Chaitanya Bharathi Institute of Technology(A)

Choice Based Credit System (CBCS)

The CBCS is applicable to the students who are admitted to M.E/M.Tech.(Four Semesters) programme from the academic year 2016-2017. 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 semester 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 report will 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.	CBCS	Choice Based Credit System (CBCS), provides choice for students to select from the prescribed courses.
8.	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.
9.	Letter Grade	It is an index of the performance of students in a said course. Grades are denoted by letters like O, A+, A, ,B, C, D etc.
10.	Grade Point	It is a numerical weight allotted to each letter grade on a 10-point scale.
11.	Credit Point	It is the product of grade point and number of credits for a course.
12.	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.
13.	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.
14.	Transcript or Grade Card or Certificate	Based on the grades earned, a grade certificate shall be issued to all the registered students after every semester. The grade certificate 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:
Courses in a programme two kinds: Core and Elective.
Core Course:
There may be a core course in every semester. This is the course which is to be compulsorily studied by a student as a core requirement to complete the requirement of a programme in a said discipline of study.
Elective Course:
Elective course is a course which can be chosen from a pool of papers and they may be:

- Supportive to the discipline of study/ Program Specific
- Providing an expanded scope
- Enabling an exposure to some other discipline/domain/Inter discipline
- Nurturing student's proficiency/skill.

Course Structure: The following table shows the course structure with the credit Weightage distribution.

Sl No	Description	Credits	%	Syllabus Requirements
1.	Core Courses (Theory)	24	35	
2.	Elective Courses(Theory)	18	26	Compulsory
3.	Lab Courses ,Seminars, Mini Project, Project Seminar and Project	27	39	
	Total	69	100	

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 (internal assessment and end exam) 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.

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.

% of Marks	Grade points	Letter Grade	Grade description
90.00-100	9.00-10	O	Outstanding
80.00-89.99	8.00-8.99	A+	Excellent
70.00-79.99	7.00-7.99	A	Very good
60.00-69.99	6.00-6.99	B	Good
55.00-59.99	5.50-5.99	C	Average
50.00-54.99	5.00-5.49	D	PASS
<50	0.00	F	Fail
----	0.00	Ab	Absent

A student obtaining Grade F shall be considered failed and is required to re-register for that particular course. For non-credit courses 'Satisfactory' or "Unsatisfactory' 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

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

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.

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.

$$\text{CGPA} = \Sigma(C_i \times S_i) / \Sigma C_i$$

where S_i is the SGPA of the ith semester and C_i 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
2	1	0	3

A laboratory practical course with a L-T-P schedule of 0-1-2 will be assigned two (2) credits.

L	T	P	C
0	1	2	2

Plan of Study of I-VI Sem 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.

I- SEMESTER:

Course Code	Subject	No. of Hrs./Week		Marks for		Total Marks	Credits
		Lecture	T/P/S	Internal Assessment	End Exam		
	Core 1	3	1	30	70	100	4
	Core 2	3	1	30	70	100	4
	Core 3	3	1	30	70	100	4
	Elective 1	3	--	30	70	100	3
	Elective 2	3	--	30	70	100	3
	Elective 3	3	--	30	70	100	3
	Lab 1	---	3	50	-	50	2
	Seminar 1	---	3	50	-	50	2
	Soft Skills	--	2	*Non-credit			
Total		18	**11**	280	420	700	25

*Internal Assessment only and awarded with "Satisfactory/Not Satisfactory"

II-SEMESTER

Course Code	Subject	No. of Hrs./Week		Marks for		Total Marks	Credits
		Lecture	T/P/S	Internal Assessment	End Exam		
	Core 4	3	1	30	70	100	4
	Core 5	3	1	30	70	100	4
	Core 6	3	1	30	70	100	4
	Elective 4	3	---	30	70	100	3
	Elective 5	3	---	30	70	100	3
	Elective 6	3	---	30	70	100	3
	Lab 2	---	3	50	-	50	2
	Seminar 2	---	3	50	-	50	2
	Mini Project		2	50	-	50	1
Total		18	11	330	420	750	26

III-SEMESTER

Course Code	Subject	Marks for		Total Marks	Credits
		Internal Assessment	End Exam		
	Project Seminar (i) Problem formulation and submission of synopsis within 8 weeks from the commencement of 3rd semester. (50 Marks) (ii)Preliminary work on Project Implementation. (50 Marks)	100	----	100	6
Total		100		100	6

IV-SEMESTER

Course Code	Subject	Marks for		Total Marks	Credits
		Internal Assessment	End Exam		
	Project Work and Dissertation	100	100	200	12
Total				200	12

The time-table is prepared with the following timings:

1st Hour	2nd Hour	3rd Hour	Lunch	4th Hour	5th Hour	6th Hour
09:40-10:40	10:40-11:40	11:40-12:40	12:40-13:20	13:20-14:20	14:20-15:20	15:20-16:20

Credit requirements for the award of degree, lower limit and upper limit of credits for registration by a student in a semester
Credit Requirement for the award of M.E/M.Tech. degree is **69.**

The lower and upper limit for course credits registered in a semester by a student of M.E/M.Tech. program:

Lower Limit: 21 Credits	Upper Limit: 28 Credits

Industrial Training / Internship/Online Certification Course

The students may undergo Industrial training/Internship during summer / winter vacation. In this case the training has to be undergone continuously for the entire period.

Students are permitted (after due approval from the Head of the Department) for registering Online certification courses without detrimental to the regular semester class work .

The students may undergo Internship at Research organization / University (after due approval from the Head of the Department) during summer / winter vacation or during semester break.

Duration of Training/ Internship	Credits
2 Weeks	1
4 Weeks	2

Students are permitted to complete one online certification course through Massive Open Online Courses (MOOCs) offered by reputed Universities/ Government Organizations duly approved by the Head of the Department. The Credits allotted for the Certification course is one (1)/ Two (2) Credits and will be decided by the Head of the Department.

The Industrial Training / Internship/ Online Certification Course is optional and the credits earned will be indicated in the Mark Sheet. However, credits earned due to Industrial Training/ Internship/ online Certification Course **shall not be considered** for dropping any course or in process of award of degree.

The student is allowed to undergo a maximum of 4 weeks Industrial Training / Internship during the entire duration of study, no extra credits will be allotted for the internship beyond four(4) weeks.

The detailed procedure is furnished in the **ANNEXURE** regarding the earning of credits by the student for **Industrial Training / Internship/ Online Certification.**

Industrial Visit
Every student is required to go for at least one industrial visits 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.

Course enrolment and registration

Each student on admission shall register for **all the courses prescribed in the curriculum in** the student's **first Semester of study.**

Every student shall enrol for the course of the succeeding semester in the current semester. However, the student shall confirm the enrolment by registering for the courses within the first five working days after the commencement of the concerned semester.

After registering for a course, a student shall attend the classes, to satisfy the attendance requirements for attending the semester end examinations.

The enrolment for all the courses of the II-Semester will commence 10 working days prior to the last working day of I-Semester. The student shall confirm the enrolment by registering for the courses within the first five working days after the commencement of the II-Semester.

A student is permitted to register for III-Semester Project Seminar, if there are not more than three courses/subjects as backlog from the previous semesters,(backlog for this purpose shall mean theory/practicals/seminars), then the student is permitted to work on his Project/Dissertation.

If a student earns successfully the prescribed credits in III-semester then the student is allowed for registering for IV-Semester, as per almanac.

A student has to earn the total number of credits specified in the curriculum of the respective Programme of study in order to be eligible to obtain the degree. However, if the student wishes, then the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme.

If a student fails in any course/subject, then student has to re-register for semester end exam in the subsequent semester for earning the credits for that failed course.

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, attend the classes and fulfil the attendance requirements.

If a student fails in particular subject(s)/course(s), the student has to re-register again for that particular subject(s)/course(s\, when offered next, attend the classes, fulfil the attendance requirements and must earn the credit as prescribed in the curriculum.

A student can apply for revaluation of the student's semester examination answer paper in a theory course, within 2 weeks from the declaration of results, on payment of a prescribed fee along with prescribed application.

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.

Assessment Procedures for Awarding Marks

The distribution of marks is based on internal assessment (Sessional) by concerned teacher and the Semester end examination shall be as follows:

Course (in terms of credits)	Sessional (Marks)	Semester end Examination (Marks)	Remarks	Duration of Semester End Examination
Three(3)Credits/ Four(4)credits	30*	70**	Theory Course	3 Hours
Two(2) Credits	50	--	Lab Course/Seminar	--
Six(6) Credits	100	--	Project Seminar	--
Twelve(12) Credits	100	100	Project	Viva
One(1) Credit	50	--	Mini Project	-----
Non-credit courses	Satisfactory/ Unsatisfactory	--		1 Hour

* Out of 30 sessional marks, 10 marks are allotted for assignments (at least two assignments must be given, which covers the entire syllabus of that particular course/subjcet) and the remaining 20 marks are based on the average of two Internal tests (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 out of three questions).

** The question paper will be in two parts, Part-A and Part-B. Part A is compulsory and covers the entire syllabus, and carries 20 marks. Part-B carries 50 marks and covers all the units of the syllabus (student has to answer five out of seven questions)

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 in the end **Examinations plus Sessional marks shall be 50% .**

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, Drawings, Workshops, 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 end examination of that particular subject/course and he/she shall have to re-register himself/ herself 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. If a candidate fails to maintain a minimum of 40% attendance in at least three of the Theory subjects registered independently (excluding Seminar and Practicals) in the first semester following admission, he/she shall forfeit his/her seat in the course and the admission automatically stands cancelled.

5. The fee for condonation of attendance on medical grounds shall be Rs.500.00 payable through Demand Draft drawn in favor of the Principal, CBIT, Hyderabad.

SEMESTER END EXAMINATION

(a) All examinations shall be held at Chaitanya Bharathi Institute of Technology (Autonomous), Hyderabad.

(b) Applications for permission to appear at a Semester Examinations shall be made on the prescribed form along with the necessary certificates regarding attendance, practical work, etc., and the prescribed fee. The form and the prescribed for this purpose.

(c) 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.

(d) A candidate who fails to present himself / herself for the Examination for any reason whatsoever excepting shortage of attendance or who fails to pass the Examination shall not be entitled to claim refund of the whole or part of the Examination fee nor for the reservation of the same be held at the end of each semester only in the subjects offered during that semester.

(e) The semester end Examinations shall be held at the end of each semester only in the subjects registered during that semester.

(f) A student shall appear for the Semester end Examination at the end of each semester only in the subjects registered during that semester.

(g) A candidate who has been allowed to appear for the semester end Examination may be permitted to re-appear in the subject at the subsequent Make-up Examination which shall be conducted within one month from the declaration of the result of the Main Examination.

(h) A candidate who is unsuccessful at both the semester end examination and Make-up Examinations or has not appeared at these Examinations in subject(s) shall register for the subject(s) again and pass the subject(s) elective (or) core as the case may be, in the subsequent semester(s) when this particular subject is offered by the department

(i) 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.

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
8.0 and above	First Class with Distinction
6.5 and less than 8.0	First division
5.5 and less than 6.5	Second division
5.0 and less than 5.5	Pass division

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.

-oOo-

ANNEXURE

Industrial Training / Internship/ Online Certification Course

Guide lines for earning one(1)/two(2) credit(s) by the student towards the Industrial Training/ Internship for two(2) to four(4) weeks duration during the semester break or summer/winter vacation and for Online Certification:

1. The student needs to approach the respective Head of the department with a request that he/she is interested to carry out an Industrial Training/Internship/ Online Certification Course, with the details of the industry/organisation/ Online Certification Course.

2. The Head of the department issues a letter to the industry/organisation with a request to permit the students for Industrial Training / Internship.

3. Student has to obtain a written permission from the concerned Head of the Department for carrying out Online Certification Course.

4. On Completion of Industrial Training / Internship/ Online Certification Course by the student, the student is required to submit the following to the respective department.

   - Industrial Training / Internship/ Online Certification Course completion certificate from the industry/ organization.

   - Hardcopy of the report in a standard format which is prescribed by the department

5. Department committee evaluates the student performance on the Industrial Training / Internship for awarding the credits.

Assessment procedure for earning one (1)/two (2) credit(s):

The student has to deliver power point presentation before the committee on the work which is carried out by the student during Industrial Training /Internship. Committee examines the student and the marks **(Maximum :50 Marks, in case of four weeks Industrial Training / Internship/ Online Certification Course, 25 Marks, in case of two weeks Industrial Training / Internship/ Online Certification Course)** are to be awarded on the following aspects

Description	For Four(4) weeks Duration	For Two(2) weeks Duration
	Max. Marks	Max. Marks
Power Point Presentation	25	10
Hard copy of the Report	15	10
Viva-Voce	10	05
Total	50	25

The department sends the performance of the student to the CoE for awarding Grade/Grade points towards earning one(1)/two(2) credit(s)credits by the student for Industrial Training / Internship.

Note: The credits earned by the student towards the Industrial Training/ Internship/ Online Certification Course for two(2) to four(4) weeks duration during the semester break or summer/winter vacation shall not be considered for dropping any elective or in process of award of degree.

-oOo-