his performance in that subject in SEE shall stand cancelled inspite of appearing the SEE.***
- 7.5** For conducting laboratory end examinations of all PG Programmes, one internal examiner and one external examiner are to be appointed by the Chief Controller of Examinations. The panel of external examiners should be selected from outside the College concerned but within the cluster/Other autonomous. No external examiner should be appointed from any other College in the same cluster/any other cluster which is run by the same Management.
- 7.6** There shall be Mini Project with Seminar during II semester for internal evaluation of 100 marks. The Departmental Academic Committee (DAC) will review the progress of the mini project during the seminar presentations and evaluate the same for 50 marks. Mini Project Viva Voce will be evaluated by the DAC for another 50 marks before the semester end examinations. Student shall carryout the mini project in consultation with the mini project supervisor which may include critically reviewing the literature, project implementation and submit it to the department in the form of a report and shall make an oral presentation before the DAC consisting of Head of the Department, Mini Project supervisor and two other senior faculty members of the department. The student has to secure a minimum of 50% of marks in
- i) seminar presentation and
  - ii) mini project viva voce, to be declared successful. If he fails to obtain the minimum marks, he has to reappear for the same as and when scheduled.
- 7.7** Every candidate shall be required to submit a dissertation on a topic approved by the Dissertation Review Committee.
- 7.8** A Dissertation Review Committee (DRC) shall be constituted with the Head of the Department as Chairperson, Dissertation Supervisor and one senior faculty member of the Department offering the M.Tech programme.

- 7.9** Registration of Dissertation Work: A candidate is permitted to register for the Dissertation Work after satisfying the attendance requirement in all the subjects, both theory and laboratory.
- 7.10** After satisfying 7.9, a candidate must present in Dissertation Work Review-I, in consultation with his Dissertation Supervisor, the title, objective and plan of action of his Dissertation work to the Dissertation Review Committee (DRC) for approval within four weeks from the commencement of III Semester. Only after obtaining the approval of the DRC can the student initiate the Dissertation work.
- 7.11** If a candidate wishes to change his supervisor or topic of the Dissertation, he can do so with the approval of the DRC. However, the DRC shall examine whether or not the change of topic/supervisor leads to a major change of his initial plans of Dissertation proposal. If yes, his date of registration for the project work starts from the date of change of Supervisor or topic as the case may be.
- 7.12** A candidate shall submit his Dissertation progress report in two stages at least with a gap of three months between them.
- 7.13** The work on the Dissertation shall be initiated at the beginning of the III Semester and the duration of the Dissertation is two semesters. A candidate is permitted to submit Dissertation Thesis only after successful completion of all theory and practical courses with the approval of DRC not earlier than 40 weeks from the date of approval of the Dissertation work. For the approval of DRC, the candidate shall submit the draft copy of thesis to the Head of the Department and make an oral presentation before the DRC.
- 7.14** The Dissertation Work Review - II in III Semester carries 100 internal marks. Evaluation should be done by the Department Review Committee (DRC) for 50 marks and the Supervisor will evaluate the work for the other 50 marks. The Supervisor and DRC will examine the Problem Definition, Objectives, Scope of Work, Literature Survey in the same domain and progress of the Dissertation Work. A candidate has to secure a minimum of 50% of marks to be declared successful in Dissertation Work Review - II. If he fails to obtain the minimum required marks, he has to reappear for Dissertation Work Review - II as and when conducted.
- 7.15** The Dissertation Work Review - III in IV Semester carries 100 internal marks. Evaluation should be done by the DRC for 50 marks and the Supervisor will evaluate it for the other 50 marks. The DRC will examine the overall progress of the Dissertation Work and decide whether or not the Dissertation is eligible for final submission. A candidate has to secure a minimum of 50% of marks to be declared successful in Dissertation Work Review - III. If he fails to obtain the required minimum marks, he has to reappear for Dissertation Work Review - III as and when conducted. For Dissertation Evaluation (Viva Voce) in IV Semester there are external marks of

100 and it is evaluated by the external examiner. The candidate has to secure a minimum of 50% marks in Dissertation Evaluation (Viva- Voce) examination.

- 7.16** Dissertation Work Reviews-II and III shall be conducted in phase I (Regular) and Phase II (Supplementary). Phase II will be conducted only for unsuccessful students in Phase I. The unsuccessful students in Dissertation Work Review-II (Phase II) shall reappear for it at the time of Dissertation Work Review-III (Phase I). These students shall reappear for Dissertation Work Review-III in the next academic year at the time of Dissertation Work Review-II only after completion of Dissertation Work Review-II, and then Dissertation Work Review-III follows. The unsuccessful students in Dissertation Work Review-III (Phase II) shall reappear for Dissertation Work Review - III in the next academic year only at the time of Dissertation Work Review-II (Phase I).
- 7.17** After approval from the DRC, a soft copy of the thesis should be submitted for ANTI-PLAGIARISM check and the plagiarism report should be submitted to the University and be included in the final thesis. The Thesis will be accepted for submission, if the similarity index is less than 30%. If the similarity index has more than the required percentage, the student is advised to modify accordingly and re- submit the soft copy of the thesis after one month. The maximum number of re-submissions of thesis after plagiarism check is limited to TWO. The candidate has to register for the Dissertation work and work for two semesters. After three attempts, the admission is liable to be cancelled. The college authorities are advised to make plagiarism check of every soft copy of theses before submissions.
- 7.18** Three copies of the Dissertation Thesis certified by the supervisor shall be submitted to the College/School/Institute, after submission of a research paper related to the Dissertation work in a UGC approved journal. A copy of the submitted research paper shall be attached to thesis.
- 7.19** The thesis shall be adjudicated by an external examiner selected by the Principal / Chief Controller of Examinations. For this, the BoS Chairman shall submit a panel of three examiners drawn from various reputed Institutes with relevant specialization / Programme.
- 7.20** If the report of the external examiner is unsatisfactory, the candidate shall revise and resubmit the Thesis. If the report of the examiner is unsatisfactory again, the thesis shall be summarily rejected. Subsequent actions for such dissertations may be considered, only on the specific recommendations of the external examiner and /or Dissertation Review Committee. No further correspondence in this matter will be entertained, if there is no specific recommendation for resubmission.
- 7.21** If the report of the examiner is satisfactory, the Head of the Department shall coordinate and make arrangements for the conduct of Dissertation Viva-Voce examination. The Dissertation Viva-Voce examination shall be conducted by a board consisting of the Supervisor, Head of the Department

and the external examiner who adjudicated the Thesis. The candidate has to secure a minimum of 50% of marks in Dissertation Evaluation (Viva-Voce) examination.

**7.22** If he fails to fulfill the requirements as specified in 7.21, he will reappear for the Dissertation Viva-Voce examination only after three months. In the reappeared examination also, if he fails to fulfill the requirements, he will not be eligible for the award of the degree, unless he is asked to revise and resubmit his Dissertation Work by the board within a specified time period (within four years from the date of commencement of his first year first semester).

**7.23** The Dissertation Viva-Voce External examination marks must be submitted in Academic and Examinations Section on the day of the examination.

**7.24** For mandatory non-credit Audit courses, a student has to secure 40 marks out of 100 marks (i.e.40% of the marks allotted) in the continuous internal evaluation for passing the subject/course. These marks should also be uploaded along with the internal marks of other subjects.

**7.25** No marks or letter grades shall be allotted for mandatory non-credit Audit Courses. Only Pass/Fail shall be indicated in Grade Card.

## **8. Re-Admission/Re-Registration**

### **8.1 Re-Admission for Discontinued Student**

A student, who has discontinued the M.Tech degree programme due to any reason whatsoever, may be considered for 'readmission' into the same degree programme (with the same specialization) with the academic regulations of the batch into which he gets readmitted, with prior permission from the authorities concerned, subject to item 6.6.

**8.2** If a student is detained in a subject (s) due to shortage of attendance in any semester, he may be permitted to re-register for the same subject(s) in the same category (core or elective group) or equivalent subject, if the same subject is not available, as suggested by the Board of Studies of that department, as and when offered in the subsequent semester(s), with the academic regulations of the batch into which he seeks re-registration, with prior permission from the authorities concerned, subject to item 3.1

**8.3** A candidate shall re-register and attend the classes, if the internal marks secured by a candidate are less than 40% of total CIE marks. A candidate must re-register for failed subjects within four weeks of commencement of the class work and secure the required minimum attendance. In the event of the student taking this chance, his Continuous Internal Evaluation (internal) marks and Semester End Examination marks obtained in the previous attempt stand cancelled.

## **9. Examinations and Assessment - The Grading System**

**9.1** Grades will be awarded to indicate the performance of each student in each Theory Subject, or Lab/Practicals, or Mini Project with Seminar, Dissertation, etc., based on the percentage of marks

obtained in CIE+SEE (Continuous Internal Evaluation + Semester End Examination, both taken together) as specified in Item 7 above, and a corresponding Letter Grade shall be given.

**9.2** As a measure of the student's performance, a 10-point Absolute Grading System using the following Letter Grades (UGC Guidelines) and corresponding percentage of marks shall be followed:

% of Marks Secured in a subject/Course (Class Intervals)	Letter Grade (UGC Guidelines)	Grade Points
90% and above ( $\geq 90\%$ , $\leq 100\%$ )	O (Outstanding)	10
Below 90% but not less than 80% ( $\geq 80\%$ , $< 90\%$ )	A+ (Excellent)	9
Below 80% but not less than 70% ( $\geq 70\%$ , $< 80\%$ )	A (Very Good)	8
Below 70% but not less than 60% ( $\geq 60\%$ , $< 70\%$ )	B+ (Good)	7
Below 60% but not less than 50% ( $\geq 50\%$ , $< 60\%$ )	B (above Average)	6
Below 50% ( $< 50\%$ )	F (FAIL)	0
Absent	Ab	0

**9.3** A student obtaining 'F' Grade in any Subject is deemed to have 'failed' and is required to reappear as 'Supplementary Candidate' for the Semester End Examination (SEE), as and when conducted. In such cases, his Internal Marks (CIE Marks) in those subjects will remain as obtained earlier.

**9.4** If a student has not appeared for the examinations, 'Ab' Grade will be allocated to him for any subject and shall be considered 'failed' and will be required to reappear as 'Supplementary Candidate' for the Semester End Examination (SEE), as and when conducted.

**9.5** A Letter Grade does not imply any specific marks percentage; it is only the range of percentage of marks.

**9.6** In general, a student shall not be permitted to repeat any Subject/ Course (s) only for the sake of 'Grade Improvement' or 'SGPA/ CGPA Improvement'.

**9.7** A student earns Grade Point (GP) in each Subject/ Course, on the basis of the Letter Grade obtained by him in that Subject/ Course. The corresponding 'Credit Points' (CP) are computed by multiplying the Grade Point with Credits for that particular Subject/ Course.

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

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

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

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

where 'i' is the Subject indicator index (taking into account all Subjects in a Semester), 'N' is the no. of Subjects 'REGISTERED' for the Semester (as specifically required and listed under the Course Structure of the parent Department),  $C_i$  is the no. of Credits allotted to the ith Subject, and  $G_i$  represents the Grade Points (GP) corresponding to the Letter Grade awarded for that ith Subject.

**9.10** The Cumulative Grade Point Average (CGPA) is a measure of the overall cumulative performance of a student over all Semesters considered for registration. The CGPA is the ratio of the Total Credit Points secured by a student in ALL registered Courses in ALL Semesters, and the Total Number of Credits registered in ALL the Semesters. CGPA is rounded off to TWO Decimal Places. CGPA is thus computed from the I Year Second Semester onwards, at the end of each Semester, as per the formula

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

(ie., up to and inclusive of S Semesters,  $S \geq 2$ ),

where 'M' is the TOTAL no. of Subjects (as specifically required and listed under the Course Structure of the parent Department) the Student has 'REGISTERED' for from the 1<sup>st</sup> Semester onwards upto and inclusive of the Semester S ( obviously  $M > N$  ), 'j' is the Subject indicator index (taking into account all Subjects from 1 to S Semesters),  $C_j$  is the no. of Credits allotted to the jth Subject, and  $G_j$  represents the Grade Points (GP) corresponding to the Letter Grade awarded for that j<sup>th</sup> Subject. After registration and completion of I Semester however, the SGPA of that Semester itself may be taken as the CGPA, as there are no cumulative effects.

#### Illustration of calculation of SGPA

Course/Subject	Credits	Letter Grade	Grade points	Credit Points
Course 1	4	A	8	4*8 = 32
Course 2	4	O	10	4*10 = 40
Course 3	4	B	6	4*6 = 24
Course 4	3	B	6	3*6 = 18
Course 5	3	A+	9	3*9 = 27
Course 6	3	B	6	3*6 = 18
	21			159

$$SGPA = 159/21 = 7.57$$

#### Illustration of calculation of CGPA

Semester	Credits	SGPA	Credits * SGPA
Semester I	24	7	24*7 = 168
Semester II	24	6	24*6 = 144
Semester III	24	6.5	24*6.5 = 156
Semester IV	24	6	24*6 = 144
	96		612

$$CGPA = 612/96 = 6.37$$

## 10. 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  $CGPA \geq 6.0$ ), shall be declared to have 'QUALIFIED' for the award of the M.Tech Degree in the chosen Branch of Engineering and Technology with the specialization that he was admitted into.

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

Class Awarded	CGPA
First Class with Distinction	$\geq 7.75$
First Class	$6.75 \leq CGPA < 7.75$
Second Class	$6.00 \leq CGPA < 6.75$

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

## 11. 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. 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 doubt or ambiguity in the interpretation of the above rules, the decision of the Institute is final.

**12.6** The Institute 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.

**12.7** The Term 'subject' and 'course' imply the same meaning.



## MALPRACTICE RULES

### DISCIPLINARY ACTION FOR / IMPROPER CONDUCT IN EXAMINATIONS

S. No	Nature of Malpractice/Improper	Punishment
1.(a)	If the candidate: Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the subject to the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the subject of the examination).	Expulsion from the examination hall and cancellation of the performance in that subject only.
(b)	Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the exam hall in respect of any matter.	Expulsion from the examination hall and cancellation of the performance in that subject only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.
2.	Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the subject to the examination (theory or practical) in which the candidate is appearing.	Expulsion from the examination hall and cancellation of the performance in that subject and all other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the subjects of that Semester/year. The Hall Ticket of the candidate is to be cancelled and sent to the University.

3.	Impersonates any other candidate in connection with the examination.	The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the subjects of the examination (including practicals and project work) already appeared and shall not be allowed to appear for examinations of the remaining subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the imposter is an outsider, he will be handed over to the police and a case is registered against him.
4.	Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination.	Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.
5.	Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass marks.	Cancellation of the performance in that subject.

6.	<p>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.</p>	<p>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.</p>
7.	<p>Leaves the exam hall taking away answer script or intentionally tears of the script or any part there of inside or outside the examination hall.</p>	<p>Expulsion from the examination hall and cancellation of performance in that subject and all the other subjects the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the subjects of that semester/year. The candidate is also debarred for two consecutive semesters from class work and all University examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat.</p>
8.	<p>Possess any lethal weapon or firearm in the examination hall.</p>	<p>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.</p>

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 University for further action to award suitable punishment.	

**Malpractices identified by Squad or Special Invigilators:**

Punishments shall be given to the students as per the above guidelines.

**Malpractices identified at Spot Valuation center during Valuation:**

The following procedure shall be followed in the case of malpractice cases detected during valuation, scrutiny etc. at spot valuation center:

- i) Malpractice detected at the spot valuation center:** The case is to be referred to the Committee constituted to look into the malpractice cases. The committee shall meet and discuss / question the student and based on the evidences, the committee shall recommend suitable action on the student.
- ii)** A notice is to be served to the student(s) involved, through the Principal, to his address and to the student(s) permanent address regarding the malpractice and seek explanation.
- iii)** Based on the explanation given by the party involved and recommendations of the committee, action shall be initiated.

**iv) Composition of the committee constituted to look into malpractice cases**

1. Principal: Chairman
2. Controller of Examinations: Member
3. Head of the Department Concerned: Member
4. Chief Examiner of the course/course expert: Member
5. Additional / Assistant Controller of Examinations: Member (Convener)

**Chairman  
Academic Council**

