MCA Academics Rules and Regulations

(R-23)

MCA
ACADEMICS
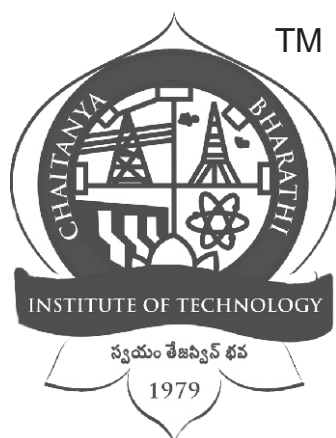# RULES AND REGULATIONS
(R-23)

™

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY

(Autonomous and Affiliated to Osmania University,Six UG Programs Accredited by NBA,Accredited by NAAC with'A++' Grade,ISO 9001:2015 Certified Institution)

Chaitanya Bharathi (PO), Kokapet (V), Gandipet (M), Ranga Reddy (Dist.),Hyderabad – 500 075, Telangana
Phone: 8466997201, E-Mail: principal@cbit.ac.in, Website:www.cbit.ac.in

PRELIMINARY DEFINITIONS AND NOMENCLATURE

The R-23 is applicable to the students who are admitted to M.C.A (Four Semesters) programme from the academic year 2023-2024. 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 M.C.A. Degree
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.	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.
8.	Grade Point	It is a numerical weight allotted to each letter grade on a 10-point scale.
9.	Credit Point	It is the product of grade point and number of credits for a course.
10.	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.
11.	CGPA	Cumulative Grade Point Average (CGPA), it is a measure of overall cumulative performance of a student in 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.
12.	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.

II. 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.

S.No	Syllabus Component	No. of Courses	No. of credits	Credits %
1.	Core Theory	10	40	42.1
2.	Core Practical	10	27	28.4
3.	Core Electives	04	16	16.9
4.	Open Elective	01	03	3.1
5.	Mathematics	02	08	8.5
6.	English	01	01	1.0
	Total	28	95	100

III. 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 hours (**2**) session per week is assigned one (1) credit(C).

For example, a theory course with a L-T-P schedule of 3-1-0 will be assigned four (4) credits (C).

L	T	P	C
3	1	0	4

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

L	T	P	C
3	0	0	3

A laboratory practical course with a L-T-P schedule of 0-0-3 will be assigned One and half (1.5) credits(C).

L	T	P	C
0	0	3	1.5

IV. PLAN OF STUDY OF I-IVSEMESTER OF M.C.A. (CURRICULUM)

The plan of study from I-semester to IV-semester is furnished in the following tables.

SEMESTER – I

S.No	Course Code	Title of the Course	Scheme of Instruction Hours per week		Scheme of Examination				Credits
					Duration of SEE in Hours	Maximum Marks			
			L/T	P/S		CIE	SEE		
THEORY									
1	23MCC101	Data Structures	3/1	-	3	40	60		4
2	23MCC102	Computer Architecture	3/1	-	3	40	60		4
3	23MCC103	Object Oriented Programming using Java	3/1	-	3	40	60		4
4	23MTC103	Mathematical Foundation for Computer Science	3/1	-	3	40	60		4
5	23MTC104	Probability and Statistics for Data Science	3/1	-	3	40	60		4
PRACTICALS									
6	23MCC104	Data Structures Lab	-	3	3	50	50		1.5
7	23MCC105	Java Lab	-	3	3	50	50		1.5
8	23EG101	Professional Communication Skills Lab	-	2	3	50	50		1
		TOTAL	15/5	8		350	450		24

L: Lecture   **T: Tutorial**   **P: Practical**   **S: Seminar**
CIE: Continuous Internal Evaluation   **SEE: Semester End Examination**

SEMESTER-II

S.No	Course Code	Title of the Course	Scheme of Instruction Hours per week L/T	P/S	Scheme of Examination Duration of SEE in Hours	Maximum Marks CIE	SEE	Credits
THEORY								
1	23MCC106	Database Management Systems	3/1	-	3	40	60	4
2	23MCC107	Web Technologies	3/1	-	3	40	60	4
3	23MCC108	Python Programming	3/1	-	3	40	60	4
4	23MCC109	Operating Systems	3/1	-	3	40	60	4
5	23MCE101/ 23MCE102/ 23MCE103/ 23MCE104	Professional Elective - I	3/1	-	3	40	60	4
PRACTICALS								
6	23MCC110	Database Management Systems Lab	-	3	3	50	50	1.5
7	23MCC111	Web Technologies Lab	-	3	3	50	50	1.5
8	23MCC112	Operating Systems Lab	-	3	3	50	50	1.5
		TOTAL	15/5	9		350	450	24.5

L: Lecture   T: Tutorial   P: Practical   S: Seminar

CIE: Continuous Internal Evaluation   SEE: Semester End Examination

Internship is compulsory after II Semester with 3 credits

Professional Elective- I	
23MCE101	Design and Analysis of Algorithms
23MCE102	Business Intelligence and Analytics
23MCE103	Free and Open Source Technologies
23MCE104	Optimization Techniques

SEMESTER - III

S. No.	Course Code	Title of the Course	Scheme of Instruction		Scheme of Examination			Credits
			Hours per week		Duration of SEE in Hours	Max. Marks		
			L/T	P/S		CIE	SEE	
			THEORY					
1	23MCC113	Artificial Intelligence and Machine Learning	3/1	-	3	40	60	4
2	23MCC114	Software Engineering	3/1	-	3	40	60	4
3	23MCC115	Data Communications & Computer Networks	3/1	-	3	40	60	4
4	23MCE105/ 106/107/108	Professional Elective- II	3/1	-	3	40	60	4
5	23MEO201/ 23MBO104/ 23MEO202/ 23CEO102	Open Elective-I	3	-	3	40	60	3
			PRACTICALS					
	23MCC116	Machine Learning Lab	-	3	3	50	50	1.5
6								
7	23MCC117	Unified Modeling Language(UML) Lab	-	3	3	50	50	1.5
8	23MCC118	Technical Seminar	-	3	-	50	-	1.5
9	23MCC119	Internship	4 to 5 weeks / 135 Hours		-	100	-	3
		TOTAL	15/4	9		450	400	26.5

Professional Elective – II	
23MCE105	Cloud Computing
23MCE106	Big Data Analytics
23MCE107	Full stack Development
23MCE108	Social Network Analysis

Open Elective – I	
23MEO201	Intellectual Property Rights
23MBO104	Organizational Behavior
23MEO202	Human Values and Professional Ethics
23CEO102	Disaster Control and Response

L: Lecture   **T: Tutorial**   **P: Practical**   **S: Seminar**

CIE: Continuous Internal Evaluation   **SEE: Semester End Examination**

SEMESTER - IV

S.No	Course Code	Title of the Course	Scheme of Instruction		Scheme of Examination			Credits
			Hours per week		Duration of SEE in Hours	Maximum Marks		
			L/T	P/S		CIE	SEE	
THEORY								
1	23MCE109/ 110/111/112	Professional Elective – III	3/1	-	3	40	60	4
2	23MCE113/ 114/115/116	Professional Elective – IV	3/1	-	3	40	60	4
3	23MCC120	Project Work	-	24	3	100	100	12
		TOTAL	**6/2**	**24**		**180**	**220**	**20**

L: Lecture   **T: Tutorial**   **P: Practical/Project Seminar/Dissertation**
CIE: Continuous Internal Evaluation   **SEE: Semester End Examination**

Professional Elective – III	
23MCE109	Cyber Security
23MCE110	Soft Computing
23MCE111	Block Chain Technology
23MCE112	Deep Learning

Professional Elective – IV	
23MCE113	Cyber Forensics
23MCE114	Internet of Things
23MCE115	Explainable Artificial Intelligence
23MCE116	Natural Language Processing

CREDIT DISTRIBUTION TABLE

S.No	Syllabus Component	No. of Courses	No. of credits	Credits %
1.	Core Theory	10	40	42.1
2.	Core Practical	10	27	28.4
3.	Core Electives	04	16	16.9
4.	Open Elective	01	03	3.1
5.	Mathematics	02	08	8.5
6.	English	01	01	1.0
	Total	28	95	100

Total No. of Courses: 28   **Total No. of Credits: 95**

V. Credit framework for the online courses through SWAYAM/any other MOOC courses.

Students are permitted to complete online certification courses through MOOCs (Proctored exam only) for academic credit transfer. This may be allowed from I semester to IV semesters for a maximum of 40% of the credits in each semester, which will be included in the academic credits within the frame work of 95. These equivalent courses shall be identified and notified by the respective departments at least 2 weeks before the commencement of the semester. Department shall nominate faculty coordinator to look after the student registration process and update the same to the Director AEC-COE. The responsibility of earning the credits

through online MOOCs courses lies entirely on the respective students. The students who choose to appear for both online and regular semester course work, must fulfill the minimum attendance criteria, and also attend for CIE and SEE as per the rules. The student who opted for MOOCs online courses has to re-register the same course or its equivalent if he/she could not secure the required credits. Student shall submit an affidavit to the department at the time of registration for online courses and abide by the rules and regulations. The detail Standard Operating Procedure (SOP) is attached as Annexure-III.

The time-table is prepared with the following timings:

1st Hour	2nd Hour	3rd Hour	Lunch	4th Hour	5th Hour	6th Hour
09:10-10:10	10:10-11:10	11:15-12:15	12:15-13:00	13:00-14:00	14:00-15:00	15:05-16:05

Credit requirements for the award of M.C.A degree: Credit Requirement for the award of M.C.A. degree is 95**.**

VI . INTERNSHIP/ON-LINE CERTIFICATION

The Curriculum includes the Internship for Students of four weeks' duration during summer vacation (at the end/after II Sem). The internship experience will augment outcome-based learning process and inculcate various attributes in a Student. Internships are educational and career development opportunities providing practical experience in a field or discipline.

The Students shall undertake the Internship during the summer vacation continuously for four to five weeks of duration in any Industry/ organization after seeking due approval from the Head of the Department. The award of credits for the Internship during summer shall be evidenced in the III Semester Grade Sheet. The detailed procedure is furnished in the **Annexure-I**.

VII. GUIDELINES FOR PROJECT WORK

Fourth (Final) Semester of the MCA course consists of Project work and two elective courses. Project Work has to be carried out by each student individually in a period of 15 weeks of duration. Students should submit a synopsis at the end of 2nd week in consultation with the Project Guide. The synopsis should consist of definition of the problem, scope of the problem and plan of action. After completion of eight weeks students are required to present a Project Seminar on the topic covering the aspects of analysis, design and implementation of the project work. The work should be submitted in the MCA department of the college. The Project work evaluated with the committee consisting of two faculty members of MCA department along with guide of the project to award internal marks.

At the end of the semester the students are required to present their project work for Viva-Voce, in which each student will be awarded with marks. The detailed procedure is depicted in **Annexure - II.**

VIII. 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, and converting these marks to letter grades based on absolute and awards the grades. As per the UGC recommendations, the following system will be implemented in awarding the grades.
(CIE: Continuous Internal Evaluation, SEE: Semester End Examination)

IX. 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 tables for Theory courses and Laboratory.

Academic Performance	Letter grade	Grade points
90% ≤ Marks ≤ 100%	S	10
80% ≤ Marks < 90%	A	9
70% ≤ Marks < 80%	B	8
60% ≤ Marks <70%	C	7
50% ≤ Marks < 60%	D	6
40% ≤ Marks<50%	E	5
0% ≤ Marks < 40%	F	0

A Student obtaining Grade F shall be considered failed and will be required to reappear the examination. For non-credit course 'Satisfactory' or "Unsatisfactory' shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA. For the non-credit Courses, the Students must have secured ' Satisfactory' for the award of degree along with other requirements.

X. 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

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

Where **Ci** is the number of credits of the ith course and **Gi** 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.
$$\textbf{CGPA} = \Sigma(C_i \times S_i) / \Sigma C_i$$
Where **Si** is the SGPA of the ith 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.

XI. ASSESSMENT PROCEDURES FOR AWARDING MARKS

The distribution of marks which is based on continuous internal assessment by concerned teacher and the Semester End Examination shall be as follows:

Course	Credits	CIE	SEE	Duration of Semester End Examination
Theory Course	Four (4)/Three (3)	40*	60**	3 Hours
Lab Course	One and half (1.5)	50	50	3 Hours
Internship during Summer Vacation	Three (3)	100	-	-
Project Work	Twelve (12)	100	100	-

*CIE: Continuous Internal Evaluation (Max. Marks: 40)

S.No	Assessment Tool	No. of Tests	Description	Max. Marks	Remarks
1.	Internal Tests	2	Average of two tests, each of 20 marks	20	
2.	a) Case Studies / Book Review / Relevant Industry visit & Report / Course end project / Open ended problem	1	Evaluation as per the assessment rubrics (minimum 2 reviews)	10	Assessment methods either (a) or (b) can be opted as per the scope
	b) Assignments (should be from BL4 and BL5)	2	Average of two assignments, each of 10 marks		
3.	Slip Tests	3	Three slip tests and average of the best two slip tests	5	
4.	Attendance	5	5 marks >=85% 4 marks >=80% 3 marks >=75% 2 marks >=70% 1 mark >=65%	5	
	Total Marks			**40**	

**Semester End Examination (SEE) (Max. Marks: 60)

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 10 marks, one from each unit carrying a weightage of 2 marks each. Part-B consists of five questions, one question from each unit with internal choice and carries 50 marks, carrying a weightage of 10 marks each and covers all the units of the syllabus. Student has to answer five questions.

Note:

- A course that has CIE (sessional marks) but no semester end examination as per scheme is treated as Pass/Fail for which pass marks are 50% of CIE.

- If he/she fails, then he/she has to re-register the course in the consequent semesters whenever it is offered.

- Minimum pass marks for theory course is 40% of total marks `i.e., CIE plus semester end examinations where as for the lab course/project is 50%.

- For non-credit courses also the minimum pass mark is 40% and the students who secures more than are equal to 40% of maximum mark, then the student will be awarded with

'PASS' otherwise they will be awarded with 'FAIL'. The students must have secured with 'Satisfactory' in these non-credit courses for the award of degree.

XII. PROMOTION RULES

The promotion rules for one semester to another semester are furnished in the following table:

Rules of promotion are as under:

S.No.	Semester	Conditions to be fulfilled for Promotion
1.	From I -Semester to II- Semester	Regular Course of Study of I-Semester
2.	From II- Semester to III -Semester	Regular Course of study of II -Semester Student must have earned at least 24 credits of I and II semester
3.	From III- Semester to IV- Semester	Regular Course of Study of III-Semester.
4.	To attend the SEE of IV semester	Regular study of Semester – IV

Note: *Regular course of study means the student has to satisfy attendance rules as prescribed by the Institute.*

XIII. CREDIT REQUIREMENTS

Credit Requirement for the award of MCA degree is 95.

XIV. RULES AND REGULATIONS OF ATTENDANCE

1. The Degree of MCA will be conferred on a candidate who has pursued a 'Regular Course of Study' for four semesters as herein after prescribed in the scheme of instruction and has earned the required credits.

2. i) A regular course of study for eligibility to appear at MCA Examination of any Semester shall mean putting in attendance of not less than 75% aggregate in lectures/theory, Practical, Seminars etc.

   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 not be availed twice during the course of study.

   iii) In any semester of the course if a candidate fails to secure the minimum percentage of attendance, he/she shall not be eligible to appear in the examination of that semester and he/she shall have to enroll himself/ herself to undergo afresh a 'Regular Course of Study' of the corresponding semester in subsequent academic session, in order to become eligible to appear for the examination. **The Student needs to pay the required tuition fee for that corresponding semester as per institute rules.**

   iv) The attendance shall be calculated on the aggregate of the courses/ subjects from the date of commencement of classes / date of readmission in case of detained candidates as per the almanac communicated by Chaitanya Bharathi Institute of Technology (Autonomous).

   v) Candidates admitted to the first semester through an entrance test and do not have the requisite attendance, but have not less than 40% attendance can seek readmission

without once again appearing the admission process where the admissions are governed through an entrance test. Candidates of ISemester, who do not have the minimum 40% attendance, would lose their seat.

3. i) In special cases and for sufficient cause shown, the Director 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 Director 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 study.

4. The fee for condonation of attendance on medical grounds shall be Rs.2000.00.

XV. REAPPEARING/READMISSION/REVALUATION/PHYCIAL VERIFICATION OF ANSWER SCRIPTS

Supplementary Semester End examination shall be conducted for I and III semester Theory / Lab courses, whereas Supplementary Semester End Examination shall not be conducted for II and IV Semester theory/ Lab courses and Project Viva-voce.
 If a Student is prevented from writing End Semester examination due to lack of attendance, the Student must take re-admission of that semester (by paying appropriate tuition fee as prescribed by the institute) when offered next and must attend the classes and fulfil the attendance requirements.

A Student can apply for revaluation of the Student's Semester Examination answer paper in a Theory course, notified by the Institute, on payment of a prescribed fee along with prescribed application.

After the declaration of results, the interested Student(s) can go through/evidence their Semester End Theory examination answer scripts (by paying the prescribed fee) physically on issuing of the notification by the respective authorities.

If a student is detained due to non-earning of required Credit(s), such Student(s) are eligible for re-
admission after earning the required number of Credits only. Further, if any Student is detained due to non-earning of required Credit(s) and wants to repeat the Semester class work, such Students are eligible for re-admission in the odd semesters only, such Students are required to pay tuition fee as per the Institute Rules

XVI. ELIGIBILITY FOR THE AWARD OF DEGREE

A Student shall be declared to be eligible for the award of the M.C.A., 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.

XVII. AWARD OF DIVISION

CGPA	DIVISION
7.5 and above	First Class with distinction
6.5 and less than 7.5	First Class
5.0 and less than 6. 5	Second Class
4.0 and less than 5.0	Pass
Less than 4.0	Fail

Candidates are eligible for the award of Distinction with I Class with a CGPA of 7.5 and above if and only if the Student clears all the subjects in all Semesters in single attempt.

XVIII. AWARD OF GOLD MEDAL

A Student securing highest CGPA in single attempt is eligible for award of Gold Medal in the Course of study of M.C.A.

XIX. DURATION OF THE PROGRAMME

A student is normally expected to complete the M.C.A. 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.

XX. 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.

XXI. 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.

(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 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 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.

XXII. 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.

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 ANNEXURE-I

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.

ANNEXURE - I

Internship

The internship is compulsory for all the Students for the award of MCA degree and the guidelines for earning three (3 credits) by the student are furnished below:

Guidelines:

Procedure for granting permission to the student to carryout Internship by the Student, for four to five weeks duration from an organization during the summer vacation:

1. The Student needs to approach the Head of the Department with a request to carry out Internship, with the details of the Industry/Organization and the Department allocates one of the Faculty members as Guide.
2. The Guide will discuss with CEO/Director/HR/ Concerned person of that Industry/Organization on the following points:
   - Duration of the Internship
   - Nature of work to be carried out by the Student
   - Facilities to be extended to the student in the Industry
   - Requesting the industry Personnel to assign a guide or an in-charge to monitor the Student's work in the Industry
   - Number of work hours to be spent by the Student
   - Preparation of the documentation/report by the Student
   - To appraise the Industry Personnel that the Internship carries a weightage of
   - three (3) Credits
3. If the department recommends then the student is permitted to carry out Internship in that particular Industry/Organization, for four to five (4 - 5) weeks during the summer vacation.
4. Recommendation Letter/Email from Department/Career Guidance Cell (CGC) of the college should go to industry to provide internship opportunity for the Student(s).
5. A copy of the confirmation given by the Industry shall be maintained with the CDC, Department and the Student.
6. Students on joining Internship at the concerned Industry/Organization, submit the Joining Report/Letter/Email.
7. Students undergo Internship at the concerned Industry/Organization. The candidate should regularly submit his/her progress report to their respective Faculty guide. In-between Guide/Panel evaluate(s) the performance of Students at the mid of Internship and at the end of Internship period in consultation with Guide/Concerned person in the Industry.
8. Students will submit Internship report after completion of Internship.

Internship Report:

After completion of Internship, the Student should prepare a comprehensive report to indicate what he/she has observed and learnt in the internship period. The Internship report should be signed by the Internship Supervisor (from Industry), Faculty Guide, and Head of the Department. The Internship report will be evaluated on the basis of following criteria:

1. Originality
2. Adequacy and purposeful write-up
3. Organization, format, charts/images/diagrams/models, language, style etc.
4. Variety and relevance of learning experience.

5. Practical applications, relationships with basic theory and concepts taught in the Course.

Monitoring and Evaluation of Internship: The Internship of the Students will be evaluation in three stages:
1. Evaluation by Industry
2. Evaluation by Faculty Guide
3. Evaluation through Seminar Presentation/Viva-voce at the Institute.

Evaluation by Industry:

The Industry will evaluate the Students based on the Punctuality, eagerness to learn, Maintenance of Daily Diary, skill test etc. for 30 marks.

Evaluation by Faculty Guide:

Two midterm evaluations shall be done by the Faculty Guide. One evaluation at the end of 2nd week of Internship and another at the end of 4th week of Internship are to be carried out by the Faculty Guide. The midterm evaluation will be based on the work carried out by the Student in Industry/Organization and also Attendance record, daily diary etc. For awarding marks for midterm evaluations, the guide has to coordinate with the guide from industry. The midterm evaluations are to be carried out for a maximum of 30 marks.

Evaluation through Seminar Presentation/Viva-Voce at the Institute:
The student will give a seminar based on his internship report, before an expert committee/panel constituted by the concerned department as per norms of the Institute. Committee examines the students work and performance and the Marks (Maximum 40 marks) are to be awarded.

The evaluation will be based on the following criteria: 1. Quality of content presented (8 Marks)
2. Proper planning for presentation (8 Marks)
3. Effectiveness of presentation (8 Marks)
4. Depth of knowledge and skills (8 Marks)
5. Outcome of Internship (Publication, presentation in conference, project proposal etc.) (8 Marks)

Seminar presentation will enable sharing knowledge and experience amongst students and Faculty and build communication skills and confidence in Students.

The Department sends the performance of the Student to the Controller of Examinations (CoE) for awarding Grade/Grade points towards earning of three (3) Credits by the Student for Internship.

ANNEXURE - II

Major Project Work has to be carried out by each student individually in a period of 15 weeks of duration. Students should submit a synopsis at the end of 2nd week in consultation with the Project Guide. The synopsis should consist of definition of the problem, scope of the problem and plan of action. After completion of 8 weeks students are required to present a Project Seminar on the topic covering the aspects of analysis, design and implementation of the project work to the committee consisting of two faculty members of MCA department in the college along with guide will evaluate the project and award internal marks. At the end of the semester the students are required to present their project work before the External Committee for Viva-Voce examination, in which each student will be awarded with marks.

The following is the rubrics followed for evaluation of Major Projects, Internal and External marks for IV semester.

Guidelines for awarding CIE (Max. Marks: 100)		
Evaluation by	Max. Marks	Evaluation Criteria / Parameter
Department Review Committee (DRC)	20	Review 1
	20	Review 2
	20	Review 3
Supervisor	10	Regular Work Progress
	10	Quality of the work which may lead to Publication
	10	Report Preparation
	10	Analytical/ Programming Skills

Guidelines for awarding SEE (Max. Marks: 100)		
Evaluation by	Max. Marks	Evaluation Criteria/Parameter
External and Internal Examiners together	20	Power Point Presentation
	40	Project execution & Documentation
	20	Quality of the Project • Innovation, • Applications, • Scope for further study, • Applications to Society
	20	Viva-Voce

ANNEXURE-III

**Standard Operation Procedure (SOP) for Credit Transfer through MOOCS
(Proctored exam only) for ME/M.Tech./MCA**

With reference to the guidelines issued for Credit Framework for Online Learning Courses through SWAYAM (UGC Regulations dated 19/07/2016 & MHRD MOOC's guidelines, dated 11/03/2016) and resolutions passed in the 12th meeting of the Academic Council and the subsequent 12th College Academic Committee meeting held on 04-10-2023, the Institution has resolved to implement Credit transfer through NPTEL-SWAYAM for all credit courses of ME/M.Tech and MCA under the Regulations of R-23.

The following modalities or SOPs are proposed for effective implementation in Credit transfer through MOOCS (NPTEL-SWAYAM).

The modalities should be annexured in the academic rules and regulations of R-23 and awareness about credit transfer and SOPs should be explained to students at the entry level/ in the induction program for newly admitted students.

1. Students are permitted to complete online certification courses through MOOCs (Proctored exam only) for academic credit transfer. This may be allowed from I semester to IV semesters for a maximum of 40% of the credits in each semester, which will be included in the academic credits within the frame work.

2. The credit equivalence of the MOOC Courses (Proctored exam only) for consideration in awarding the degree.

Course Duration (SWAYAM/NPTEL)	Credit Equivalence	Remarks
12 Weeks	03	04 Week Course duration is not applicable
08 Weeks	02	

3. The SWAYAM shall notify in June and November every year, the list of the online learning Courses going to be offered in the forthcoming Semester on its website https://swayam.gov.in.

4. Decision of offering the online courses through NPTEL-SWAYAM for credit transfer shall rest with the Institute.

5. The Head of the Department or Chairman-BOS along with PG coordinator is recommended to identify and notify the equivalent course at least 2 weeks before the commencement of the Academic Year/semester. The identified equivalent courses through MOOCS should be approved by department BOS.

6. A equivalent MOOCs course can be considered if and only if ≥ 70% syllabus is matching with the course offer under course of curriculum.

7. Student shall submit an affidavit to the department at the time of registration for online courses and abide by the rules and regulations.

8. Department shall nominate faculty coordinator for each MOOCs equivalent course. The approved MOOCs equivalent courses and nominated faculty coordinator details should be disseminated to admitted students through circular/display in notice board/department portal and the same is to be submitted to Director-Academic and Director-AEC-COE.

9. The faculty coordinator shall register the MOOC as a course mentor under the affiliation of CBIT after approval from HOD and shall follow-up for

(i) Ensuring MOOCs SWAYAM-NPTEL registration by students on time, in coordination with the SWAYAM Institute faculty coordinator.

(ii) Ensuring each registered student should submit all assignments on time.

(iii) Ensuring students register for the NPTEL exam.

(iv) Should collect students marksheet and the certificate of award after successfully completing the course and submitting to Director-AEC-COE through proper channel.

10. If a student does not submit details of the MOOCs opted/registered/enrolled through SWAYAM-NPTEL to faculty coordinator then it shall be deemed that the student is willing to pursue the Department offered credit courses.

11. Once SWAYAM- NPTEL declares the results, the HOD shall submit the details of successfully completed student result details to the COE for credit transfer. Copies of SWAYAM- NPTEL certificates of the students should be attached. The faculty coordinator for the relevant MOOCs will assist with this process.

12. Marks secured by the student in MOOCs shall be converted to CIE:SEE (40:60) evaluation pattern for equivalency and the letter grades shall be awarded as defined in the ME/M.Tech. and MCA R-23 academic regulation. The converted marks and the letter grades shall be reflected in Marks Memo of the respective student.
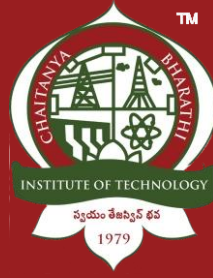
Examinations in SWAYAM-NPTEL	Marks secured by Student	Examinations in CBIT	Equivalent Marks secured by Student
Assignments (25M)	15	CIE (40M)	24
Proctored Examination (75M)	50	SEE (60M)	40
TOTAL Marks (100M)	65	TOTAL Marks (100M)	64

13. If the student fails in completing the MOOCs (SWAYAM-NPTEL) course in the prescribed timeline, student can re-register for the equivalent course offered by department as and when notified.

14. If the student is unsuccessful in MOOCs (SWAYAM-NPTEL) course for a Professional elective/open elective, then student deserves the right to opt for other Professional Electives/Open Electives either through curriculum or MOOCs (SWAYAM-NPTEL) in consultation with faculty coordinator/PG coordinator. Student need to submit a new affidavit for registering new elective equivalent course through MOCCs.

15. A student cannot simultaneously register for a course in curriculum and equivalent MOOCs (SWAYAM-NPTEL) course. The department is deemed to consider marks secured in course offered by department as final.

16. If the course is not offered in the new regulations, then department nominated faculty coordinator is responsible to conduct mid examinations and semester end examination as per the evaluation guidelines of CBIT, Hyderabad.

17. The student who could not complete the MOOCs (SWAYAM-NPTEL) course in the first attempt, will not be eligible to be consider for the award of degree under Distinction.

18. Institute reserves the right to amend or modify these guidelines from time-to-time.

For Students:

1. A student desirous of pursuing credit course through MOOCs (SWAYAM-NPTEL) platform shall complete enrolment (registration) of the chosen SWAYAM-NPTEL course on or before the enrolment closing date.

2. The responsibility of earning the credits through online MOOCs (SWAYAM-NPTEL) courses lies entirely on the respective students.

3. It shall be the responsibility of the student to complete exam registration in the SWAYAM-NPTEL portal for the opted MOOCs course before the deadline.

4. Student holds the responsibility to submit the online assignments on time, attend the proctored examination conducted by the SWAYAM-NPTEL agency and successfully complete the chosen NPTEL course as per the criteria laid.

5. Student should submit the secured marks (Pass/Fail) to nominated faculty coordinator/HOD. Failing of which within the time line is considered to be Absent or Fail in the NPTEL-SWAYAM Exam.

****

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY

(Autonomous and Affiliated to Osmania University, Six UG Programs Accredited by NBA,
Accredited by NAAC with 'A++' Grade, ISO 9001:2015 Certified Institution)

Chaitanya Bharathi (PO), Kokapet (V), Gandipet (M), Ranga Reddy (Dist.),
Hyderabad – 500 075, Telangana
Phone: 8466997201, E-Mail: principal@cbit.ac.in, Website : www.cbit.ac.in