



Academic Rules

(With effect from 2020-2021)

Name of the Programme (PG): M.E/M.Tech

Specializations offered:

- Structural Engineering
- CAD/CAM
- Communication Engineering
- Power Systems and Power Electronics
- Computer Science and Engineering
- Embedded System and VLSI Design
- Thermal Engineering
- Artificial Intelligence and Data Science

Chaitanya Bharathi Institute of Technology (A)

Chaitanya Bharathi (P.O), Gandipet
Hyderabad-500 075.Telangana State.

Chaitanya Bharathi Institute of Technology (A)

These rules are applicable to the students who are admitted to M.E/M.Tech(four Semesters) programme from the academic year 2021-21. The preliminary definitions and nomenclature are furnished in the following table.

Sl. No	Key Words	Definition
1.	Programme	An educational programme leading to award of a Degree M.E/M.Tech .
2.	Admission Procedure	As prescribed by Government of Telangana
3.	Academic Year	Two consecutive (one odd + one even) semesters constitute one academic year.
4.	Semester	Each semester will consist of 15-17 weeks of academic work equivalent to 90 actual teaching days. The odd semester may be scheduled from July to December and even semesteris from January to June.
5.	Course	Usually referred to, as 'papers' is a component of a programme. All courses need not carry the same weight. The courses should define learning objectives and learning outcomes. A course may be designed to comprise lectures/tutorials/laboratory work/ project work/ seminars/ Exams/ viva/ assignments/presentations/self-study etc. or a combination of some of these. The medium of instruction, examinations and project reports/dissertationshall be in English
6.	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 per week.
7.	CBSS	Credit Based Semester System (CBSS), the requirement for awarding a degree is prescribed in terms of number of credits to be completed by the students.
8.	Letter Grade	It is an index of the performance of students in a said course. Grades are denoted by letters like S, A, B, C, D, E, F etc..
9.	Grade Point	It is a numerical weight allotted to each letter grade on a 10-point scale.
10.	Credit Point	It is the product of grade point and number of credits for a course.
11.	SGPA	Semester Grade Point Average (SGPA), it is a measure of performance of work done in a semester. It is ratio of total credit points secured by a student in various courses registered in a semester and the total course credits taken during that semester. It shall be expressed up to two decimal places.
12.	CGPA	Cumulative Grade Point Average (CGPA), it is a measure of overall cumulative performance of a student over all semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters. It is expressed up to two decimal places.
13.	Grade Sheet	Based on the grades earned, a grade sheet shall be issued to all the registered students after every semester. The grade sheet will display the course details (Course title, number of credits, grade secured) along with SGPA of that semester and CGPA earned till that semester.

Types of Courses in the Programme :

Program Core Courses	These courses are to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.
Program Elective Courses	These courses can be chosen from a pool of courses which are supportive to the discipline of study/ program specific and providing an expanded scope
Open Elective course	The courses included under open electives are of importance in the context of special skill development and they may be on Business analytics, Industrial safety, Operation research and Cost management of engineering project.
Audit courses	These courses, covering subjects of developing desired attitude among the learners is on the line of initiatives such as Unnat Bharat Abhiyan, Yoga, Value education, Disaster management, Sanskrit, Pedagogy, Constitution of India, Personality development through Indian culture etc.
Mandatory Course	These courses are to be compulsorily studied by a student as a mandatory core requirement to complete the requirement of a programme in a said discipline of study.

Course Structure:

The following table shows the course structure with the credit weightage distribution.

SI No	Description	Credits
1.	Program Core Courses	12
2.	Laboratory courses	08
3.	Program Elective Courses	15
4.	Mandatory Course	02
5.	Open Elective course	03
6.	Audit Courses	Non-Credit
7.	Mini Project with Seminar	02
8.	Dissertation: Phase -I and II	26
Total		68

Examination and Assessment:

In assessing the performance of the students in examinations, the approach is to award marks based on the examinations conducted at various stages (CIE and SEE) in a semester. Converting of these marks to letter grades based on absolute and award the grades. As per the UGC recommendations, the following system will be implemented in awarding the grades and CGPA under the credit based semester system. (CIE: Continuous Internal Evaluation, SEE: Semester End Examination)

Letter Grades and Grade Points:

The absolute grading mechanism is followed in mapping the letter grades. The marks are converted to grades based on pre-determined class interval. As per the UGC recommendations a 10-point grading system with the following letter grades are followed. The same is furnished in the following table.

Theory Courses.....			
Academic Performance	Letter grade	Grade points	Performance
$90\% \leq \text{Marks} \leq 100\%$	S	10	Outstanding
$80\% \leq \text{Marks} < 90\%$	A	9	Excellent

$70\% \leq \text{Marks} < 80\%$	B	8	Very Good
$60\% \leq \text{Marks} < 70\%$	C	7	Good
$50\% \leq \text{Marks} < 60\%$	D	6	Pass
$0\% \leq \text{Marks} < 50\%$	F	0	Fail
	Ab	0	Absent

A student obtaining Grade F shall be considered failed and is required to appear for make-up/re-register for that particular course. For non-credit courses 'Pass' or 'Fail' shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

Computation of SGPA and CGPA:

The computations of SGPA and CGPA are followed as per the UGC guidelines.

The **SGPA** is the ratio of sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$\text{SGPA (Si)} = \Sigma(\text{Ci} \times \text{Gi}) / \Sigma \text{Ci}$$

Where **Ci** is the number of credits of the i^{th} course and **Gi** is the grade point scored by the student in the i^{th} course.

The **CGPA** is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$\text{CGPA} = \Sigma(\text{Ci} \times \text{Si}) / \Sigma \text{Ci}$$

Where **Si** is the SGPA of the i^{th} semester and **Ci** is the total number of credits in that semester. The **SGPA** and **CGPA** shall be rounded off to 2 decimal points and reported in the transcripts.

Transcript/Grade Sheet (Format):

Based on the above guidelines on Letter grades, Grade points and SGPA and CGPA, the institute issues the transcript/grade certificate for each semester and a consolidated transcript/grade certificate indicating the performance in all semesters.

Contact hours and credits:

The norms for course credits are as follows:

Lecture (L)/Tutorials (T): One (1) hour per week is assigned one(1) credit(C).

Practical (P): Two (2) hours session per week is assigned one(1) credit(C).

For example, a theory course with a L-T-P schedule of 2-1-0 will be assigned three (3) credits.

L	T	P	C
3	0	0	3

A laboratory practical course with a L-T-P schedule of 0-0-4 will be assigned two (2) credits.

L	T	P	C
	0	4	2

Plan of Study of I-IVSem of M.E/M.Tech.(Curriculum) :

The plan of study from I-semester to IV-semester is furnished in the following tables and it is common to all the disciplines of M.E/M.Tech.

(CIE: Continuous Internal Evaluation SEE: Semester End Examination, L: Lecture T: Tutorial
P: Practical/Project S: Seminar)

SEMESTER-I

Sl. No	Course Code	Title of the Course	Scheme of Instruction		Scheme of Examination		Credits
			Hours per week		Maximum Marks		
			L/T	P/S	CIE	SEE	
Theory							
1.		Program Core-1	3	-	40	60	3
2.		Program Core-2	3	-	40	60	3
3.		Program Elective-1	3	-	40	60	3
4.		Program Elective-2	3	-	40	60	3
5.		Mandatory Course	2	-	40	60	2
6.		Audit Course-1	2	-	-	50	Non-Credit
Practical							
7.		Laboratory -1 (Based On Core)	-	4	50	-	2
8.		Laboratory -2 (Based On Core/Elective)	-	4	50	-	2
Total			16	8	300	350	18

SEMESTER-II

Sl. No	Course Code	Title of the Course	Scheme of Instruction		Scheme of Examination		Credits
			Hours per week		Maximum Marks		
			L/T	P/S	CIE	SEE	
Theory							
1.		Program Core-3	3		40	60	3
2.		Program Core-4	3		40	60	3
3.		Program Elective-3	3		40	60	3
4.		Program Elective-4	3		40	60	3
5.		Audit Course-2	2		-	50	Non-Credit
Practical and Mini-Project							
6.		Laboratory -3 (Based On Core)	---	4	50	-	2
7.		Laboratory -4 (Based On Core/Elective)	---	4	50	-	2
8.		Mini Project with Seminar		4	50	-	2
Total			14	12	310	290	18

SEMESTER-III

Sl. No	Course Code	Title of the Course	Scheme of Instruction		Scheme of Examination		Credits
			Hours per week		Maximum Marks		
			L/T	P/S	CIE	SEE	
Theory							
1.		Program Elective-5	3		40	60	3
2.		Open Elective	3		40	60	3
Dissertation							
3.		Industrial Project /Dissertation Phase 1	-	20	100	-	10
Total			6	20	180	120	16

SEMESTER-IV

Sl. No	Course Code	Title of the Course	Scheme of Instruction		Scheme of Examination		Credits
			Hours per week		Maximum Marks		
			L/T	P/S	CIE	SEE	
Dissertation							
1.		Industrial Project /Dissertation Phase II		32	100	100	16
Total				32	100	100	16

Assessment Procedures for Awarding Marks

The distribution of marks is based on CIE by concerned teacher and the SEE shall be as follows:

Course (in terms of credits)	CIE (Marks)	SEE (Marks)	Remarks	Duration of Semester End Examination
Three(3)Credits	40*	60**	Theory Course	3 Hours
Two(2)Credits	40*	60**	Theory Course	3 Hours
Two(2) Credits	50	--	Lab Course	--
Non-credit courses (Pass/Fail)	—	50 ***	Audit Course	2 Hours
Two(2) Credits	50	--	Mini Project with Seminar	-----
Ten(10) Credits	100	--	Industrial Project /Dissertation Phase 1	--
Twenty(16) Credits	100	100	Industrial Project /Dissertation Phase II	Viva-Voce / Presentation

* Out of 40CIE marks, 10 marks are allotted for assignments (at least two assignments must be given, which covers the entire syllabus of that particular course/subject and addressing Bloom's Taxonomy Level 4 and above) and 20 marks are based on the average of two internal tests/midterm examinations (weightage for each test is 20 marks of one hour duration).

The question paper for internal tests will be in two parts, Part-A and Part-B. Part A is compulsory and carries six(6) marks. Part-B carries fourteen(14) marks, student has to answer two questions (with internal choice) and each question carries seven(7) marks.

Remaining 10 marks:

10 Marks:

Course End Project / Publishing a research Paper in conference or journal / presenting a seminar on a latest topic / presenting an innovative idea relevant to the course

** Out of 60 SEE Marks, The question paper will be in two parts, Part-A and Part-B. Part A is for five(5) questions and is compulsory covers the entire syllabus, and carries 15 marks. Part-B carries 45 marks, five questions, (one question from each unit), with an internal choice and each question carries nine(9) marks.(from BE)

*** Out of 50 SEE Marks, The question paper will be in two parts, Part-A and Part-B. Part A is for ten (10) questions and is compulsory covers the entire syllabus, and carries 10 marks. Part-B carries 40 marks, five questions (one question from each unit), with an internal choice and each question carries eight (8) marks.

A candidate has earned the credits of a particular course, if he/she secures not less than the minimum marks/ grade as prescribed. Minimum pass marks is 50% of total marks of CIE plus SEE(50% of SEE in case of non-credit course).

Credit Requirement for the award of M.E /M.Tech. degree is 68

The time-table is prepared with the following timings:

1 st Hour	2 nd Hour	3 rd Hour	Lunch	4 th Hour	5 th Hour	6 th Hour
09:10-10:10	10:10-11:10	11:15-12:15	12:15-13:15	13:15-14:15	14:15-15:15	15:20-16:20

Industrial Visit

Every student is required to go for at least one industrial visit during the I-semester /II-semester of the Programme. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

Duration of the programmes

A student is normally expected to complete the M.E/ M.Tech. Programme in four (4) semesters but in any case not more than eight (8) Semesters. Each semester shall normally consist of 90 teaching days (including examination days). The Head of the Department shall ensure that every teacher imparts instruction as per the number of hours specified in the syllabus covering the full content of the syllabus for the course being taught.

Rules and Regulations of attendance

1. The Degree of Master of Engineering / Technology will be conferred on a candidate who has pursued a 'Regular Course of Study' for four semesters as prescribed and has earned the required credits.
2. i) A regular course of study for eligibility to appear at the M.E/M.Tech Examination of any Semester shall mean putting in attendance of not less than 75% in lectures/theory, Practicals, Project, Seminars etc. (Attendance is considered subject/course wise).
 - ii) Attendance of N.C.C/N.S.S. Camps or Inter collegiate or Inter University or Inter State or International matches or debates or Educational Excursion or such other Inter University activities as approved by the authorities involving journeys outside the city in which the college is situated will not be counted as absence. However, such absence shall not exceed (4) weeks per semester of the total period of instructions. Such facility should be availed once during the course of study.
 - iii) If a candidate fails to secure the minimum percentage of attendance in a particular subject/course, he/she shall not be eligible to appear in the semester end examination of that particular subject/course and he/she shall have to re-register himself/ herself (when the course is offered next time by the respective department) to attend the classes and obtain the eligibility as per the requirement, in order to become eligible to appear for the end examination.
 - iv) The attendance shall be calculated from the date of commencement of classes as per the almanac communicated by the Chaitanya Bharathi Institute of Technology (Autonomous).
3. i) In special cases and for sufficient cause shown, the Principal may, on the specific recommendation of the Head of the Department, condone the deficiency in attendance to the extent of 10% on medical grounds subject to submission of medical certificate and payment of condonation fee.
 - ii) However, in respect of women candidates who seek condonation of attendance due to pregnancy, the Principal may condone the deficiency in attendance to the extent of 15% (as against 10% Condonation for others) on medical grounds subject to submission of medical certificate to this effect. Such condonation shall not be availed twice during the course of study.
4. The fee for condonation of attendance on medical grounds shall be Rs.2000.00 payable through Demand Draft, drawn in favour of Principal, CBIT.

Course registration(s) and Semester End Examinations

1. A student shall register for all the course(s) of the semester as prescribed in the scheme/curriculum. After registering for a course, a student shall attend the classes, to satisfy the attendance requirements for attending the semester end examinations.
2. If a student is prevented from writing end semester examination due to lack of attendance in a particular subject(s)/course(s), the student has to re-register again for that particular subject(s)/course(s), when offered next time by the respective department, attend the classes and fulfil the attendance requirements and must earn the credit as prescribed in the curriculum.
3. If a student is unsuccessful in 'Industrial Project /Dissertation Phase I' (i.e), the student has not earned ten(10) credits of 'Dissertation/Phase-I', then that student is not eligible for registering 'Industrial Project /Dissertation Phase II' of IV semester of the program. These students are permitted to re-register for 'Industrial Project /Dissertation Phase I' in the subsequent even/odd semester of the academic year. Further, these students are permitted to register for 'Industrial Project /Dissertation Phase II', in the next subsequent semester (even

or odd semester of the academic year) after earning ten (10) credits of 'Industrial Project /Dissertation Phase I'.

4. If a student is unsuccessful i.e the student has failed in the registered 'Program Elective Course(s)/Open Elective course/Audit course(s)', during the re-registration process the student has a choice to choose different 'Program Elective Course(s)/Open Elective course/Audit course(s)', when offered next time by the respective department.
5. A candidate who has failed in the course for which there is only CIE, the following is permitted.

Name of the Courses(s)	Permissible
i. Laboratory -1,2,3 and 4	Students are required to re-register when the course is offered next time by the respective department(s)
i. Mini Project with Seminar ii. Industrial Project /Dissertation Phase I	These students are permitted to re-register in the subsequent even/odd semester of the academic year

6. A candidate who has been allowed to appear for the semester end examination may be permitted to re-appear (if the student is unsuccessful in the SEE) in the course at the subsequent make-up examination which shall be conducted within one month from the declaration of the result of the Main Examination. As notified by the institute, the prescribed fee is to be paid by the student for attending make-up examinations.
7. If a student fails (even after makeup examination) in particular subject(s)/course(s), the student has to re-register for the examination in that particular subject(s)/course(s), the student shall appear for SEE, as notified by the institute, the prescribed fee is to be paid by the student for directly attending examination.
8. A student is eligible for appearing semester end examination (viva-voce) for 'Industrial Project /Dissertation Phase II, if the student earns fifty two (52) credits of I, II and III semesters of M.E/M.Tech program.
9. All examinations shall be held at Chaitanya Bharathi Institute of Technology, Hyderabad.
10. Applications for permission to appear at a semester end examination(s)/make-up examination, shall be made on the prescribed form and with the prescribed fee.
11. When a candidate's application is found in order and he/she is found eligible to appear at the Semester Examination, the Controller of Examinations (CoE) shall furnish him/her with a Hall Ticket for the Examination and this hall ticket shall be produced by the candidate before he/she can be admitted into the Examination Hall.
12. A candidate who fails to present himself/herself for the semester end examination or who fails to pass the semester end examination shall not be entitled to claim refund of the whole or part of the Examination fee.
13. The semester end examinations shall be held at the end of each semester only in the subjects/courses registered during that semester.

14. A candidate shall be deemed to have fully passed the examination of a semester if he/she secures not less than the minimum marks/ grade as prescribed in every course of the semester as prescribed in the scheme/curriculum.

Overall Monitoring Committee:

There shall be an overall monitoring committee for each semester of a programme which comprises of the Course Coordinators / Course teachers (as applicable), and Head of the Department. This overall monitoring committee shall meet periodically to discuss academic related matters, progress and status of the students of the semester concerned. The overall monitoring committee can invite the students of the semester concerned for any of the committee meetings if necessary.

Industrial Project / Internship Guidelines for ME/ MTech Students

To develop advanced knowledge and specific skills required for industrial development, CBIT is implementing the AICTE internship policy guidelines for ME/ MTech students from the academic year 2020-21 onwards. Students may choose Industrial problem as Dissertation topic. The proposed Credit Framework for the same is as follows:

Sno	Schedule	Activities	Duration	Credits
1	Semester - III	Industrial Project /Dissertation Phase 1	20 weeks	10
2	Semester - IV	Industrial Project/Dissertation Phase 2	32 weeks	16

Guidelines:

- ✓ The student should submit a synopsis of the proposed work to be done during the internship Programme/Industrial Project/Dissertation/Industrial Dissertation which is examined or evaluated by the departmental Project Review Committee to ensure that the proposed work is equivalent to ME/MTech dissertation work. This synopsis should be submitted to the department before the candidate is relieved.
- ✓ Student has to submit the information about the commencement of internship to the HOD before the registration of the courses in that semester (i.e III/IV).
- ✓ Two supervisors will monitor the internship/ Industry project work, one from the department and another from industry.
- ✓ Industry/Educational Organization must submit the month-wise attendance of the students to the department.
- ✓ Student should regularly present his/her project progress report to their respective internal supervisor(s)
- ✓ The final project presentation is evaluated on the basis of the recommendation given by external supervisor, and further can be evaluated by the institute supervisor.
- ✓ If the internship project is not found to be of high quality, then the student will have to reappear in the next semester for their ME/ MTech dissertation work.
- ✓ The student is required to publish internship work in conferences and journals with due permission/consent from the organization/Industry where he/she has undergone the internship.
- ✓ If the student feels that the internship work is not of high quality/not related to that field of interest, then the student should submit the application to the department HoD within THREE weeks and can re-join the institute.
- ✓ Industry/Institute should allow producing results obtained during project/internship period in the project report. The written certificate to this effect from the industry/institute is mandatory before consideration of the proposed project/internship

Revision of regulations, curriculum and syllabi

The institute may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of examinations through the Academic Council's approval.

Eligibility for the award of Degree

A student shall be declared to be eligible for the award of the M.E/M.Tech., provided the student has successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.

Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the **4 semesters** within a maximum period of **8 semesters** considered from the commencement of the first semester to which the candidate was admitted.

Successfully passed any additional courses prescribed by the institute whenever readmitted under regulation and no disciplinary action pending against the student.

The award of Degree must have been approved by the University.

Award of Division

CGPA	DIVISION
7.5 and above	First Class with distinction(All the subjects should be cleared in single attempt)
6.5 and less than 7.5	First Class
5.5 and less than 6.5	Second Class
5.0 and less than 5.5	Pass

Award of Gold Medal:

A student securing highest CGPA in single attempt is eligible for award of Gold Medal in each course of study of M.E/ M.Tech.

Improvement of overall score:

A candidate who wishes to improve his/her overall score may do so within one academic year immediately after having passed all the examinations of the M.E/ M.Tech degree course by reappearing to all courses/subjects of any one semester as prescribed by the syllabus and curriculum.

All the rules and regulations, specified herein after shall be read as whole for the purpose of interpretation and when a doubt arises, the interpretation of the Chairman, Academic Council, Chaitanya Bharathi Institute of Technology (Autonomous) is final. As per the requirements of the Statutory Bodies, Principal, Chaitanya Bharathi Institute of Technology (Autonomous), shall be the Chairman of the College Academic Council.

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