FOREWORD

CMR Technical Campus, established in the year 2009, Approved by AICTE, New Delhi, Permanently Affiliated to JNTUH, twice Accredited by NBA and has been bestowedwith NAAC 'A' Grade of 3.12 score on 04 scale in February 2019 for its remarkable academic accomplishments accompanied by its unflinching spirit and dedication to impart quality technical education to the deserving aspirants. The institution has commenced functioning independently within the set norms prescribed by UGC and AICTE. The performance of the institution manifests the confidence that the prestigious monitoring body, the UGC has on it,in terms of upholding its spirit and sustenance of the expected standards of functioning on its own consequently facilitating the award of degrees for its students. Thus, an autonomous institution is provided with the necessary freedom to have its own curriculum, examination system and monitoring mechanism, independent of the affiliating University but under its observance.

CMR Technical Campus takes pride for having won the confidence of such distinguished academic bodies meant for monitoring the quality in technology education. Besides, the institution is delighted to sustain the same spirit of discharging the responsibilities that it has been conveying since a decade to attain the current academic excellence, if not improving upon the standards and ethics. Consequently, statutory bodies such as the Academic Council and the Boards of Studies have been constituted under the supervision of the Governing Body of the College and with the recommendations of the JNTU Hyderabad, to frame the regulations, course structure and syllabi for autonomous status.

The autonomous regulations, course structure and syllabi have been framed in accordance with the vision and mission of the institution along with certain valuable suggestions from professionals of various ancillary fields such as the academics, the industry and the research, all with a noble vision to impart quality technical education and contribute in catering full-fledged engineering and management graduates to the society.

All the faculty members, the parents and the students are requested to study all the rules and regulations carefully and approach the Director to seek any clarifications, if needed,without presumptions, to avoid unwanted subsequent inconveniences and embarrassments. The cooperation of all the stake holders is sought for the successful implementation of the autonomous system in the larger interests of the institution and for brightening the career prospects of engineering and management graduates.

DIRECTOR

CMR TECHNICAL CAMPUS

Vision:

To impart quality education in serene atmosphere thus strive for excellence in Technology and Research.

Mission:

- To create state of art facilities for effective Teaching – Learning process.
- Pursue and Disseminate knowledge based research to meet the needs of Industry & Society.
- Infuse Professional, Ethical and Societal values among Learning Community.

Quality Policy:

- The management is committed in assuring quality service to all its stakeholders like parents, students, alumni, employees, employers and the community.
- Continual quality improvement by establishing and implementing mechanisms and modalities.
- Transparency in procedures and access to information and actions.

Core Values:

The CMR Technical Campus is guided by the following core values in delivering its mission and pursuing its vision.

- **A**ccountability: Demonstrate responsibility for our actions; establish and communicate clearly defined and articulated goals and objectives.
- **B**enchmark: To develop and pursue high standards by encouraging skill development and entrepreneurship to meet industry and society needs.
- **C**ommitment: Focus on students and stakeholders needs; continuously evaluate and improve academics, research and infrastructure.
- **D**ignity: Recognize the expertise of all members of the institute and encourage individual contribution and also include stakeholders in the decisions that affect them.

CMR TECHNICAL CAMPUS
UGC AUTONOMOUS
Kandlakoya (V), Medchal Road, Hyderabad–501401, Telangana State (India)

Academic Regulations [R22]
B.Tech. - Regular Four Year Degree Programme
(For students admitted from the academic year 2022 - 23)
&
B.Tech. - Lateral Entry Scheme
(For students admitted from the academic year 2023 - 24)

CMR Technical Campus (CMRTC) offers a 4-year (8 semesters) Bachelor of Technology (B.Tech.) degree programme, under Choice Based Credit System (CBCS).

1. **UNDER GRADUATE PROGRAMS OFFERED (Engineering & Technology)**

CMRTC (Autonomous), affiliated to JNTUH, offers 4 Year (8 Semesters) **B.Tech.** Degree Programme in the following Branches of Engineering:

S.No	Branch	Branch Code	Acronym
1	Computer Science and Engineering (CSE)	05	CSE
2	Computer Science and Engineering (AI & ML)	66	CSM
3	Artificial Intelligence and Machine Learning	73	AIM
4	Computer Science and Engineering (Data Science)	67	CSD
5	Computer Science and Engineering (Cyber Security)	62	CSC
6	Information Technology	12	IT
7	Electronics and Communication Engineering	04	ECE
8	Computer Science and Information Technology	33	CSI

2. **ADMISSION CRITERIA AND MEDIUM OF INSTRUCTION**

2.1 **Admission into first year of four- year B. Tech. (Regular) Degree Programme:**

2.1.1 **Eligibility:** A candidate seeking admission into the first year of four-year B. Tech. Degree Programme should have:

(i) Passed either Intermediate Public Examination (IPE) conducted by the Board of Intermediate Education, Telangana, with Mathematics, Physics and Chemistry as optional subjects or any equivalent examination recognized by Board of Intermediate Education, Telangana or a Diploma in Engineering conducted by the Board of Technical Education, Telangana or equivalent Diploma recognized by Board of Technical Education for admission as per guidelines defined by the Regulatory bodies of Telangana State Council for Higher Education (TSCHE) and AICTE.

(ii) Secured a rank in the TSEAMCET examination conducted by TSCHE for allotment of a seat by the Convenor, TSEAMCET.

2.1.2 **Admission Procedure:** Admissions are made into the first year of four- year B. Tech. Degree Programme as per the stipulations of the TSCHE.

(a) Category A: 70% of the seats are filled through TSEAMCET counseling.
(b) Category B: 30% of the seats are filled by the Management.

2.2 Admission into the second year of four-year B. Tech. (Regular) Degree Programme Under Lateral Entry Scheme.

2.2.1 **Eligibility**: A candidate seeking admission into the II year I Semester B. Tech. Regular Degree Programme under Lateral Entry Scheme (LES) should have passed the qualifying examination (B.Sc. Mathematics or Diploma in concerned course) and have secured a rank

at Engineering Common Entrance Test TSECET (FDH). Admissions are made in accordance with the instructions received from the Convenor, TSECET and Government of Telangana State.

2.2.2   **Admission Procedure:** Admissions are made into the II year of four-year B.Tech. (Regular) Degree Programme through Convenor, TSECET (FDH) against the sanctioned intake in each Programme of study as lateral entry student.

2.3   **Branch Transfers:** There shall be no Branch transfers after the completion of Admission Process.

2.4   **Medium of Instruction:** The Medium of Instruction and Examinations for the entire B.Tech. programme will be in **English** only.

3.   B. Tech. PROGRAMME STRUCTURE

3.1   Admitted under Four Year B. Tech. (Regular) degree Programme:

3.1.1   A student after securing admission shall pursue the under graduate programme in B.Tech for a minimum period of **four** academic years (8 semesters), and a maximum period of **eight** academic years (16 semesters) starting from the date of commencement of first year first semester, failing which, students shall forfeit their seat in B.Tech course.

3.1.2   As per AICTE guidelines, a 3-week mandatory **"Induction Programme"** shall be offered toI - B.Tech newly admitted students to get acquainted with the professional environment and prepare them for the academic schedules ahead.

3.1.3   The entire B.Tech. programme is structured for a total of 160 credits. Distribution of credits Semester-wise is available in the respective course structure.

3.1.4   Each student shall register and secure 160 credits (with CGPA ≥ 5) for the completion of the under graduate programme and award of the B.Tech degree.

3.2   Admitted under Lateral Entry Scheme (LES) into B. Tech. degree Programme:

3.2.1   After securing admission into II year B.Tech. I Semester, the LES students shall pursue a course of study for not less than three academic years (6 Semesters) and not more than six academic years (12 Semesters), failing which students shall forfeit their seat in B.Tech. programme.

3.2.2   The student shall register and secure 120 credits (with CGPA ≥ 5) from II year to IV year B.Tech. programme (LES) for the award of B. Tech degree.

3.3   The Course Structure is organized based on the AICTE Model Curriculum (Jan-2018) for Under-Graduate Degree Courses in Engineering & Technology. **UGC / AICTE** specified definitions / descriptions are adopted appropriately for various terms and abbreviations usedin these Academic Regulations / Norms, which are listed below:

3.3.1   Semester Scheme:
The evaluation of course is on the basis of Choice Based Credit System (CBCS) and Credit Based Semester System (CBSS) as indicated by UGC while the course Curriculum / Course Structure is as suggested by AICTE.

- B.Tech. (Regular) Programme is of 4 Academic Years (8 Semesters)
- B.Tech. (LES) Programme is of 3 Academic Years (6 Semesters),
- Each academic year is divided into two semesters
- Each semester is of 22 weeks (≥ 90 Instructional days per semester)
- Each Semester is having - 'Continuous Internal Evaluation (CIE)' and 'End Semester Examination (ESE).

3.3.2   **Credit Courses:**

a) All Subjects / Courses are to be registered by a student in a Semester to earn Credits. Credits shall be assigned to each Subject / Course in a L: T: P: C (Lecture Periods: TutorialPeriods: Practical Periods : Credits) Structure based on the following general pattern:

Theory		Practical	
1 Hr. Lecture (L)	1 credit	1 Hr. Practical (P)	0.5 credit
1 Hr. Tutorial (T)	1 credit	2 Hrs Practical (Lab)	1.0 credit

All Mandatory Courses, Study Tour, Guest Lecture, etc., will not carry any Credits.

b) **Contact Hours:** Weekly contact hours – maximum of 30 hours per week (1 hour = 60 Minutes) including credit and non-credit courses.

3.3.3   **Subject / Course Classification:**

CMRTC has followed the guidelines specified by AICTE / UGC / JNTUH. The subjects / courses offered in B.Tech. programme are broadly classified as mentioned below.

S. No.	Broad Course Classification	Course Group/ Category	Course Description
1	Foundation Courses	BS – Basic Sciences	Includes mathematics, physics and chemistry subjects
2		ES - Engineering Sciences	Includes fundamental engineering subjects
3		HS – Humanities and Social sciences	Includes subjects related to humanities, social sciences and management
4	Core Courses	PC – Professional Core	Includes core subjects related to the parent discipline/ department/ branch of Engineering.
5	Elective Courses	PE – Professional Electives	Includes elective subjects related to the parent discipline/ department/ branch of Engineering.
6		OE – Open Electives	Elective subjects which include inter-disciplinary subjects or subjects in an area outside the parent discipline/ department/ branch of Engineering.
7	Core Courses	PR- Project Work	B.Tech. project or UG project or UG major project or Project Stage I & II
8		Industrial training/ Mini- project	Industrial training/ Summer Internship Industrial Oriented Mini-project/ Mini-project
9		Seminar	Seminar/ Colloquium based on core contents related to parent discipline/ department/ branch of Engineering.
10	Minor courses	-	1 or 2 Credit courses (subset of HS)
11	Mandatory Courses	MC	Mandatory courses (non-credit)
12	Audit Courses	AC	

3.3.4   Subject Code Nomenclature:

1	2	3	4	5	6	7	8	9

1, 2 - Year of implementation of Regulation
3, 4 - Department Code (Course offering department)
5 - Serial No. of Semester (1 to 8)
6, 7 - Serial No. of Subject, Semester wise
8, 9 - Course Group/ Category

Example: - 19EC302PC

4.   COURSE REGISTRATION

4.1   A '**Faculty Advisor/Mentor**' shall be assigned to each student to advise the student about the B.Tech. programme, course structure and curriculum, choice / option for subjects / courses, based on his/her competence, progress, pre-requisites and interest.

4.2   The academic section of the college invites 'registration forms' from students before the beginning of the semester through online submission, ensuring '**date** and **time stamping**'. The online registration requests for any 'current semester' shall be completed **before the commencement of ESEs (End Semester Examinations) of the 'preceding semester'**.

4.3   A student can apply for **online** registration, **only after** obtaining the '**written approval**' from his faculty advisor or Mentor, which should be submitted to the college academic section through the Head of the Department. A copy of it shall be retained with Head of the Department, faculty advisor and the student.

4.4   A student has to register for all subjects/courses in a semester as specified in the course structure and may be permitted to register one additional theory subject / course limited to 3 credits, based on the student's **progress** and SGPA / CGPA, and completion of the '**pre- requisites'** as indicated for various subjects/courses, in the department course structure and syllabus contents.

4.5   If the student submits ambiguous choices or multiple options or erroneous (incorrect) 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.

4.6   Subject / course options exercised through **online** registration are final and **cannot** be changed or inter- changed; further, alternate choices also will not be considered. However, if the subject / course that has already been listed for registration by 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 - either for a new subject (subject to offering of such a subject), or for another existing subject (subject to availability of seats), which may be considered. Such alternate arrangements will be made by Head of the Department, with due notification and time-framed schedule, within the **first week** from the commencement of class-work for that semester.

4.7   Dropping of additional registered subject / course (refer 4.4) may be permitted only after obtaining prior approval from the faculty advisor / Mentor, '**within a period of 15 days**' from the commencement of that semester.

4.8   **Open electives**: The students have to choose three Open Electives (OE-I, II & III) from the list of Open Electives given by other departments. However, the student can opt for an Open Elective subject offered by his own (parent) department, if the student has not registered and not studied that subject under any category (Professional Core, Professional Electives, Mandatory Courses etc.) offered by parent department in any semester. Open Elective subjects already studied should not repeat/should not match with any category (Professional Core, Professional Electives, Mandatory Courses etc.) of subjects even in the forthcoming semesters.

4.9   **Professional electives**: Students have to choose Professional Electives (PE-I to VI), wherever offered, from the list of professional electives given.

4.10   **Mandatory Courses (Non-Credit):** All mandatory courses, wherever offered, require prior registration.

5.   SUBJECTS / COURSES TO BE OFFERED

5.1   A typical Section (or Class) Strength for each Semester shall be 60. A subject / course may be offered to the students, **if only** a minimum 1/3 of students register to the course. The Maximum Strength of a Section is limited to 80 (60 + 1/3 of the Section Strength).

i) More than **one faculty member** may offer the **same subject** (lab / practical's may be included with the corresponding theory subject in the same semester) in any semester.

ii) However, selection of choice for students will be based on '**first come first serve** basis and CGPA criterion' (i.e. the first focus shall be on early **on-line entry** from the student for registration in that semester, and the second focus, if needed, will be on CGPA of the s tudent).

iii) If more entries for registration of a subject come into picture, then the concerned Head of theDepartment shall take necessary decision, whether or not to offer such a subject / course for **two (or multiple) sections**.

6.   ATTENDANCE REQUIREMENTS

6.1   A student shall be eligible to appear for the semester end examinations, if the student acquires a minimum 75% of attendance in aggregate of all the subjects / courses (including attendance in mandatory courses like Environmental Science, Constitution of India, Intellectual Property Rights, and Gender Sensitization Lab) for that semester. **Two periods** of attendance for each theory subject shall be considered, if the student appears for the mid-term examination of that subject. *This attendance should also be included in the final attendance.*

6.2   Shortage of attendance in aggregate upto 10% (65% and above, and below 75%) in each semester may be condoned by the college academic committee on genuine and valid grounds, based on the student's representation with supporting evidence.

6.3   A stipulated fee shall be payable towards condoning of shortage of attendance.

6.4   Shortage of attendance below 65% in aggregate shall in **no** case be condoned.

6.5   **Students whose shortage of attendance is not condoned in any semester are not eligible to take their end examinations of that semester. They get detained and their registration forthat semester shall stand cancelled. They will not be promoted to the next semester.** They may seek re-registration for all those subjects registered in that semester in which student was detained, by seeking re-admission into that semester as and when offered; 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 alternate electives may be chosen from the **same** set of elective subjects offered under that category.

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

6.7   The attendance requirements of B. Tech. (Regular) shall be applicable to B. Tech. (LES).

7.   ACADEMIC REQUIREMENTS

The following academic requirements have to be satisfied, in addition to the attendance requirements mentioned in item no. 6.

7.1   A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/course, if student secures not less than 35% of marks (14 marks out of 40) in the Continuous Internal Evaluation (CIE), not less than 35% of marks (21 marks out of 60 marks) in the End Semester Examination (ESE), and a minimum of 40% of marks (40 marks out of 100 marks) in the sum total of the Continuous Internal Evaluation (CIE) and End Semester Examination (ESE) taken together; in terms of letter grades, this implies securing 'C' grade or above in that subject / course.

7.2   A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to Real-time Research Project (or) Field Based Research Project (or) Industry Oriented Mini Project (or) Internship (or) Seminar, if the student secures not less than 40% marks (i.e. 40 out of 100 allotted marks) in each of them. The student is deemed to have failed, if he (i) does not submit a report on Industry Oriented Mini Project/Internship, or (ii) not make a presentation of the same before the evaluation committee as per schedule, or (iii) secures less than 40% marks in Real-time Research Project (or) Field Based Research Project (or) Industry Oriented Mini Project (or) Internship evaluations.

A student may reappear once for each of the above evaluations, when they are scheduled again; if the student fails in such 'one reappearance' evaluation also, the student has to reappear for the same in the next subsequent semester, as and when it is scheduled.

7.3   Promotion Rules

7.3.1   B.Tech. (Regular):

S. No.	Promotion	Conditions to be fulfilled
1	First Semester to Second Semester	Regular course of study of First Semester
2	Second Semester to Third Semester	**(i).** Regular course of study of Second Semester **(ii).** Must have secured at least 50% credits (20 out of 40 credits) up to Second Semester from all the relevant regular and supplementary examinations whether the student takes those examinations or not.
3	Third Semester to Fourth Semester	Regular course of study of Third Semester
4	Fourth Semester to Fifth Semester	**(i)** Regular course of study of Fourth Semester **(ii).** Must have secured at least 60% credits (48 out of 80 credits) up to Fourth Semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
5	Fifth Semester to Sixth Semester	Regular course of study of Fifth Semester
6	Sixth Semester to Seventh Semester	**(i)** Regular course of study of Sixth Semester **(ii).** Must have secured at least 60% credits (72 out of 120 credits) up to Sixth Semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
7	Seventh Semester to Eighth Semester	Regular course of study of Seventh Semester

7.3.2   B. Tech - Lateral Entry Scheme (LES):

S. No.	Promotion	Conditions to be fulfilled
1	Third Semester to Fourth Semester	Regular course of study of Third Semester
2	Fourth Semester to Fifth Semester	**(i)** Regular course of study of Fourth Semester **(ii)** Must have secured at least 50% credits (20 out of 40 credits) up to Fourth Semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
3	Fifth Semester to Sixth Semester	Regular course of study of Fifth Semester

4	Sixth Semester to Seventh Semester	**(i)** Regular course of study of Sixth Semester
		(ii). Must have secured at least 60% credits (48 out of 80 credits) up to Sixth Semester from all the relevant regular and supplementary examinations, whether the student takes those examinations or not.
5	Seventh Semester to Eighth Semester	Regular course of study of Seventh Semester

7.4   A student (i) shall register for all courses/subjects covering 160 credits (120 credits in case of LES) as specified and listed in the course structure, (ii) fulfills all the attendance and academic requirements for 160 credits (120 credits in case of LES), (iii) earn all 160 credits (120 credits in case of LES) by securing SGPA $\geq$ 5.0 (in each semester), and CGPA $\geq$ 5 (at the end of 8 semesters), (iv) **passes all the mandatory courses**, to successfully complete the undergraduate programme. The performance of the student in these 160 credits (120 credits in case of LES) shall be considered for the calculation of the final CGPA (**at the end of undergraduate programme**), and shall be indicated in the grade card / marks memo of IV-year II semester.

7.5   If a student registers for '**additional subjects'** (in the parent department or other departments / branches of engineering) other than those listed subjects totaling to 160 credits (120 credits in case of LES) as specified in the course structure of parent department, the performances in those '**additional subjects**' (although evaluated and graded using the same procedure as that of the required 160 credits (120 credits in case of LES)) will not be taken into account while calculating the SGPA and CGPA. For such '**additional subjects'** registered, % of marks and letter grade alone will be indicated in the grade card as a performance measure, subject to completion of the attendance and academic requirements as stated in regulations 6 and 7.1 to 7.4 above.

7.6   A student eligible to appear in the End Semester Examination for any subject / course, but absent from it or failed (thereby failing to secure **'C'** grade or above) may reappear for that subject / course in the supplementary examination as and when conducted. In such cases, internal marks (CIE) assessed earlier for that subject / course will be carried over, and added to the marks to be obtained in the ESE supplementary examination for evaluating performance in that subject.

7.7   A student **detained in a semester due to shortage of attendance may be re-admitted when the same semester is offered in the next academic year for fulfillment of academic requirements**. The academic regulations under which student has been readmitted shall be applicable. However, no grade allotments or SGPA / CGPA calculations will be done for the entire semester in which student has been detained.

7.8   A student detained **due to lack of credits, shall be promoted to the next academic year only after acquiring the required academic credits.** The academic regulations under which student has been readmitted shall be applicable to him.

8.   EVALUATION - DISTRIBUTION AND WEIGHTAGE OF MARKS

8.1   The performance of a student in every subject/course (including practicals and Project Stage – I & II) will be evaluated for 100 marks each, with 40 marks allotted for CIE (Continuous Internal Evaluation) and 60 marks for ESE (End Semester Examination).

8.2   **Evaluation of Theory Subjects / Courses:**

A)   **Continuous Internal Evaluation (CIE):** For each theory subject, during a semester, there shall be two mid-term examinations. Each Mid-Term examination consists of two parts i) **Part – A** for 10 marks, ii) **Part – B** for 20 marks with a total duration of 2 hours as follows:

1. Mid-Term Examination for 30 marks:

    a. Part - A: Descriptive paper for Part-A (10 marks) Consists of one compulsory question with 5 sub questions (2, 2, 1 questions from Units I, II, III respectively in I Mid-Term and 1, 2, 2 questions from Units III, IV, V respectively in II Mid-Term) carrying 2 marks each.

    b. Part – B: Descriptive paper for Part-B (20 marks) consists of 3 questions (May contain sub questions) carrying 8 marks, 8 marks & 4 marks from Units I, II, III respectively in I Mid-Term and 4 marks, 8 marks & 8 marks from Units III, IV, V respectively in II Mid-Term with internal choice. The student has to answer all the questions.

The **average of the two Mid-Term examinations** (I Mid-Term & II Mid-Term) shall be taken as the final marks for Mid –Term examination (for 30 marks).

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

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

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

While the first mid-term examination shall be conducted on 50% of the syllabus, the second mid-term examination shall be conducted on 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 mid- term examination, and the second assignment should be submitted before the conduct of the second mid-term examination. 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 before II Mid-Term Examination.

The student, in each subject, shall have to earn 35% of marks (i.e. 14 marks out of 40 marks) in CIE, 35% of marks (i.e. 21 marks out of 60) in ESE and Overall 40% of marks (i.e. 40 marks out of 100 marks) both CIE and ESE marks put together.

The student is eligible to write End Semester Examination of the concerned subject, if the student scores ≥ 35% (14 marks) of 40 Continuous Internal Evaluation (CIE) marks.

In case, the student appears for End Semester Examination (ESE) of the concerned subject but not scored minimum 35% of CIE marks (14 marks out of 40 internal marks), his performance in that subject in ESE shall stand cancelled inspite of appearing the ESE.

There is **NO** Computer Based Test **(CBT)** for R22 regulations.

B) **End Semester Examinations:** The duration of End Semester Examination (ESE) is 3 hours. The details of the end semester question paper pattern are as follows:

The End Semester Examination (ESE), 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 (Two from each unit) carrying equal marks.
- Part-B consists of five questions (numbered from 2 to 11) 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.

C) For the subject, **Computer Aided Engineering Graphics**, the Continuous Internal Evaluation (CIE) and Semester End Examinations (SEE) evaluation pattern is same as other theory subjects for **Non-Circuit Branches,** Practical subjects **for Circuit Branches Like ECE, CSE/IT and allied branches.**

8.3   **Evaluation of Practical Subjects / Courses:** In any semester, a student has to complete at least 08 to 10 experiments / exercises in each laboratory course and get the record certified by the Subject teacher and concerned Head of the Department to be eligible for End Semester Examination.

For practical subjects, there shall be a Continuous Internal Evaluation (CIE) during the Semester for 40 internal marks and 60 marks for End Semester Examination (ESE).

A) **Continuous Internal Evaluation (CIE):** 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 examination conducted by the laboratory teacher concerned shall be evaluated for 10 marks.

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

B) **End Semester Examination (ESE):** The ESE for practical subject / course shall be conducted at the end of the semester by one internal and one external examiner appointed by the Head of the Institution as per the recommendation of the concerned Head of the Department.

In the End Semester 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 10 marks for viva-voce on concerned laboratory course

The student, in each subject, shall have to earn 35% of marks (i.e. 14 marks out of 40 marks) in CIE, 35% of marks (i.e. 21 marks out of 60) in ESE and Overall 40% of marks (i.e. 40 marks out of 100 marks) both CIE and ESE marks put together.

The student is eligible to write End Semester Examination of the concerned subject, if the student scores ≥ 35% (14 marks) of 40 Continuous Internal Evaluation (CIE) marks.

In case, the student appears for End Semester Examination (ESE) of the concerned subject but not scored minimum 35% of CIE marks (14 marks out of 40 internal marks), his performance in that subject in ESE shall stand cancelled inspite of appearing the ESE.

8.4   The evaluation of courses having ONLY internal marks in I-Year I Semester and II- Year II Semester is as follows:

1. I Year I Semester course (ex., Basic Elements of Engineering & Technology): The internal evaluation is for 50 marks and it shall take place during I Mid-Term examination and II Mid-Term examination. The average marks of two Mid-Term examinations is the final for 50 marks. Student shall have to earn 40%, i.e 20 marks out of 50 marks from average of the two examinations. There shall be NO external evaluation. The student is deemed to have failed, if he (i) is absent as per schedule, or (ii) secures less than 40% marks in this course.

For Circuit Branches Like ECE, CSE/IT and allied branches the Continuous Internal Evaluation (CIE) will be for 50 marks. Each Mid-Term examination consists of two parts i) Part – A for 20 marks, ii) Part – B for 20 marks with a total duration of 2 hours.

   a. Part - A: Descriptive paper for Part-A (20 marks) Consists of one compulsory question with 10 sub questions (4, 4, 2 questions from Units I, II,III respectively in I Mid-Term and 2, 4, 4 questions from Units III, IV, V respectively in II Mid-Term) carrying 2 marks each.

   b. Part – B: Descriptive paper for Part-B (20 marks) consists of 3 questions (May contain sub questions) carrying 8 marks, 8 marks & 4 marks from Units I, II, III respectively in I Mid-Term and 4 marks, 8 marks & 8 marks from Units III, IV, V respectively in II Mid-Term with internal choice. The student has to answer all the questions.

The remaining 10 marks of Continuous Internal Evaluation are for Assignment (5marks) and Subject Viva-Voce/PPT/Poster Presentation/ Case Study (5 marks) and the evaluation pattern will remain same as for other theory subjects.

For all other branches, the Continuous Internal Evaluation (CIE) will be for 50

marks. Out of the 50 marks for internal evaluation:

a) 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

b) 10 marks for viva-voce (or) tutorial (or) case study (or) application (or) poster presentation of the course concerned.

c) Internal practical examination conducted by the laboratory teacher concerned shall be evaluated for 15 marks.

d) The remaining 15 marks are for Laboratory Report/Project and Presentation, which

consists of the Design (or) Software / Hardware Model Presentation (or) AppDevelopment (or) Prototype Presentation submission which shall be evaluated after completion of laboratory course and before semester end practical examination.

2. II Year II Semester Real-Time (or) Field-based Research Project course: The internal evaluation is for 50 marks and it shall take place during I Mid-Term examination and II Mid-Term examination. The average marks of two Mid-Term examinations is the final for 50 marks. Student shall have to earn 40%, i.e 20 marks out of 50 marks from average of the two examinations. There shall be NO external evaluation. The student is deemed to have failed, if he (i) does not submit a report on the Project, or (ii) does not make a presentation of the same before the internal committee as per schedule, or (ii) secures less than 40% marks in this course.

8.5   There shall be an Industry training (or) Internship (or) Industry oriented Mini-project (or) Skill Development Courses (or) Paper presentation in reputed journal (or) Industry Oriented Mini Project in collaboration with an industry of their specialization. Students shall register for this immediately after II-Year II Semester Examinations and pursue it during summer vacation/semester break & during III Year without effecting regular course work. Internship at reputed organization (or) Skill development courses (or) Paper presentation in reputed journal (or) Industry Oriented Mini Project shall be submitted in a report form and presented before the committee in III-year II semester (VI Semester) before end semester examination. It shall be evaluated for 100 external marks. The committee consists of an External Examiner, Head of the Department, Supervisor of the Industry Oriented Mini Project (or) Internship etc, Internal Supervisor and a Senior Faculty Member of the Department. There shall be **NO internal marks** for Industry Training (or) Internship (or) Mini-Project (or) Skill Development Courses (or) Paper Presentation in reputed journal (or) Industry Oriented Mini Project.

8.6   **Evaluation of Project work:** The Project work shall be started and evaluated as per the following Guidelines.

a)   The UG project shall be initiated at the end of the IV Year I Semester (VII Semester) and the duration of the project work is one semester. The student must present Project Stage – I during IV Year I Semester before II Mid examinations, in consultation with his Supervisor, the title, objective and plan of action of his Project work to the departmental committee for approval before commencement of IV Year II Semester. Only after obtaining the approval of the departmental committee, the student can start his project work.

b)   UG project work shall be carried out in two stages: Project Stage – I for approval of project before Mid-II examinations in IV Year I Semester (VII Semester) and Project Stage – II during IV Year II Semester (VIII Semester). Student has to submit project work report at the end of IV Year II Semester. The project shall be evaluated for 100 marks before commencement of ESE Theory examinations.

c)   For Project Stage – I, the departmental committee consisting of Head of the Department, project supervisor and a senior faculty member shall approve the project work to begin before II Mid-Term examination of IV Year I Semester (VII Semester). The student is deemed to be not eligible to register for the Project work, if he does not submit a report on Project Stage - I or does not make a presentation of the same before the evaluation committee as per schedule.

A student who has failed may reappear once for the above evaluation, when it is scheduled again; if he fails in such 'one reappearance' evaluation also, he has to reappear for the same in the next subsequent semester, as and when it is scheduled.

d)   For Project Stage – II, the external examiner shall evaluate the project work for 60 marks and the internal project committee shall evaluate it for 40 marks. Out of 40 internal marks, the departmental committee consisting of Head of the Department, Project Supervisor and a Senior Faculty Member shall evaluate the project work for 20marks and Project Supervisor shall evaluate for 20 marks. The topics for Industry Oriented Mini Project/ Internship/SDC etc. and the main Project shall be different fromthe topic already taken. The student is deemed to have failed, if he (i) does not submit a report on the Project, or (ii) does not make a presentation of the same before the External Examiner as per schedule, or (iii) secures less than 40% marks in the sum totalof the CIE and ESE taken together.

e)   For the Project Stage - I, the Viva-voce shall be conducted at the end of the VII Semester, before the commencement of the End Semester Examinations, by theProject Evaluation Committee comprising of the Head of the Department or One Senior Faculty member and Supervisor and the Project Stage – II Viva-voce shall be conducted by the Committee comprising of an External Examiner appointed by the Head of the Institution, Head of the Department and Project Supervisor at the end ofthe VIII Semester, before the commencement of the End Semester Examinations.

f)   If a student does not appear (or fails) for any of the two Viva-voce examinations at the scheduled times as specified above, he may be permitted to reappear for Project Stage - I and/or Project Stage - II Viva-voce examinations, as and when they are scheduled again in that semester; if he fails in such 'one reappearance' evaluation also, he has to reappear for the same in the next subsequent semester(s), as and when they are scheduled, as supplementary candidate.

8.7   A student shall be given only one time chance to re-register for a maximum of two subjects in a semester:

•   If the internal marks secured by a student in the Continuous Internal Evaluation marks for 40 (Sum of average of two mid-term examinations consisting of descriptive Part-A & Part-B, Average of two Assignments & Subject Viva-Voce/PPT/Poster Presentation/ Case Study on a topic in the concerned subject) are less than 35% and failed in those subjects.

A student must re-register for the failed subject(s) for 40 marks within four weeks of commencement of the classwork in next academic year. Also, the student has to earn 35% of total internal marks (14 out of 40 marks including Mid-Term examinations, Assignment & Subject Viva-voce/PPT/ Poster presentation/ Case Study on a topic in the concerned subject).

In the event of the student taking this chance, his Continuous Internal Evaluation marks for 40 and End Semester Examination marks for 60 obtained in the previous attempt stand cancelled.

8.8   **Evaluation of Mandatory Non-Credit Courses:** For mandatory courses of Environmental Science, Constitution of India, Intellectual Property Rights, and Gender Sensitization lab, a student has to secure 40 marks out of 100 marks (i.e. 40% of the 100 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. No marks or letter grades shall be allotted for mandatory/non-credit courses. Only Pass/Fail shall be indicated in Grade Card.

8.9   **MOOCs Courses through SWAYAM Portal:** The approved list of SWAYAM courses shall be notified and made available at the beginning of the semester. The students are given option to choose Professional Electives / Open Electives in the curriculum offered by the institute or from the notified list. The maximum number of transferable credits through SWAYAM Courses are capped at 18 (06 Courses).

9. GRADING PROCEDURE

9.1   Grades will be awarded to indicate the performance of the student in each theory subject, laboratory/practicals, Industry-Oriented Mini Project/Internship/SDC and Project-I & Project-II based on the percentage of marks obtained in Continuous Internal Evaluation plus End Semester Examination, both taken together, as specified in item 8 above, 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/AICTE 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 (≥ 90% , ≤ 100%)	O (Outstanding)	10
Below 90% but not less than 80% (≥ 80% , <90%)	A$^+$ (Excellent)	9
Below 80% but not less than 70% (≥ 70% , <80%)	A (Very Good)	8
Below 70% but not less than 60% (≥ 60% , <70%)	B$^+$ (Good)	7
Below 60% but not less than 50% (≥ 50% , <60%)	B (Average)	6
Below 50% but not less than 40% (≥ 40% , <50%)	C (Pass)	5
Below 40% (< 40%)	F (Fail)	0
Absent	Ab	0

9.3   A student obtaining **F** grade or **AB** grade in any subject shall be considered **'failed'** in that subject and will be required to reappear in '**Supplementary Exam**' in the End Semester Examination (ESE), as and when offered. In such cases, Continuous Internal Examination (CIE) in those subject(s) will remain 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 reappear as a '**supplementary student**' in the semester end examination, as and when offered next. In this case also, the internal marks in those subjects will remain the same as those obtained earlier.

9.5   A letter grade does not imply any specific % of marks. secured by the student, but it indicates only the range of percentage of marks.

9.6   A student earns grade point (GP) in each subject / course, on the basis of the letter grade obtained in that subject/course (excluding mandatory non-credit courses). Then the corresponding '**credit points**' (CP) are computed by multiplying the grade point with credits for that particular subject/course.

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

9.7   The student passes the subject / course only when **GP $\geq$ 5 (C grade or above).**

9.8   The Semester Grade Point Average (SGPA) is calculated by dividing the sum of credit points (ΣCP) secured from all subjects / courses registered in a semester, by the total number of credits registered during that semester. SGPA is rounded off to **two** decimal places. SGPA is thus computed as

$$\text{SGPA } (S_i) = \sum (C_i \times G_i) / \sum C_i$$

Where C_i is the number of credits of the ith course and G_i is the grade point scored by the student in the ith course.

9.9   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, I semester onwards, at the end of each semester,as per the formula:

$$\text{CGPA} = \sum (C_j \times S_i) / \sum C_j$$

where S_i is the SGPA of the jth semester and C_j is the total number of credits in that semester.

Illustration of calculation of SGPA					Illustration of calculation of CGPA			
Course /Subject	Credits	Letter Grade	Grade Points	Credit Points	Sem.	Credits	SGPA	Credits x SGPA
Course 1	4	A	8	4 x 8 = 32	Sem I	20	7	20 x 7= 140
Course 2	4	O	10	4 x 10 = 40	Sem II	20	6	20 x 6= 120
Course 3	3	C	5	3 x 5 = 15	Sem III	20	6.5	20 x 6.5 =130
Course 4	3	B	6	3 x 6 = 18	Sem IV	20	6	20 x 6 = 120
Course 5	1.5	A+	9	1.5x9 = 13.5	Sem V	20	7.5	20 x 7.5 =150
Course 6	1.5	A	8	1.5x8 =12	Sem VI	20	8	20 x 8 = 160
Course 7	1.5	B+	7	1.5x7 =10.5	Sem VII	20	8.5	20 x 8.5 =170
Course 8	1.5	A+	9	1.5x9 =13.5	Sem VIII	20	8	20 x 8 = 160
Total	**20**		**62**	**154.5**	**Total**	**160**		**1150**
SGPA = 154.5/20 = 7.72					**CGPA = 1150/160 = 7.18**			

9.10   For merit ranking or comparison purposes or any other listing, **only** the '**rounded off**' values of the CGPAs will be used.

9.11   SGPA and CGPA of a semester will be mentioned in the semester Memorandum of Grades if all subjects of that semester are passed in first attempt. Otherwise the SGPA and CGPA shall be mentioned only on the Memorandum of Grades in which sitting he passed his last exam in that semester. However, mandatory courses will not be taken into consideration.

10.   PASSING STANDARDS

10.1   A student shall be declared '**successful'** or '**passed**' in a semester, if student secures a GP ≥ 5 ('C' grade or above) in every subject/course in that semester (i.e. when student gets an SGPA ≥ 5.00 at the end of that particular semester); and a student shall be declared '**successful**' or '**passed**' in the entire under graduate programme, only when a student gets a CGPA ≥ 5.00 for the award of the degree as required.

10.2   After the completion of semester, a grade card or grade sheet (or transcript) shall be issued to all the registered students of that semester, indicating the letter grades and credits earned. It will show the details of the courses registered (course code, title, no. of credits, grade earned etc.), credits earned, SGPA, and CGPA. **There is NO exemption of credits in any case.**

11   **DECLARATION OF RESULTS**

11.1   Computation of SGPA and CGPA are done using the procedure listed in 9.6 to 9.9.

11.2   For Final percentage of marks equivalent to the computed final CGPA, the following formula may be used:

<center>**Percentage of Marks = (final CGPA – 0.5) x 10**</center>

12   **AWARD OF DEGREE**

12.1   A student who registers for all the specified subjects/ courses as listed in the course structure and secures the required number of 160 credits (with CGPA $\geq$ 5.0), within 8 academic years from the date of commencement of the first academic year, shall be declared to have '**qualified**' for the award of B. Tech. degree in the branch of Engineering selected at the time of admission.

12.2   A Student who qualifies for the award of the degree as listed in item 12.1 shall be placed in the following classes.

1.   A student with final CGPA (at the end of the undergraduate programme) > 8.00, and fulfilling the following conditions - shall be placed in '**First Class with Distinction'**.

However, he

   (i)   Should have passed all the subjects/courses in '**First Appearance'** within the first 4 academic years (or 8 sequential semesters) for B. Tech (Regular) and first 3 academic years (or 6 sequential semesters) for B. Tech.(LES) from the date of commencement of first year first semester for B. Tech(Regular) and II Year I Semester for B. Tech. (LES).

   (ii)   Should not have been detained or prevented from writing the semester end examinations in any semester due to shortage of attendance or any other reason.

   A student not fulfilling any of the above conditions with final CGPA > 8 shall beplaced in '**First Class'.**

2.   Students with final CGPA (at the end of the undergraduate programme) $\geq$ 7.0 but < 8.00 shall be placed in '**First Class'.**

3.   Students with final CGPA (at the end of the undergraduate programme) $\geq$ 6.00 but < 7.00, shall be placed in '**Second Class**'.

4.   All other students who qualify for the award of the degree (as per item 12.1), with final CGPA (at the end of the undergraduate programme) $\geq$ 5.00 but < 6, shall be placed in '**pass class**'.

5.   A student with final CGPA (at the end of the undergraduate programme) < 5.00 will not be eligible for the award of the degree.

12.3   Approved by the Academic Council to restore the addition of grace marks up to 0.15% of total marks (i.e., maximum of 9 grace marks for regular and 7 grace marks for lateral entry students) and applying up to 2(two) theory subjects, as per the university proceedings No. JNTUH/EB/Grace Marks/2023 dated: 23.02.2023 and applicable for all B. Tech R18 A. Y 2022-23 onward outgoing students to get degree only. For all other batch or regulations students to satisfy their applicable rules and norms as per their academic regulations for getting the degree

12.4   **Award of Medals:** Students fulfilling the conditions listed under item 12.2 alone will be eligible for award of '**College Ranks**' and '**Medals**'.

12.5   **Award of 2-Year B.Tech. Diploma Certificate**

1. A student is awarded 2-Year UG Diploma Certificate in the concerned engineering branch on completion of all the academic requirements and earned all the 80 credits (within 4 years from the date of admission) upto B. Tech. II Year II Semester, if the student want to exit the 4-Year B. Tech. program and requests for the 2-Year B. Tech. (UG) Diploma Certificate.

2. The student **once opted andawarded for 2-Year UG Diploma Certificate, the student will be permitted to join** in B. Tech. III Year I Semester and continue for completion of remaining years of study for 4-Year B. Tech. Degree **ONLY** in the next academic year along with next batch students. However, if any student wishes to continue the study after opting for exit, he/she should register for the subjects/courses in III year I semester before commencement of classwork for that semester.

3. The students, who exit the 4-Year B. Tech. program after II year of study and wish to re-join the B. Tech. program, must submit the 2-Year B. Tech. (UG) Diploma Certificate awarded to him, subject to the eligibility for completion of Course/Degree.

4. A student may be permitted to take one year break after completion of II Year II Semester or B. Tech. III Year II Semester (with university permission through the principal of the college well in advance) and can re-enter the course in **next Academic Year in the same college** and complete the course on fulfilling all the academic credentials within a stipulated duration i.e. double the duration of the course (Ex. within 8 Years for 4-Year program).

5. LES students are not eligible for 2-Year B. Tech. Diploma Certificate.

12.6   **Graduation Day:** The College shall have its own Annual Graduation Day for the award of Degrees issued by the University.

12.7   **Transcripts:** After successful completion of prerequisite credits for the award of degree a transcript containing performance of all academic years will be issued as a final record. Duplicate transcripts will also be issued if required after the payment of requisite fee and also as per norms in vogue.

13   **WITHHOLDING OF RESULTS**

If the student has not paid the fees to the Institute at any stage, or has dues pending due to any reason whatsoever, or if any case of indiscipline is pending, the result of the student may be withheld, and the student will not be allowed to go into the next higher semester. The award or issue of the degree may also be withheld in such cases.

14   **SUPPLEMENTARY EXAMINATIONS**

Supplementary examinations for odd semester subjects will be conducted along with even semester regular examinations and vice versa.

15.   **TRANSITORY REGULATIONS**

A. For students detained due to shortage of attendance:

1. A Student who has been detained in I year of any previous Regulations due to lack of attendance, shall be permitted to join I year I Semester of R22 Regulations and he is required to complete the study of B. Tech. programme within the stipulated period of eight academic years from the date of first admission in I Year.

2. A Student who has been detained in any semester of II, III and IV years of any previous regulations for want of attendance, shall be permitted to join the corresponding semester of R22 Regulations and is required to complete the study of B. Tech. within the stipulated period of eight academic years from the date of first admission in I Year. The R22 Academic Regulations under which a student has been readmitted shall be applicable to that student from that semester. See rule (C) for further Transitory Regulations.

B. For students detained due to shortage of credits:

3. A student of any previous Regulations who has been detained due to lack of credits, shall be promoted to the next semester of R22 Regulations only after acquiring the required number of credits as per the corresponding regulations of his/her first admission. The total credits required are 160 (120 for LES) including Previous & R22 regulations. The student is required to complete the study of B. Tech. within the stipulated period of eight academic years from the year of first admission. The R22 Academic Regulations are applicable to a student from the year of readmission. See rule (C) for further Transitory Regulations.

C. For readmitted students in R22 Regulations:

4. A student who has failed in any subject under any regulation has to pass those subjects in the same regulations.

5. The maximum credits that a student acquires for the award of degree, shall be the sum of the total number of credits secured in all the regulations of his/her study including R22 Regulations. **There is NO exemption of credits in any case**.

6. If a student is readmitted to R22 Regulations and has any subject with 80% of syllabus common with his/her previous regulations, that particular subject in R22 Regulations will be substituted by another subject to be suggested by the CMRTC Academic Council.

Note: If a student readmitted to R22 Regulations and has not studied any subjects/topics in his/her earlier regulations of study which is prerequisite for further subjects in R22 Regulations, remedial classes shall be conducted to cover those subjects/topics for the benefit of the students.

16   STUDENT TRANSFERS

16.1   There shall be no branch transfers after the completion of admission process.

16.2   The students seeking transfer to CMRTC from various other institutions have to pass the failed subjects which are equivalent to the subjects of CMRTC, and also pass the subjects of CMRTC which the students have not studied at the earlier institution. Further, though the students have passed some of the subjects at the earlier institutions, if the same subjects are prescribed in different semesters of CMRTC, the students have to study those subjects in CMRTC in spite of the fact that those subjects are repeated.

16.3   The transferred students from other Institutions to CMRTC who are on rolls shall be provided one chance to write the CBT (for internal marks) in the **equivalent subject(s)** as per the clearance letter issued by the University.

16.4   One chance shall be provided to write the internal examinations in the **equivalent subject(s)** to the students transferred from other institutions to CMRTC as per the clearance (equivalence) letter issued by the University.

17   RULES OF DISCIPLINE

17.1   Any attempt by any student to influence the teachers, examiners, faculty members and staff of Controller of Examination office for undue favours in the exams, and bribing them either for marks or attendance will be treated as malpractice case and the student can be debarred from the college.

17.2   When the performance of the student in any subject(s) is cancelled as a punishment for indiscipline, student is awarded zero marks in that subject(s).

17.3   When the student's answer book is confiscated for any kind of attempted or suspected malpractice the decision of the Malpractice Prevention Committee is final.

18.   MALPRACTICE

18.1   **Malpractice Prevention Committee:** The committee shall examine the student's malpractice and indiscipline cases occurred, while conducting the examinations and recommend appropriate punishment to the Academic Council after taking explanation from the student and concerned invigilator as per the malpractice rules mentioned below. The committee consists of

a)   Controller of Examinations - Chairman
b)   Addl. Controller of Examinations - Convener
c)   Subject Expert - Member
d)   Head of the Department of which the student belongs to - Member
e)   The Invigilator concerned – Member

18.2 Malpractice Rules: Disciplinary Action for Improper Conduct in Examinations

S. No.	Nature of Malpractices / Improper Conduct	Punishment
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 appearingbut has not made use of (materialshall 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 orreceives it from any other candidate orally or by any other body language methods or communicates through cellphones 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 ofmaterial 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 shall 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's andproject 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 twoconsecutive 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 answerpaper 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 Controller of examinations / anyofficer 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 addl. Controller of examinations 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 addl. Controller of examinations, 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 theopinion of the officer on duty amounts to use of unfair meansor 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 aredebarred and forfeit their seats. In case ofoutsiders, 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 examinationhall.	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 Chief Superintendent for further action to award suitable punishment.	

19.   SCOPE

   i)   Wherever the words 'he, him, his' occur in the regulations, they shall include 'she, her, hers'.

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

   iii) The above mentioned rules and regulations are applicable in general to both B.Tech. (Regular) and B.Tech. (LES), unless and otherwise specific.

   iv) In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the College Academic Committee is final.

20.   REVISION AND AMENDMENTS TO REGULATIONS

The Academic Council may revise or amend the academic regulations, course structure or syllabi at any time, and the changes or amendments made shall be applicable to all students with effect from the dates notified by the Academic Council.

Academic Regulations for *B. Tech. with Honors program*

1. Objectives

The key objectives of offering B. Tech. with Honors program are:

- To expand the domain knowledge of the students laterally and vertically.

- To increase the employability of undergraduate students with expanded knowledge in one of the core Engineering disciplines.

- To provide an opportunity to students to pursue their higher studies in wider range of specialisations.

2. Academic Regulations for B. Tech. Honors degree

1) The weekly instruction hours, internal & external evaluation and award of grades are on par with regular 4-Years B. Tech. program.

2) For B. Tech with Honors program, a student needs to earn additional 20 credits (over and above the required 160 credits for B. Tech degree). The broad guidelines for the courses of Honors program, their respective credits weightage and semester-wise break-up of the course are enclosed as Annexure. All these 20 credits need to be completed in III year and IV year only.

3) After registering for the Honors programme, if a student is unable to pass all courses in first attempt and earn the required 20 credits, he/she shall not be awarded Honors degree. However, if the student earns all the required 160 credits of B. Tech., he/she will be awarded only B. Tech degree in the concerned branch.

4) There is no transfer of credits from courses of Honors program to regular B. Tech. degree course & vice versa.

5) These 20 credits are to be earned from the additional courses offered by the host department in the college or from a closely related department in the college as well as from the MOOCS platform.

6) For the courses selected under MOOCS platform following guidelines may be followed:
    a) Prior to registration of MOOCS courses, formal approval of the courses, by the University is essential. University before the issue of approval considers the parameters like the institute / agency which is offering the course, syllabus, credits, duration of the programme and mode of evaluation etc.
    b) Minimum credits for a MOOCS course must be equal to or more than the credits specified in the Honors course structure provided by the University.

c)   Only Pass-grade/marks or above shall be considered for inclusion of grades in the Honors grade memo.

d)   Any expenses incurred for the MOOCS courses are to be met by the students only.

7)   The choice to opt/take the Honors program is purely on the choice of the students.

8)   The student shall be given a choice of withdrawing all the courses registered and/or the credits earned for Honors program at any time; and in that case the student will be awardedonly B. Tech. degree in the concerned branch on earning the required credits of 160.

9)   The students of every branch can choose Honors program in their respective branches if they are eligible for the Honors program. A student who chooses an Honors program isnot eligible to choose a Minor program and vice-versa.

10) The B. Tech. with Honors program shall be offered from the AY 2021-22 onwards. The students who are pursuing their III year I semester in the current academic year can registerfor the Honors program if they fulfil the eligibility criteria.

11) A student can graduate with Honors if he/she fulfils the requirements for his/her regular B. Tech. program as well as fulfils the requirements for Honors program.

12) The institute shall maintain a record of students registered and pursuing their Honors programs branch-wise. The same report needs to be sent to the University once the enrolment process is complete.

13) The department shall prepare the time-tables for each Honors program offered at their respective departments without any overlap/clash with other courses of study in therespective semesters.

3.   Eligibility conditions of the students for the Honors degree

a)   A student can opt for B. Tech. degree with Honors, if she/he passed all subjects in first attempt in all the semesters till the results announced and maintaining 7.5 or moreCGPA.

b)   If a student fails in any registered course of either B. Tech. or Honors in any semesterof four years program, he/she will not be eligible for obtaining Honors degree. He willbe eligible for only B. Tech. degree.

c)   Prior approval of mentor and Head of the Department for the enrolment into Honors program, before commencement of III year ISemester (V Semester), is mandatory.

d)   If more than 30% of the students in a branch fulfil the eligibility criteria (as stated above), the number of students given eligibility should be limited to 30%. The criteriatobe followed for choosing 30% candidates in a branch may be the CGPA secured bythe students till II year Isemester.

e)   The department concerned should be preferably NBA accredited and shall offer at least one M. Tech. Program.

f) Successful completion of 20 credits earmarked for honors program with at least 7.5 CGPA along with successful completion of 160 credits earmarked for regular B. Tech. Program with at least 7.5 CGPA and passing all subjects in first attempt gives the eligibility for the award of B. Tech. (Honors) degree.

g) For CGPA calculation of B. Tech. course, the 20 credits of Honors program will notbe considered.

4. **Registration for the course in Honors program**

   a) At the beginning of each semester, just before the commencement of classes, students shall register for the courses which they wish to take in that semester.

   b) The students should choose a course from the list against each semester (from Honors course structure) other than the courses they have studied/registered for regular B.Tech. programme. No course should be identical to that of the regular B. Tech. course. The students should take the advice of faculty mentors while registering for a course atthe beginning of semester.

   c) The maximum No. of courses for the Honors is limited to two (three in case of inclusion of lab) in a semester along with regular semester courses.

   d) The registration fee to be collected from the students by the College is **Rs. 1000/-** per one credit.

   e) A fee for late registration may be imposed as per the norms.

Academic Regulations for *B. Tech. with Minor* program

1. Objectives

The key objectives of offering B. Tech. with Minor program are:

- To expand the domain knowledge of the students in one of the other branches of engineering.

- To increase the employability of undergraduate students keeping in view of better opportunity in interdisciplinary areas of engineering & technology.

- To provide an opportunity to students to pursue their higher studies in the inter-disciplinary areas in addition to their own branch of study.

- To offer the knowledge in the areas which are identified as emerging technologies/thrust areas of Engineering.

2. Minor courses and the offering departments

S. No.	Minor Program	Eligible branch of students	@Offering Department	Award of Degree
1.	Artificial Intelligence& Machine Learning	All branches, except B. Tech. in CSE (AI&ML) /B. Tech. (AI&ML)/ B. Tech. (AI)/ B. Tech. CSE(AI)	CSE	"B. Tech. in branch name with Minor in Artificial Intelligence & Machine Learning"
2.	Cyber Security	All branches, except B. Tech. in CSE (Cyber Security)/ B. Tech. (Cyber Security)	CSE	"B. Tech. in branch name with Minor in Cyber Security"
3.	Data Science	All branches, except B. Tech. in CSE (Data Science)/ B.Tech. (Data Science)	CSE	"B. Tech. in branch name with Minor in Data Science"
4.	IOT	All branches, except B. Tech.in CSE (IOT) / B. Tech. (IOT)	ECE	"B. Tech. in branch name with Minor in IOT"
5.	Innovation and Entrepreneurship	All branches.	Management Science / MBA	"B. Tech. in branch name with Minor in Innovation and Entrepreneurship"

Note: @ As per AICTE guide lines.

3. Academic Regulations for B. Tech. Degree with Minor programs

1. The weekly instruction hours, internal & external evaluation and award of grades are on par with regular 4-Years B. Tech. program.

2. For B. Tech. with Minor, a student needs to earn additional 18 credits (over and above the required 160 credits for B. Tech degree). The list of courses of each Minor program, their respective credits weightage and semester-wise break-up of the courses are enclosed as Annexure. All these 18 credits need to be completed in III year and IV year only.

3. After registering for the Minor programme, if a student is unable to earn all the required 18 credits in a specified duration (twice the duration of the course), he/she shall not be awarded Minor degree. However, if the student earns all the required 160 credits of B.Tech., he/she will be awarded only B. Tech degree in the concerned branch.

4. There is no transfer of credits from Minor program courses to regular B. Tech. degree course & vice versa.

5. These 18 credits are to be earned from the additional Courses offered by the host department in the college as well as from the MOOCS platform.

6. For the course selected under MOOCS platform following guidelines may be followed:

   a) Prior to registration of MOOCS courses, formal approval of the courses, by the University is essential. University before the issue of approval considers the parameters like the institute / agency which is offering the course, syllabus, credits, duration of the programme and mode of evaluation etc.

   b) Minimum credits for MOOCS course must be equal to or more than the credits specified in the Minor course structure provided by the University.

   c) Only Pass-grade/marks or above shall be considered for inclusion of grades in minor grade memo.

   d) Any expenses incurred for the MOOCS courses are to be met by the students only.

7. The choice to opt/take a Minor program is purely on the choice of the students.

8. The student shall be given a choice of withdrawing all the courses registered and/or the credits earned for Minor program at any time; and in that case the student will be awarded only B. Tech. degree in the concerned branch on earning the required credits of 160.

9. The student can choose only one Minor program along with his/her basic engineering degree. A student who chooses an Honours program is not eligible to choose a Minor program and vice-versa.

10. The B. Tech. with a Minor program shall be offered from the AY 2021-22 onwards. The students who are pursuing their III year I semester in the current academic year can register for the Minor program if they fulfil the eligibility criteria.

11. A student can graduate with a Minor if he/she fulfils the requirements for his/her regular

    B. Tech. program as well as fulfils the requirements for Minor program.

12. The institute shall maintain a record of students registered and pursuing their Minor programs, minor program-wise and parent branch-wise. The same report needs to be sentto the University once the enrolment process is complete.

13. The institute / department shall prepare the time-tables for each Minor course offered at their respective institutes without any overlap/clash with other courses of study in the respective semesters.

4. **Eligibility conditions for the student to register for Minor course**

   a) A student can opt for B.Tech. degree with Minor program if she/he has no active backlogs till II Year I Semester (III semester) at the time of entering into III year I semester.

   b) Prior approval of mentor and Head of the Department for the enrolment into Minor program, before commencement of III year ISemester (V Semester), is mandatory

   c) If more than 50% of the students in a branch fulfil the eligibility criteria (as stated above), the number of students given eligibility should be limited to 50%.

5. **Registration for the courses in Minor Program**

   d) At the beginning of each semester, just before the commencement of classes, studentsshall register for the courses which they wish to take in the that semester.

   e) The students should choose a course from the list against each semester (from Minors course structure) other than the courses they have studied/registered for regular B.Tech.programme. No course should be identical to that of the regular BTech course. The students should take the advice of faculty mentors while registering for a course at thebeginning of semester.

   f) The maximum No. of courses for the Minor is limited to two (three in case of inclusionof lab) in a semester along with regular semester courses.

   g) The registration fee to be collected from the students by the College is **Rs. 1000/-** per one credit.

   h) A fee for late registration may be imposed as per the norms.

<center>****</center>