



Hindusthan

College of Engineering and Technology

(An Autonomous Institution Affiliated to Anna University | Approved by AICTE, New Delhi)

Accredited with 'A' Grade by NAAC | Accredited by NBA (ECE, MECH, EEE, IT & CSE)

Coimbatore 641 032

REGULATIONS 2020 (PG)

MCA

(With Amendments)

**HINDUSTHAN COLLEGE OF ENGINEERING AND TECHNOLOGY,
COIMBATORE 641 032**

(An Autonomous Institution Affiliated to Anna University, Chennai)

REGULATIONS 2020(Choice Based Credit System)

For

Master of Computer Applications (MCA)

The regulations hereunder are effective from the academic year 2020-2021 and applicable to students admitted in Hindusthan college of Engineering and Technology, an Autonomous Institution Affiliated to Anna University, Chennai and subject to amendments as may be made by the Academic Council of the Institution from time to time. Any or all such amendments will be effective from such date to such batches of students (including those already in the middle of the course) as may be decided by the Academic Council.

1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In this Regulation, unless the context otherwise specifies

- i. **“Programme”** means Degree Programme, i.e. MCA Degree Programme.
- ii. **Choice Based Credit System** : The choice based credit system provides a ‘cafeteria’ type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.
- iii. **“Specialization”** means a discipline of Post Graduate like Programme MCA
- iv. **“Course”** means a theory or practical subject like Applied Mathematics, Advanced Thermodynamics, etc. that is normally studied in a semester.
- v. **“Head of the Institution “** and **“Chairman- Academic Council”** means the Principal of the College.
- vi. **“Head of the Department”- HoD** means Head of the Department concerned.
- vii. **“Controller of Examinations”- CoE** means the authority who is responsible for all activities of the End Semester Examinations.
- viii. **“University”** means **“Anna University”**, Chennai

2. ADMISSION PROCEDURE

- a. Students for admission to the first semester of the Post Graduate Degree Programme shall be required to have passed an appropriate qualifying Degree Examination of Anna University or any examination of any other University or Authority accepted by the Syndicate of Anna University, Chennai as equivalent thereto.
- b. The Syndicate of the University may decide to restrict admission in any particular year to students having the subset of qualifications prescribed at the time of admission.
- c. Notwithstanding the qualifying examination the student might have passed, he/she shall have a minimum level of proficiency in the appropriate Programme / courses as prescribed by the Syndicate of the University from time to time.
- d. Eligibility conditions for admission such as the marks, class obtained, the number of attempts in the qualifying examination and physical fitness shall be as prescribed by the Syndicate of the University from time to time.

3. PROGRAMMES OFFERED AND MODE OF STUDY

3.1 PROGRAMMES OFFERED

A student may be offered admission to the following full time Programme of study approved by the University

- 1 MCA (Full Time – 2 Years Duration)

3.2 MODES OF STUDY

3.2.1 Full Time:

- Students admitted under “Full Time” would be available in the college during the entire duration of working hours (from Morning to Evening on Full-Time basis) for the curricular, co-curricular and Extra Curricular Activities.
- The Full-Time students should not attend any other Full-Time Programme(s) / Course(s) or take up any Full – Time job / Part Time job during working hours in any Institution or Company during the period of Full-Time Programme. Violation of the above rules will result in cancellation of admission to the PG programme.

4. STRUCTURE OF THE PROGRAMMES

4.1 Categorization of Courses

Every Post Graduate Degree Programme will have a Curriculum with Syllabi consisting of Theory courses, Practical courses that shall be categorized as follows:

- i. **Foundation Courses (FC)** may include Mathematics or other basic courses.
- ii. **Program Core Courses (PCC)** courses include the core courses relevant to the chosen specialization/branch.
- iii. **Program Elective Courses (PEC)** courses include the elective courses relevant to the chosen specialization/ branch.
- iv. **Research Methodology and IPR Courses (RMC)** to understand the importance and the process of creation of patents through research.
- v. **Employability Enhancement Courses (EEC)** includes Project Work, Internship, Seminar, Professional Practices, Case Study and Industrial / Practical Training.
- vi. **Industry Core (IC)** may include core courses relevant to the industry standards.
- vii. **Audit courses (AC)** expose the students to Unnat Bharathi Abhiyan, Constitution of India, Disaster Management, Yoga, English for Research Paper Writing, Value Education, Pedagogy Studies, Stress Management, Sanskrit for Technical Knowledge and Personality Development through Life Enlightenment Skills, Registration for any of these courses is mandatory to students in I to III Semester

4.2 Courses Per Semester

The curriculum of a semester shall normally have a blend of lecture courses and practical courses including Employability Enhancement Courses. Each course may have credits assigned as per clause 4.3

4.3 Credit Assignment

Each course is assigned certain number of credits based on the following:

S.No	Contact period per week	Credits
1	1 Lecture Hour / 1 Tutorial Hour	1
2	3 Practical hours (Laboratory)	1.5
3	2 Seminar Period / 2 Project Work Period	1

4.4 Project work:

- 4.4.1 The Project work for MCA is to be undertaken during the final (fourth) semester. Every student is required to undertake a suitable project work independently in Industry/ Department in consultation with the faculty guide and Head of the Department and submit the project report on dates specified by the Department.

- 4.4.2** Project work of MCA Programme shall be pursued for a minimum of 16 week during the final semester (whole semester). The deadline for submission of final Project Report for MCA is 30 calendar days from the last working day of the FINAL semester.
- 4.4.3** Project work shall be carried out under the supervision of a faculty having PG degree with at least THREE years of teaching experience / Ph.D. degree in the Department concerned.
- 4.4.4** A student may, however, in certain cases, be permitted to work on projects in an Industrial /Research Organization, on the recommendations of the Head of the Department. In such cases, the Project work shall be jointly guided by a supervisor of the department and an expert as joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress.
- 4.4.5** The students may be encouraged to publish his/her project work in a reputed National / International journal before the project viva voce examinations.

4.5 Internship / Industrial Training

- 4.5.1** A student may undergo Industrial Training/Internship for a period of not exceeding 4 weeks. The students may undergo Internship at a Research organization / University/ industry (after due approval from the Departmental Consultative Committee) for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training.
- 4.5.2** On completion of the training, the student has to submit a report on the Training/Internship undergone and a certificate from the organization concerned. A three member Departmental Committee constituted by Head of the Department will evaluate the report, conduct viva voce examination and award appropriate grades and the credit points earned will depend on the duration of the Industrial Training/Internship.
- 4.5.3** Non submission of the Industrial Training report shall be considered as reappearance. Student is expected to complete his/ her internship during his/her summer vacation.

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

4.6 Additional Credits

A Student can earn a maximum of 10 extra credits over and above the total credits. This may be earned through 1 credit / 2 credit courses such as value added courses / Online courses / Self Study Courses / EEC.

4.7 Value Added Courses

- The Students may optionally undergo Value Added Courses and the credits earned through the Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. One / Two credit courses shall be offered by a Department with the prior approval from the Head of the Institution/COE.
- The details of The Syllabus, Time Table and Faculty may be sent to the Controller of Examinations after approval from the Head of the Institution at least one month before the course is offered.

4.8 Online courses

- A student has a choice to study online courses conducted by agencies such as State and Central Government educational institutions like IIT, Anna University and other reputed Universities, Swayam for which certificates are provided by the agencies offering the courses.
- Students may be permitted to take online courses/Self Study Courses (which are provided with certificate) with the approval Departmental Consultative Committee, Dean Academics and Office of the Controller of Examinations. In case of credits earned through online mode from a NPTEL, MOOC and Edx shall be mentioned in the mark sheet over and above the credits considered for the award of the degree.
- A student has to do a self- study course in Semester II and Semester III.

4.9 Credit Transfer Courses

Students may be permitted to take upto 10% online courses (only theory) in II semester. The Students of MCA are permitted to undergo ONE Professional Elective Course in NPTEL/SWAYAM/MOOCs etc. with the prior approval of Departmental Consultative Committee, Dean Academics and Office of the Controller of examinations. The student shall take up Assessments and End Semester Examinations conducted by NPTEL/SWAYAM/ MOOCs and can transfer the grade credits on submission of marks and certificates to the Department Consultative committee.

4.10 Medium of Instruction

The medium of instruction is English for all courses, Examinations, Seminar Presentations and Project / Thesis / Dissertation Reports.

5. DURATION OF THE PROGRAMME

5.1 The minimum and maximum period for the completion of the PG programmes are given below:

Programme	Minimum number of semesters	Maximum number of semesters
MCA (Regular)	4	8

5.2 Each semester will normally have 85 working days (including examination days). The Head of the Department shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus, covering the full content of the syllabus for the course being taught.

5.3 The total duration for the completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in clause 5.1 irrespective of the period of study (vide clause 16) or prevention (vide clause 7.4) in order that the student may be eligible for the award of the degree (vide clause 14)

5.4 The curriculum of MCA programme has been designed to have the credits in the range specified below for the award of the degree

Programme	Prescribed Credit Range
MCA	75 - 85

6. COURSE ENROLLMENT AND REGISTRATION

6.1 Each student on admission, shall be assigned to a faculty advisor (vide clause 8), who shall advice and counsel the student about the details of the academic programme and the choice of courses, considering the student's academic back ground and career objectives.

6.2 After registering for a course, a student shall attend the classes, satisfy the attendance requirements earn Continuous Assessment marks and appear for the End Semester Examinations.

6.2.1 Each student on admission shall register for **all the courses prescribed in the curriculum** in the student's **First Semester of Study**.

6.2.2 The enrollment for the course from the II semester to Final semester will commence 5 working days prior to the commencement of the succeeding semester. If the student wishes, the student may drop add courses (vide clause 6.4) within 5 working days after the commencement of the concerned semester and complete the registration process duly authorized by the Faculty Advisor of the programme.

6.2.3 A student who has passed all the courses prescribed in the curriculum for the award of the degree shall not be permitted to re-enroll to improve the student's marks in a course or the aggregate marks / CGPA.

6.3 MINIMUM CREDITS TO REGISTER FOR PROJECT WORK

Minimum credits for MCA programmes shall be as follows.

Programme	Minimum Number of Credits to be Earned
MCA	30

6.3.1 If the student has not earned the requisite minimum credits, the student cannot enroll for the Project Work. In such a case, the student can enroll for the project work in a subsequent semester, after earning the minimum credits specified.

6.4 Flexibility to Add or Drop Courses

6.4.1 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, the student is permitted to earn more than the total number of credits prescribed in the curriculum of the student's programme within the minimum duration of the programme.

6.4.2 From the First to Final Semesters, the student has the option of registering for additional courses or dropping existing courses. The total number of credits that a student can add or drop is limited to 10, subject to a maximum of 2 courses.

6.5 Redoing a Course

Redoing a course means reregistering for a course, attending all classes, fulfilling the attendance requirements as per clause 7, earning fresh Continuous Assessment Marks and appearing for End semester Examinations.

6.5.1 If a student is prevented from writing the end semester examination of any core course due to lack of attendance, the student has to register for that course again when offered next and redo the course.

6.5.2 If a student is prevented from writing the end semester examination of any professional elective course due to lack of attendance, the student can opt to register for the same course again offered next and redo the course, or she/he can opt to register for a different professional elective course when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.

6.5.3 If a student fails to secure a pass in any Theory or Laboratory course(including elective theory), he/she is given a maximum of THREE attempts to complete the course as per Clause 11.2. If the student still fails to secure a pass, he/she shall register for the same when offered next and redo the course.

6.5.4 If the course in which the student fails to secure a pass even after Three attempts in a professional elective course, then the student can opt for a different professional elective course, register for the same when it is offered, attend classes, fulfill the attendance requirements as per clause 7, secure Continuous Assessment marks and appear for End Semester Examinations.

6.5.5 The student who fails in any Project Work / Seminar / Internship / Career Development Skills/ Professional Practices / Case Study and Industrial / Practical Training shall register for the same in the subsequent semester and redo the course. In this case, the student shall attend the classes and fulfill the attendance requirements as per clause 7.

7. REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE

A student who has fulfilled the following conditions (vide clause 7.1 and 7.2) shall be deemed to have satisfied the attendance requirements for appearing for the End Semester Examination of a particular course.

7.1 Ideally every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than 75% attendance, course wise, taking into account the number of periods required for that course, as specified in the curriculum.

7.2 If a student secures attendance between 65% and 74% (both included) in any course, in the current semester due to medical reasons (Hospitalization / Accident / Specific Illness) or due to participation in University / District / State / National / International Level Sports or due

to participation in Seminar / Conference / Workshop / Training Programme / Voluntary Service / Extension Activities or similar programmes with a prior permission from the chairman, Sports Board and the Head of the Department concerned, the student shall be permitted to appear for the end semester examination of that course. In all such cases, the students should submit the required documents on joining after the absence to the Head of the Department through the Faculty Advisor.

7.3 A student shall normally be permitted to appear for the End Semester examination of the course if the student has satisfied the attendance requirements (vide clause 7.1-7.2) and has registered for the examination in those courses of that semester by paying the prescribed fee.

7.4 Students who do not satisfy clause 7.1 and 7.2 and who secure **less than 65%** attendance in a course will not be permitted to write the end semester examination of that course. The student has to register and redo the course when it is offered as per clause 6.5. If the course in which the student has prevented is a professional elective, the student can opt to redo the same course or opt different professional elective course as per clause 6.5.2. If a student has shortage of attendance in the entire registered course, he/she would not be permitted to move to the higher semester and has to repeat the current semester in the subsequent year.

7.5 In the case of reappearance (Arrear) registration for a course, the attendance requirement as mentioned in Clauses 7.1- 7.3 is not applicable. However, the student has to register for examination in that course by paying the prescribed fee.

7.6 A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear for the same course for improvement of letter grades / marks

8. FACULTY ADVISOR

To help the students in planning their courses of study and for general advice on the academic programme, the Head of the Department of the students will attach a certain number of students to a teacher of the Department, who shall function as Faculty Advisor for those students throughout their period of study. The Faculty Advisor shall advise the students in registering and reappearance (Arrear) registering of courses, authorize the process, monitor their attendance and progress and counsel them periodically. If necessary, the Faculty Advisor may also discuss with or inform the parents about the progress / performance of the students concerned.

The responsibilities of the faculty advisor shall be:

- i. To inform the students about the various facilities and activities available to enhance the student's curricular and co-curricular activities.
- ii. To guide student enrollment and registration of the courses.
- iii. To authorize the final registration of the courses at the beginning of each semester.
- iv. To monitor the academic and general performance of the students including attendance and to counsel them accordingly.
- v. To collect and maintain the academic and co-curricular records of the students.

9. COURSE COMMITTEES

9.1 COMMON COURSE COMMITTEE

A theory course handled by more than one teacher shall have a "Common Course Committee", comprising of all teachers teaching that course. One of the teachers shall be nominated as Course Coordinator by the Head of the Department, duly approved by the Dean, Academic Courses.

The first meeting of the Common Course Committee shall be held within fifteen days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals.

In addition the "Common Course Committee" shall meet to ensure uniform evaluation of continuous assessments after arriving at a common scheme of evaluation for the assessments (vide clause 10).

Wherever feasible, the common course committee shall prepare a common question paper for the continuous assessment tests also. The question paper for the end semester examination is common and shall be set by the Course Coordinator, in consultation with all the teachers.

9.2 MULTIPLE COURSES COMMITTEE

"Multiple Courses Committee" comprises of all teachers handling courses of a particular semester, including common course teachers and two student representatives from the course concerned. One of the above teachers, nominated by the Head of the Department shall coordinate the activities of this committee. The functions of this committee are as follows:

The first meeting of the Multiple Courses Committee shall be held within fifteen days from the date of formation of the committee. The nature and weightage of the continuous assessments shall be decided in the first meeting, within the framework of the Regulations. Two or three subsequent meetings in a semester may be held at suitable intervals. During these

meetings, the student members shall meaningfully interact and express their opinions and suggestions of all the students to improve the effectiveness of the teaching-learning process. It is the responsibility of the student representatives to convey the proceedings of these meetings to all the students.

9.3 OVERALL MONITORING COMMITTEE.

In addition, there shall be an overall monitoring committee for each semester of a programme, which comprises of (i) the Head of the department (convener), (ii) the Faculty Advisors of the programme and (iii) Multiple Course Coordinator. This overall monitoring committee shall meet periodically to discuss academic related matters, progress and status of the students of the semester concerned.

9.3.1 The overall monitoring committee can also invite some of the students of the semester concerned for any of the committee meetings if necessary.

10 ASSESSMENT PROCEDURES FOR AWARDING MARKS

The MCA (Full time) programmes consist of Theory Courses, Laboratory Courses and Employability Enhancement Courses. Employability Enhancement Courses include Project Work, Seminar, Professional Practices, Case Study and Industrial / Practical Training. Appearance in End Semester Examination is mandatory for all courses including Theory, Laboratory, Theory Courses with Laboratory Component and Project work.

Performance in each course of study shall be evaluated based on

- (i) Continuous assessments throughout the semester and
- (ii) End Semester Examination at the end of the semester. The evaluation shall be based on Outcome Based Education (OBE).

For Theory Courses and Theory Courses with Laboratory Component, out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks. For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks. The continuous assessment is 50 marks for the Project Work, and project report evaluation and viva-voce examination carries 50 marks. All other courses included under Employability Enhancement Courses are evaluated by Continuous Assessments only. There is no evaluation for Audit Courses. However, minimum attendance requirement as per clause 7 shall be satisfied.

(i.e.) Each course shall be evaluated for a maximum of 100 marks as shown below:

S.No	Category of courses	CIA	ESE
1.	Theory Courses (FC, PC, PE & IC)	40	60
2.	Laboratory Courses	50	50
3.	Mini Project	50	50
4.	Project Work (EEC)	50	50
5.	Life Skill / Soft Skill / Mooc	100	----

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD' for every semester, which consists of attendance marked in each theory / Laboratory/EEC/AC class, the assessment marks and the record of class work (topics covered), separately for each course handled by the teacher. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix his/her signature and date after due verification.

The Dean-Academic and his team shall check the syllabus covered attendance of the students and with his comments along with the log books are sent to the HOD of the concerned department. At the end of the semester, the record should be verified by an Audit team headed by Dean-Academics and return to Head of the Department who shall keep this document in safe custody (for four years). The records of attendance and assessment of both current and previous semesters should be available for any inspection at any time.

10.2 ASSESSMENT FOR THEORY COURSES

For Theory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks.

The End Semester Exams for theory courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters. End semester Examination is a mandatory requirement for passing the course and every student should appear for the examination for theory, theory course with laboratory, laboratory courses and project work.

Distribution of Marks

ASSESSMENT	THEORY COURSES	
	FC, PC, PE & IC courses	
Internal (40 Marks)	Internal tests (The TWO internal test marks are averaged to TEN marks and TEN marks for mid semester examination)	20
	Any 4 of the Internal Components each 5 Marks.	20
External (60 Marks)	Comprehensive Semester Exam : 100 Marks (Converted to 60 Marks)	
Total	100 Marks	

List of Internal Components

SNo	Description of the Component	SNo	Description of the Component
1.	Assignment	6.	Role play / Group Discussion
2.	Multiple choice questions	7.	Co-operative or Collaborative Learning
3.	Quiz / Gamification	8.	Mini Project
4.	Video Teach / flipped classroom	9.	Case Study
5.	UT – Unannounced Test	10.	Seminar

Question Paper pattern for Internal Test – MCA Programmes

Maximum Marks : 50
Part A : 6 x 2 = 12 marks
Part B : 2 x 14 = 28 marks (Either or Pattern)
Part C : 1 x 10 = 10 marks (Either or Pattern)

Question Paper pattern for Mid Semester / ESE – MCA Programmes

Maximum Marks : 100 (No. of Questions x Mark = Total marks)
Part A : 10 x 2 = 20 marks
Part B : 5 x 14 = 70 marks (Either or Pattern)
Part C : 1 x 10 = 10 marks (Either or Pattern with no sub division) (Application/Design/Analysis/Evaluation/Creativity/Case Study)

10.3 ASSESSMENT FOR LABORATORY COURSES

10.3.1 For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks.

10.3.2 The performance of the student shall be continuously assessed throughout the semester based on Rubrics during laboratory Class and the student's records maintained. There shall be at least one assessment test. The ESE is conducted for 100 marks and scored mark is reduced for 50. A student who secures not less than 50% of total marks prescribed for the course (CIA + ESE) with a minimum of 50% of the marks prescribed for the ESE shall be declared to have passed in the examination.

Practical Courses

S. No.	Category	Maximum Marks
1.	Average marks of all experiments based on Rubrics	40
2.	Assessment Test marks (It should be conducted for 50 marks and converted to 10 marks)	10
	Total	50

10.3.3 The End Semester examinations for Laboratory courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters.

Mark distribution for End Semester Practical examination

Component	Experiment Preparation/ Program Structure	Process of the Experiment/ Program Coding & Execution	Result/ Output	Viva Voce	Total
Marks	20	50	20	10	100

10.4 ASSESSMENT FOR MINI PROJECTWORK

The Mini Project work shall be carried out in the V / VI semester of B.E / B.Tech. Programme and the evaluation will be done through Presentation and Viva - Voce examination. The Components of Evaluation are

- i. CIA - 50 marks ii. ESE - 50 marks

In CIA, three reviews are conducted by the THREE member department committee (which includes the supervisor as one of the members) constituted by the HoD and the mark is awarded by the supervisor based on the performance.

Review I (out of 10Marks)	Review II (out of 20 Marks)	Review III (out of 20 Marks)	Total 50 Marks
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In ESE, the Report Evaluation and Viva - Voce examination will be conducted by a committee constituted by COE. The committee comprises of three faculty members - External Examiner, Supervisor & Internal examiner, but the assessment will be done by External and Internal Examiners.

End Semester Examination(50 Marks)		
Report Evaluation by the External examiner (30 Marks)	Viva – Voce(20 Marks)	
	External examiner (10 marks)	Internal examiner/ Supervisor (10 marks)

10.5 ASSESSMENT FOR PROJECTWORK

10.5.1 The Project work shall be evaluated for a maximum of 100 marks of which 50 marks will be through internal assessment. There should be three reviews to be conducted separately with Internals 100 marks which shall be reduced to 50 marks. The committee for the conduct of reviews shall be constituted by the Head of the Department. The marks are to be distributed as detailed below.

Review I(30 Marks)		Review II(30 Marks)		Review III(40 Marks)	
Review Committee (Excluding Supervisor)	Supervisor	Review Committee (Excluding Supervisor)	Supervisor	Review Committee (Excluding Supervisor)	Supervisor
10	10	25	15	25	15

The components of assessment in the ESE are given in the following table.

Report Evaluation (40 Marks)	Viva – Voce (60 Marks)		
External Examiner	External Examiner	Internal Examiner	Supervisor
40	20	20	20

10.5.2 There shall be three assessments during the semester by a review committee. The student shall make presentation on the progress made before the committee. The Head of the Department shall constitute the review committee consisting of supervisor, project coordinator and another faculty member from the Department for each branch of study. The total marks obtained in the three assessments shall be reduced to 50 marks and rounded to the nearest integer.

10.5.3 The Project Report shall be prepared according to approved guidelines as given by the Academic Courses, Anna University and duly signed by the supervisor(s), Project coordinator and the Head of the Department and shall be submitted to the Head of the Department.

10.5.4 The evaluation of the Project work shall be based on the project report submitted and a Viva-Voce Examination by a team consisting of the supervisor, internal examiner (other than the supervisor) and External Examiner. The Internal/External examiners will be appointed by the COE project evaluation.

10.5.5 If the student fails to obtain 50% of the Internal Assessment marks, he / she will not be permitted to submit the report for that particular semester and has to re-enroll for the same in the subsequent semester.

10.5.6 The deadline for submission of final Project Report is 20 calendar days from the last working day of the semester in which project / thesis / dissertation is done.

10.5.7 If a student fails to submit the project report on or before the specified deadline, student is deemed to have failed in the Project Work and shall re-enroll for the same in a subsequent semester.

10.5.8 A copy of the approved project report after the successful completion of viva-voice examinations shall be kept in the library of the College / Institution.

10.5.9 If a student fails in the ESE of Project work he/she shall resubmit the Project Report within 60 Calendar days from the date of declaration of the results and the same will be considered for assessment in the subsequent semester. The resubmission of a project report and subsequent viva-voce examination will be considered as reappearance with payment of exam fee.

10.6 ASSESSMENT FOR SEMINAR / PROFESSIONAL PRACTICES / CASESTUDY:

The seminar / Case study shall carry 100 marks and shall be evaluated through continuous assessment only. Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar, marks can be equally apportioned. The three member committee consisting of one coordinator and two members appointed by the Head of the Department will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper / report (40%), presentation (40%) and response to the questions asked during presentation (20%).

10.7 ASSESSMENT FOR INDUSTRIAL / PRACTICAL TRAINING / INTERNSHIP / SUMMER MINI PROJECT

10.7.1 Practical training / Industrial Attachment / Summer Project if specified in the Curriculum shall not exceed the maximum duration of 4 weeks and should be organized by the Head of the Department for every student.

10.7.2 The Industrial / Practical Training shall carry 100 marks and shall be evaluated through continuous assessment only as per Table given. At the end of Industrial / Practical training / Internship / Summer Project, the student shall submit a brief report on the training undergone and a certificate from the organization concerned. The evaluation will be made based on this Report and a Viva-Voce Examination, conducted internally by a three member Departmental Committee consisting of one coordinator and two members constituted by the Head of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list (with grade) and sent to Controller of Examinations by the Head of the Department.

Table

INTERNSHIP / INDUSTRIAL TRAINING		
EVALUATION		
REPORT	PRESENTATION	VIVA VOCE
40	30	30

10.8 ASSESSMENT FOR VALUE ADDED COURSES

The one credit course shall carry 100 marks and shall be evaluated through continuous assessments only. Two Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. The Head of the Department may identify a faculty member as coordinator for the course. A committee consisting of the Head of the Department, staff handling the course (if available), coordinator and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The grades shall be assigned to the students by the above committee based on their relative performance.

10.9 ASSESSMENT FOR ONLINE COURSE from NPTEL, MOOC, Edx

Students may be permitted to credit online/self-study courses (which are provided with certificate) with the approval of Departmental Consultative Committee of the department. This online/self-study course credits can be considered over and above the credits for the award of degree. The Head of the Department may identify a faculty member as coordinator for the course, who is responsible for evaluation process. For the successful students the course details will be submitted to COE by the department consultative committee and it will be mentioned in the mark sheet under the heading additional credits.

11 PASSING REQUIREMENTS

11.1 The Passing requirement for a student in a course is determined based on the marks obtained both in Continuous Assessment and End Semester Examinations. If the student gets <50% of total marks then, the student will be awarded only RA (Reappearance) grade. All other grades will be decided by the faculty concerned. While fixing the grades, the mean mark shall be at the middle of the 'A' grade range. A student who earns a minimum of 6 grade points in a course is declared to have successfully passed the course.

11.2 If a student fails to secure a pass in theory courses and laboratory courses in the current semester examination, he/she is allowed to write arrear examinations for the next three consecutive semesters and their internal marks shall be carried over for the above mentioned period of three consecutive semesters.

11.3 If a candidate fails in the end semester examinations of Phase II, he/she has to resubmit the Project Report within 30 days from the date of declaration of the results. The resubmission of the project report and the subsequent viva- voce examination will be considered as reappearance with payment of exam fee. In case if a student fails to resubmit the project report within the stipulated period and fails in the subsequent viva-voce examination, the student shall register for the course again, in the subsequent semester.

11.4 The passing requirement for the courses which are assessed only through continuous assessment (EEC courses except project work), shall be fixed as minimum 50% and rest of the grades are decided by the faculty concerned.

11.5 Supplementary Examinations

After the publication of FINAL Semester ESE and the corresponding revaluation results if a student has arrear in only one course for the entire programme, he/she will be permitted to take up the supplementary examination within one month after the publication of the revaluation results.

12 REQUEST FOR PHOTO COPY OF THE VALUED ANSWER SCRIPT / REVALUATION

A student can apply for viewing of valued answer script and / or revaluation of his / her semester examination answer paper in theory courses, within FIVE working days from the declaration of results, and on the dates specified by the Controller of Examinations on payment of a prescribed fee along with proper application to the Controller of Examinations. The Controller of Examinations shall arrange for viewing / revaluation and the revaluation result shall be published soon after the revaluation process is completed.

13. AWARD OF LETTER GRADES

13.1 The performance of a student will be reported using letter grades, each carrying certain points as detailed below:

Letter Grade	Range	Grade Points
O (Outstanding)	91 - 100	10
A + (Excellent)	81 - 90	9
A (Very Good)	71 - 80	8
B + (Good)	61 - 70	7
B (Average)	51 - 60	6
RA (Reappearance Registration)	< 50	0
WD (Withdrawal)	0	0
AB (Absent)	0	0

'RA' denotes Reappearance. Registration is required for that particular course.

'W' indicates withdrawal from the course.

'AB' indicates Absent in the course.

'WH' indicates malpractice of any kind (withheld).

13.2 The grades O, A+, A, B+, B obtained for the one credit course shall figure in the Mark sheet under the title 'Value Added Courses'.

14. GPA AND CGPA CALCULATION

14.1 After results are declared, Grade Sheets will be issued to each student which will contain the following details:

- the list of courses registered during the semester and the grades scored.
- the Grade Point Average (GPA) for the semester and
- the Cumulative Grade Point Average (CGPA) of all courses registered from first semester onwards.

During each semester, the list of courses registered and the grades scored in each course are used to compute the Grade Point Average (GPA). GPA is the ratio of the sum of the products of the number of credits of courses registered and the grade points corresponding to the grades scored in those courses, taken for all the courses, to the sum of the number of credits of all the courses in the semester.

After the results are declared, grade sheet will be issued to each student which will contain the following details. Grade Point Average (GPA) of a Semester (SGPA) and Cumulative Grade Point Average (CGPA) of a programme are calculated as follows.

$$SGPA = \frac{\text{Sum of the product of the GP by the corresponding credits of the courses offered in that semester}}{\text{Sum of the credits of the courses of that semester}}$$

$$i.e., SGPA = \frac{\sum_i C_i GP_i}{\sum_i C_i}$$

$$CGPA \text{ of the entire programme} = \frac{\text{Sum of the product of the GPs by the corresponding credits of the courses offered for the entire programme.}}{\text{Sum of the credits of the courses of the entire semester}}$$

$$i.e., CGPA \text{ of the entire programme} = \frac{\sum_n \sum_i C_{ni} GP_{ni}}{\sum_n \sum_i C_{ni}}$$

Where,

C_i is the credit fixed for the course 'i' in the any semester

G_{P_i} is the grade point obtained for the course 'i' in any semester

n refers to the semester in which such courses are credited

Note: RA grade will be excluded for calculating GPA and CGPA

14.2 The credits earned through one / two credit courses shall not be considered for calculating GPA and CGPA.

14.3 If a student studies more number of electives than required as per the student's programme curriculum, the courses with higher grades alone will be considered for calculation of CGPA.

15 ELIGIBILITY FOR THE AWARD OF DEGREE

A student shall be declared to be eligible for the award of the PG Degree 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 in Master of Computer Applications (Full 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 4 years reckoned from the commencement of the first semester to which the candidate was admitted.

- i. No disciplinary action pending against the student.
- ii. Successfully passed any additional courses.
- iii. The award of Degree must have been approved by the Syndicate of the University.

15.1 CLASSIFICATION OF THE DEGREE AWARDED

15.1.1 FIRST CLASS WITH DISTINCTION:

A student who satisfies the following conditions shall be declared to have passed the examination in First class with Distinction:

M.C.A, (Full Time)

- Should have passed the examination in all the courses of all the four semesters in the student's First Appearance within three years, which includes authorized break of study of one year. Withdrawal from examination will not be considered as an appearance.
- **Should have secured a CGPA of not less than 8.50**
- Should NOT have been prevented from writing End Semester Examination due to lack of attendance in any of the courses.

15.1.2 FIRSTCLASS:

A student who satisfies the following conditions shall be declared to have passed the examination in First class:

M.C.A, (Full Time)

- Should have passed the examination in all the courses of all four semesters within three years , which includes one year of authorized break of study (if availed) or prevention from writing the End Semester Examination due to lack of attendance (if applicable).
- **Should have secured a CGPA of not less than 7.00**

15.1.3 SECOND CLASS:

All other students (not covered in clauses 15.2.1 and 15.2.2) who qualify for the award of the degree (vide Clause 15.1) shall be declared to have passed the examination in Second Class.

15.1.4 A student who is absent in End Semester Examination in a course / project work after having registered for the same shall be considered to have appeared in that examination (except approved withdrawal from end semester examinations as per clause 16) for the purpose of classification.

16 PROVISION FOR WITHDRAWAL FROM EXAMINATION:

16.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by HOD/physical director) be granted permission to withdraw from appearing for the end semester examination in any course or courses in ANY ONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to COE through HOD with required documents.

16.2 Withdrawal application shall be valid only if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN working days before the commencement of the end semester examination in that course or courses and also recommended by the Head of the Department.

16.3 Notwithstanding the requirement of mandatory TEN working days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.

16.4 If a student withdraws a course or courses from writing end semester examinations, he/she shall register the same in the subsequent semester and write the end semester examination(s).

16.5 Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.

16.6 Withdrawal is permitted for the End Semester Examinations in the final semester only if the period of study the student concerned does not exceed 3 years for Master of Computer Applications.

17 BREAK OF STUDY FROM A PROGRAMME

17.1 A student is permitted to go on break of study for a fixed period of one year as a single break in the entire course of study.

17.2 The student applies for break of study, the student shall apply to the COE through HOD in advance, in any case, not later than the last date of the first assessment period. The application (downloaded from website) duly filled by the student shall be submitted through the Head of the Department.

17.3 The students permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the COE through HOD in the prescribed format at the beginning of the readmitted semester itself for prescribing additional/equivalent courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

17.4 The total period for completion of the programme reckoned from, the commencement of the first semester to which the student was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that the student may be eligible for the award of the degree (vide clause 15).

17.5 In case there is any period of break of study more than the permitted duration of break of study, the student shall be permitted to continue the programme only if the approval is obtained from the COE through Head of the Department before the end of the semester in which the student has taken break of study.

17.6 If a student has not reported to the department for a period of two consecutive semesters without any intimation, the name of the student shall be deleted permanently from the college enrollment. Such students are not entitled to seek readmission under any circumstances.

17.7 PROVISION OF SCRIBE:

- The Appointment of scribes for the students with disabilities shall be done by the Controller Office. In this connection the student shall submit her/his requisition through proper approval of HoD and Principal to CoE office well in advance prior to the examinations. (at least 15 days before the commencement of Examinations).

- However, students injured during the study holidays and in between the examination period and not able to write, on producing medical certificate from Civil Surgeon will be given Scribe.

18 FOR STUDENTS REJOINING THE PROGRAMME

A student who is required to repeat the study of any semester for want of attendance/ progress/conduct or who desires to rejoin the course after a period of discontinuance or who upon his/her own request is permitted by the authorities to repeat the study of any semester, may join the semester which he/she is eligible or permitted to join, only at the time of its normal commencement for a regular batch of students and after obtaining the approval from Directorate of Technical Education (DoTE) and Anna University, Chennai. No student will however be enrolled in more than one semester at any time.

In that case he/she has to come under the regulation which is being followed in that Academic year.

19 FOR TRANSFER STUDENTS

Students transferred from other Institutions may be admitted on obtaining the approval from DOTE and Anna University, Chennai. In that case he/she has to come under the regulation which is being followed in that Academic year and also should obtain equivalence from the Controller of Examinations.

20 DISCIPLINE

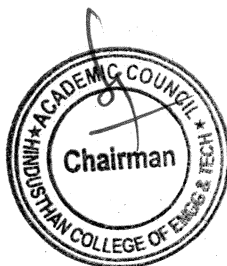
20.1 Every student is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the Institution/ Department. The Head of the Institution shall constitute a disciplinary committee consisting of Head of the Institution, Head of the departments to which the student concerned belongs, and the Head of another department to enquire into acts of indiscipline and notify the Institution about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted by the COE of the college for taking final decision.

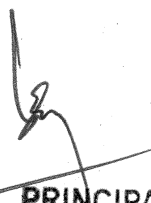
20.2 If a student indulges in malpractice in any of the examinations, the student shall be liable for punitive action as prescribed by the University from time to time.

21 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The college may from time to time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of Examinations through the Academic Council.


Dean (Academics)
HiCET




PRINCIPAL
Hindusthan College of Engineering & Technology
COIMBATORE - 641 032

As per the Anna University communication Letter No.5883/AU/CAC/Rel.Grading/2022, dated on 26.09.2022, Uniform evaluation method of students based on relative grading has been revised for the students who have been admitted in the AY 2021-2022 onwards in Clause 10 and 13. The same has been submitted to the 11th ACM and approved.

AMENDMENTS IN PG REGULATION 2020

(Amendment to the Regulation 2020 (CBCS) for M.C.A degree Programme applicable for the students admitted in 2021 – 2022 onwards)

CLAUSE NO.	EXISTING	REVISED																
10	<p>10 ASSESSMENT PROCEDURES FOR AWARDING MARKS The MCA (Full time) programmes consist of Theory Courses, Laboratory Courses and Employability Enhancement Courses. Employability Enhancement Courses include Project Work, Seminar, Professional Practices, Case Study and Industrial / Practical Training. Appearance in End Semester Examination is mandatory for all courses including Theory, Laboratory, Theory Courses with Laboratory Component and Project work.</p> <p>Performance in each course of study shall be evaluated based on</p> <p>(i) Continuous assessments throughout the semester and</p> <p>(ii) End Semester Examination at the end of the semester. The evaluation shall be based on Outcome Based Education (OBE).</p> <p>For Theory Courses and Theory Courses with Laboratory Component, out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks. For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks. The continuous assessment is 50 marks for the Project Work, and project report evaluation and viva-voce examination carries 50 marks. All other courses included under Employability Enhancement Courses are evaluated by</p>	<p>10. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT For all theory, laboratory courses, theory courses with laboratory component and project work the continuous assessment shall be awarded as per the procedure given below and should be approved by the respective board of studies for each and every course:</p> <p>10.1 Theory Courses Two assessments each carrying 100 marks shall be conducted during the semester by the Department concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer.</p> <p style="text-align: center;">Table 10.1.1 Procedure for Internal Assessment (Theory)</p> <table><tr><th>Description</th><th>Marks</th></tr><tr><td colspan="2">Continuous Internal Assessment I</td></tr><tr><td>Written Test</td><td>60</td></tr><tr><td>Individual Assignment / Case Study / Seminar / Mini Project / any other experiential learning</td><td>40</td></tr><tr><td colspan="2">Continuous Internal Assessment II</td></tr><tr><td>Written Test</td><td>60</td></tr><tr><td>Individual Assignment / Case Study / Seminar / Mini Project / any other experiential learning</td><td>40</td></tr><tr><td>Total Internal Assessment</td><td>200*</td></tr></table>	Description	Marks	Continuous Internal Assessment I		Written Test	60	Individual Assignment / Case Study / Seminar / Mini Project / any other experiential learning	40	Continuous Internal Assessment II		Written Test	60	Individual Assignment / Case Study / Seminar / Mini Project / any other experiential learning	40	Total Internal Assessment	200*
Description	Marks																	
Continuous Internal Assessment I																		
Written Test	60																	
Individual Assignment / Case Study / Seminar / Mini Project / any other experiential learning	40																	
Continuous Internal Assessment II																		
Written Test	60																	
Individual Assignment / Case Study / Seminar / Mini Project / any other experiential learning	40																	
Total Internal Assessment	200*																	

Continuous Assessments only. There is no evaluation for Audit Courses. However, minimum attendance requirement as per clause 7 shall be satisfied.

(i.e.) Each course shall be evaluated for a maximum of 100 marks as shown below:

S.No	Category of courses	CIA	ESE
1.	Theory Courses (FC, PC, PE & IC)	40	60
2.	Laboratory Courses	50	50
3.	Mini Project	50	50
4.	Project Work (EEC)	50	50
5.	Life Skill / Soft Skill / Mooc	100	----

10.1 Every teacher is required to maintain an „ATTENDANCE AND ASSESSMENT RECORD“ for every semester, which consists of attendance marked in each theory / Laboratory/EEC/AC class, the assessment marks and the record of class work (topics covered), separately for each course handled by the teacher. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of assessment marks and attendance. The Head of the Department will affix his/her signature and date after due verification.

The Dean-Academic and his team shall check the syllabus covered attendance of the students and with his comments along with the log books are sent to the HOD of the concerned department. At the end of the semester, the record should be verified by an Audit team headed by Dean- Academics and return to Head of the Department who shall keep this document in safe custody (for four years). The records of attendance and assessment of both current and previous semesters should be available for any inspection at any time.

10.2 ASSESSMENT FOR THEORY COURSES

For Theory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 40 and the End Semester Examination carries 60 marks.

The End Semester Exams for theory courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and

* The weighted average shall be converted into 40 marks for Internal Assessment.

Two internal assessments will be conducted as a part of a continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment / Case study / Seminar / Mini project and Test with each having a weightage of 40% and 60% respectively. The tests shall be in the written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

QUESTION PAPER PATTERN FOR INTERNAL & END SEMESTER EXAM

ALL PG (M.C.A) Papers

Internal Test I & II Maximum Marks : 100	End Semester Exam Maximum Marks : 100
Part A : 5 x 5 = 25 marks	Part A : 5 x 5 = 25 marks
Part B : 4 x 15 = 60 marks (Either or Pattern)	Part B : 4 x 15 = 60 marks (Either or Pattern)
Part C : 1 x 15 = 15 marks (Compulsory)	Part C : 1 x 15 = 15 marks (Compulsory)

10.2 Laboratory Courses

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on the conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 100 are as follows: 75 marks shall be awarded for the

between April and June during the even semesters. End semester Examination is a mandatory requirement for passing the course and every student should appear for the examination for theory, theory course with laboratory, laboratory courses and project work.

Distribution of Marks

ASSESSMENT	THEORY COURSES	
	FC, PC, PE & IC courses	
Internal (40 Marks)	Internal tests (The TWO internal test marks are averaged to TEN marks and TEN marks for mid semester examination)	20
	Any 4 of the Internal Components each 5 Marks.	20
External (60 Marks)	Comprehensive Semester Exam : 100 Marks (Converted to 60 Marks)	
Total	100 Marks	

List of Internal Components

SNo	Description of the Component	SNo	Description of the Component
1.	Assignment	6.	Role play / Group Discussion
2.	Multiple choice questions	7.	Co-operative or Collaborative Learning
3.	Quiz / Gamification	8.	Mini Project
4.	Video Teach / flipped classroom	9.	Case Study
5.	UT – Unannounced Test	10.	Seminar

Question Paper pattern for Internal Test – MCA Programmes

Maximum Marks : 50
Part A : 6 x 2 = 12 marks
Part B : 2 x 14 = 28 marks (Either or Pattern)
Part C : 1 x 10 = 10 marks (Either or Pattern)

Question Paper pattern for Mid Semester / ESE – MCA Programmes

successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

Table 10.2.1 Procedure for Internal Assessment (Practical)

Internal Assessment (100 Marks) *		
Evaluation of Laboratory Observation, Record		Test
75		25
* Internal assessment marks shall be converted into 60 marks		

End Semester Exam Maximum Marks : 100				
Component	Experiment Preparation / Program Structure	Process of the Experiment / Program Coding & Execution	Result / Output	Viva Voce
Marks	20	50	20	10
Total				
100				

10.3 Theory Courses with Laboratory Component / Laboratory Courses with Theory Component

The weightage of internal assessment and end semester examination marks will be 50% each. The distribution of marks for the theory and laboratory components in the internal assessments and end semester examination for different types of courses are provided in the table 10.3.1 & 10.3.2

<div>Maximum Marks : 100 (No. of Questions x Mark = Total marks)</div> <div>Part A : 10 x 2 = 20 marks</div> <div>Part B : 5 x 14 = 70 marks (Either or Pattern)</div> <div>Part C : 1 x 10 = 10 marks (Either or Pattern with no sub division) (Application/Design/Analysis/Evaluation/Creativity/Case Study)</div>														
<div>10.3 ASSESSMENT FOR LABORATORY COURSES</div> <div>10.3.1 For Laboratory Courses out of 100 marks, the maximum marks for Continuous Assessment is fixed as 50 and the End Semester Examination carries 50 marks.</div> <div>10.3.2 The performance of the student shall be continuously assessed throughout the semester based on Rubrics during laboratory Class and the student's records maintained. There shall be at least one assessment test. The ESE is conducted for 100 marks and scored mark is reduced for 50. A student who secures not less than 50% of total marks prescribed for the course (CIA +ESE) with a minimum of 50% of the marks prescribed for the ESE shall be declared to have passed in the examination.</div>														
<div>Practical Courses</div> <table><tr><th>S. No.</th><th>Category</th><th>Maximum Marks</th></tr><tr><td>1.</td><td>Average marks of all experiments based on Rubrics</td><td>40</td></tr><tr><td>2.</td><td>Assessment Test marks (It should be conducted for 50marks and converted to 10 marks)</td><td>10</td></tr><tr><td></td><td>Total</td><td>50</td></tr></table> <div>10.3.3 The End Semester examinations for Laboratory courses will be of 3 hours duration and shall normally be conducted between October and December during the odd semesters and between April and June during the even semesters.</div>			S. No.	Category	Maximum Marks	1.	Average marks of all experiments based on Rubrics	40	2.	Assessment Test marks (It should be conducted for 50marks and converted to 10 marks)	10		Total	50
S. No.	Category	Maximum Marks												
1.	Average marks of all experiments based on Rubrics	40												
2.	Assessment Test marks (It should be conducted for 50marks and converted to 10 marks)	10												
	Total	50												

Table 10.3.1 Procedure for the conduct of internal assessments for theory and laboratory components and end semester examination						
L	T	P	C	Internal		End semester Examination
				Assessment 1	Assessment 2	
1	0	4	3	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
1	0	2	2	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
2	0	2	3	Theory (25%)	Laboratory (25%)	Theory (25%) Laboratory (25%)
3	0	2	4	Theory (25%)	Laboratory (25%)	Theory (35%) Laboratory (15%)
2	0	4	4	Theory (25%)	Laboratory (25%)	Theory (15%) Laboratory (35%)

If there is a theory course with a laboratory component, there shall be two assessments: the first assessment (Maximum mark is 100) will be similar to the assessment of the theory course and the second assessment (Maximum mark is 100) will be similar to the assessment of laboratory course / Project course respectively. The weighted average of these two assessments shall be converted into 50 marks and rounded to the nearest integer.

Mark distribution for End Semester Practical examination

Component	Experiment Preparation/ Program Structure	Process of the Experiment/ Program Coding & Execution	Result/ Output	Viva Voce	Total
Marks	20	50	20	10	100

10.4 ASSESSMENT FOR MINI PROJECTWORK

The Mini Project work shall be carried out in the V / VI semester of B.E / B.Tech. Programme and the evaluation will be done through Presentation and Viva - Voce examination. The Components of Evaluation are

i. CIA - 50 marks ii. ESE - 50 marks

In CIA, three reviews are conducted by the THREE member department committee (which includes the supervisor as one of the members) constituted by the HoD and the mark is awarded by the supervisor based on the performance.

Review I (out of 10 Marks)	Review II (out of 20 Marks)	Review III (out of 20 Marks)	Total 50 Marks
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In ESE, the Report Evaluation and Viva - Voce examination will be conducted by a committee constituted by COE. The committee comprises of three faculty members - External Examiner, Supervisor & Internal examiner, but the assessment will be done by External and Internal Examiners.

End Semester Examination (50 Marks)		
Report Evaluation by the External examiner (30 Marks)	Viva - Voce (20 Marks)	
	Internal examiner (10 marks)	Internal examiner/ Supervisor (10 marks)

10.5 ASSESSMENT FOR PROJECTWORK

10.5.1 The Project work shall be evaluated for a maximum of 100 marks of which 50 marks will be through internal assessment. There should be three reviews to be

Table 10.3.2 Procedure for the conduct of internal assessments for theory and laboratory components

Assessment I (40% weightage) (Theory Component)		Assessment II (60% weightage) (Laboratory Component)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Evaluation of Laboratory Observation, Record	Written Test	
40	60	75	25	200*

*The weighted average shall be converted into 50 marks for Internal Assessment.

10.4 Project Work

The student shall register for Project Work-I in pre-final semester and Project Work-II in final semester. Project work may be allotted to a single student or to a group of students not exceeding 4 per group. Project Work-II may / may not be a continuation of Project Work - I. If Project Work - II is not a continuation of Project Work - I, then the topic and constitution of the project team members need not be the same.

10.4.1 Project Work shall be carried out under the supervision of a "Qualified Teacher" in the Department concerned. In this context "Qualified Teacher" means the faculty member possessing (i) PG Degree or (ii) Ph.D. Degree.

conducted separately with Internals 100 marks which shall be reduced to 50 marks. The committee for the conduct of reviews shall be constituted by the Head of the Department. The marks are to be distributed as detailed below.

Review I(30 Marks)		Review II(30 Marks)		Review III(40 Marks)	
Review Committee (Excluding Supervisor)	Supervisor	Review Committee (Excluding Supervisor)	Supervisor	Review Committee (Excluding Supervisor)	Supervisor
10	10	25	15	25	15

The components of assessment in the ESE are given in the following table.

Report Evaluation (40 Marks)		Viva – Voce (60 Marks)	
External Examiner	Internal Examiner	Internal Examiner	Supervisor
40	20	20	20

10.5.2 There shall be three assessments during the semester by a review committee. The student shall make presentation on the progress made before the committee. The Head of the Department shall constitute the review committee consisting of supervisor, project coordinator and another faculty member from the Department for each branch of study. The total marks obtained in the three assessments shall be reduced to 50 marks and rounded to the nearest integer.

10.5.3 The Project Report shall be prepared according to approved guidelines as given by the Academic Courses, Anna University and duly signed by the supervisor(s), Project coordinator and the Head of the Department and shall be submitted to the Head of the Department.

10.5.4 The evaluation of the Project work shall be based on the project report submitted

10.5 The Project Work - II carried out in industry / academic / research institutions need not be a continuation of Project Work - I. In such cases, Project Work - II shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and a suitable record of the meetings shall be maintained.

10.5.1 The Head of the Institutions shall constitute a review committee for Project Work for each programme. The review committee consists of a supervisor, an expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an alternate member shall be nominated. In the case of an Industrial Project, the review committee shall have the supervisor, the coordinator from the industry and the project coordinator from the Department.

There shall be three reviews during by the review committee. The student shall make a presentation on the progress made by him / her before the committee. The total marks obtained in the three reviews shall be reduced to 60 marks and rounded to the nearest integer (as per the scheme given in 10.4).

10.5.2 The project report shall carry a maximum of 20 marks. The project report shall be submitted as per the approved guidelines. The same marks shall be awarded to every student within the project group for the project

<p>and a Viva-Voce Examination by a team consisting of the supervisor, internal examiner (other than the supervisor) and External Examiner. The Internal/External examiners will be appointed by the COE project evaluation.</p> <p>10.5.5 If the student fails to obtain 50% of the Internal Assessment marks, he / she will not be permitted to submit the report for that particular semester and has to re-enroll for the same in the subsequent semester.</p> <p>10.5.6 The deadline for submission of final Project Report is 20 calendar days from the last working day of the semester in which project / thesis / dissertation is done.</p> <p>10.5.7 If a student fails to submit the project report on or before the specified deadline, student is deemed to have failed in the Project Work and shall re-enroll for the same in a subsequent semester.</p> <p>10.5.8 A copy of the approved project report after the successful completion of viva-voice examinations shall be kept in the library of the College / Institution.</p> <p>10.5.9 If a student fails in the ESE of Project work he/she shall resubmit the Project Report within 60 Calendar days from the date of declaration of the results and the same will be considered for assessment in the subsequent semester. The resubmission of a project report and subsequent viva-voice examination will be considered as reappearance with payment of exam fee.</p> <p>10.7 ASSESSMENT FOR INDUSTRIAL / PRACTICAL TRAINING / INTERNSHIP / SUMMER MINI PROJECT</p> <p>10.7.1 Practical training / Industrial Attachment / Summer Project if specified in the Curriculum shall not exceed the maximum duration of 4 weeks and should be organized by the Head of the Department for every student.</p> <p>10.7.2 The Industrial / Practical Training shall carry 100 marks and shall be evaluated</p>	<p>report. The Viva-voice examination shall carry 40 marks. Marks are awarded to each student of the project group based on the individual performance in the viva- voce examination.</p> <p>Table 10.5.2.1 Procedure for Internal Assessment & End Semester Assessment (Project)</p> <table><tr><th rowspan="3"></th><th colspan="2">Review</th><th rowspan="3">III</th><th colspan="4">End Semester Examinations</th></tr><tr><th rowspan="2">I</th><th colspan="2">II</th><th colspan="2">Project Report</th><th colspan="2">Viva-Voce Examination</th></tr><tr><th>Internal</th><th>External</th><th>Internal</th><th>External</th><th>Supervisor</th></tr><tr><td>10</td><td></td><td>15</td><td>15</td><td>10</td><td>10</td><td>10</td><td>20</td><td>10</td></tr></table> <p>10.5.3 The last date for submission of the project report is on the last working day of the semester. If a student fails to submit the project report on or before the specified deadline or the student has submitted the project report but did not appear for the viva-voice examination, it will be considered as fail in the Project Work and the student shall re-register for the same in the subsequent semester.</p> <p>10.7 Other Employability Enhancement Courses</p> <p>The Industrial / Practical Training, Summer Project, and Internship, shall carry 100 marks and shall be evaluated through an internal assessment only. At the end of the Industrial / Practical Training / Internship / Summer Project, the student shall submit an attendance certificate from the organization where he/she has undergone training and a brief report. The evaluation will be made</p>		Review		III	End Semester Examinations				I	II		Project Report		Viva-Voce Examination		Internal	External	Internal	External	Supervisor	10		15	15	10	10	10	20	10
	Review		III	End Semester Examinations																										
	I			II		Project Report		Viva-Voce Examination																						
		Internal		External	Internal	External	Supervisor																							
10		15	15	10	10	10	20	10																						

through continuous assessment only as per Table given. At the end of Industrial / Practical training / Internship / Summer Project, the student shall submit a brief report on the training undergone and a certificate from the organization concerned. The evaluation will be made based on this Report and a Viva-Voce Examination, conducted internally by a three member Departmental Committee consisting of one coordinator and two members constituted by the Head of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list (with grade) and sent to Controller of Examinations by the Head of the Department.

Table

INTERNSHIP / INDUSTRIAL TRAINING			
EVALUATION			
REPORT	PRESENTATION	VIVA VOCE	
40	30	30	

10.8 ASSESSMENT FOR VALUE ADDED COURSES

The one credit course shall carry 100 marks and shall be evaluated through continuous assessments only. Two Assessments shall be conducted during the semester by the Department concerned. The total marks obtained in the tests shall be reduced to 100 marks and rounded to the nearest integer. The Head of the Department may identify a faculty member as coordinator for the course. A committee consisting of the Head of the Department, staff handling the course(if available), coordinator and a senior Faculty member nominated by the Head of the Department shall monitor the evaluation process. The grades shall be assigned to the students by the above committee based on their relative performance.

10.9 ASSESSMENT FOR ONLINE COURSE from NPTEL, MOOC, Edx

Students may be permitted to credit online/self-study courses (which are provided with certificate) with the approval of Departmental Consultative Committee of the

based on this report and a viva-voce Examination, conducted internally by a three-member Departmental Committee constituted by the Head of the Institution consisting of the course coordinator and two experts from the Department. The certificates (issued by the organization) submitted by the students shall be attached to the mark list sent by the Head of the Institution to the Controller of Examinations.

For all the courses under Employability Enhancement Courses Category, except the Project Work, the evaluation shall be done with 100% internal marks.

10.8 Assessment for Value Added Courses

The students may optionally undergo Value Added Courses and the credits earned through the Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. One / Two credit courses may be offered by a department in every semester with prior approval from the Head of the Institution / Dean-Academics.

The details of the Syllabus, Time Table and Faculty may be sent to the Controller of Examinations after approval from the Head of the Institution / Dean-Academics at least one month before the course is offered.

10.9 Assessment for Online Courses

The online courses shall be chosen from the MOOC / NPTEL / SWAYAM platform, provided the offering organization conducts regular examinations and provide marks. The credits earned shall be transferred and the marks earned shall be converted into grades and transferred, provided the student has passed in the examination as per the norms of the offering organization. The details regarding online courses taken up by the student and marks/credits earned and

department. This online/self-study course credits can be considered over and above the credits for the award of degree. The Head of the Department may identify a faculty member as coordinator for the course, who is responsible for evaluation process. For the successful students the course details will be submitted to COE by the department consultative committee and it will be mentioned in the mark sheet under the heading additional credits.

the approval for the course from the respective department BoS shall be sent to the Controller of Examinations, in the subsequent semester(s). The obtained marks can be converted into its equivalent grade as prescribed in table 10.9.1

Table 10.9.1 Grade Calculation for Online Courses

Marks obtained	Equivalent Grade
Greater than 80	O
76 to 80	A+
71 to 75	A
61 to 70	B+
50 to 60	B
41 to 50	C

10.10 Internal Mark Display

Internal marks approved by the Head of the Institution shall be displayed by the respective HoDs within 5 days from the last working day.

10.11 Attendance Record

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD', which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the Department will put his/her signature and date after due

verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years).

10.12 Conduct of Academic Audit

The institution shall strive for a better performance of the students by conducting the internal assessments as mentioned in Clause 10.

In order to ensure the above, an Academic Audit is to be done for every course taught during the semester. For the internal assessments conducted for each course as per details provided in Clause 10, the academic records shall be maintained in the form of documentation for the individual assignments / case study report / report of mini project submitted by each student and assessment test question paper and answer script. A report of industrial training / internship shall also be maintained, if applicable. For laboratory courses, student's records shall be maintained. Further, the attendance of all students shall be maintained as a record.

The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a technical institution of repute near the institute.

CLAUSE NO.	EXISTING	REVISED																																												
13 & 14	13. AWARD OF LETTER GRADES 13.1 The performance of a student will be reported using letter grades, each carrying certainpoints as detailed below:	13 AWARD OF LETTER GRADES 13.1 The award of letter grades will be decided based on the relative grading principle for all types of courses (except laboratory courses and project work). The relative grading is applicable to only those students who have passed the examination as per the passing requirements enumerated above. For those students who have not passed the examination, Reappearance (U) shall be awarded as shown in below Table 13.1.1. For those students who have passed the course, the relative grading shall be done. The marks of those students who have passed only shall be inputted into the software developed for relative grading. The evolved relative grading method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. For a given course, if the student's strength is greater than 30, the relative grading method shall be adopted. However, if the student's strength is less than 30 for all the courses and also for the project work / Internship and laboratory courses, the fixed grading shall be followed with the grade range as specified below.																																												
	<table><tr><th>Letter Grade</th><th>Grade Point</th><th>Range of marks</th></tr><tr><td>O(Outstanding)</td><td>10</td><td>91 - 100</td></tr><tr><td>A + (Excellent)</td><td>9</td><td>81 - 90</td></tr><tr><td>A (Very Good)</td><td>8</td><td>71 - 80</td></tr><tr><td>B + (Good)</td><td>7</td><td>61 - 70</td></tr><tr><td>B (Above Average)</td><td>6</td><td>51 - 60</td></tr><tr><td>RA (Reappearance)</td><td>0</td><td>< 50</td></tr><tr><td>Absent</td><td>0</td><td></td></tr><tr><td>Withdrawal</td><td>0</td><td></td></tr><tr><td>With Held</td><td>0</td><td></td></tr></table>	Letter Grade	Grade Point	Range of marks	O(Outstanding)	10	91 - 100	A + (Excellent)	9	81 - 90	A (Very Good)	8	71 - 80	B + (Good)	7	61 - 70	B (Above Average)	6	51 - 60	RA (Reappearance)	0	< 50	Absent	0		Withdrawal	0		With Held	0		<table><tr><th>O</th><th>A+</th><th>A</th><th>B+</th><th>B</th><th>C</th><th>U</th></tr><tr><td>91 -100</td><td>81 - 90</td><td>71 - 80</td><td>61 - 70</td><td>56 - 60</td><td>50 - 55</td><td><50</td></tr></table>	O	A+	A	B+	B	C	U	91 -100	81 - 90	71 - 80	61 - 70	56 - 60	50 - 55	<50
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RA denotes Reappearance. Registration is required for that particular course.																																														
W indicates withdrawal from the course.																																														
AB indicates Absent in the course.																																														
WH indicates malpractice of any kind (withheld)																																														
13.2 The grades O, A+, A, B+, B obtained for the one credit course shall figure in the Marksheets under the title „Value Added Courses“.																																														
14. GPA AND CGPA CALCULATION After results are declared, Grade Sheets will be issued to each student which will containthe following details: the list of courses registered during the semester and the grades scored. the Grade Point Average (GPA) for the semester and		<p>The performance of a student shall be reported using letter grades, each carrying certain points as detailed in table 13.1.2</p>																																												

the Cumulative Grade Point Average (CGPA) of all courses registered from first semester onwards.		Table 13.1.2 Grade Assignment after relative grading																					
During each semester, the list of courses registered and the grades scored in each course are used to compute the Grade Point Average (GPA). GPA is the ratio of the sum of the products of the number of credits of courses registered and the grade points corresponding to the grades scored in those courses, taken for all the courses, to the sum of the number of credits of all the courses in the semester.																							
After the results are declared, grade sheet will be issued to each student which will contain the following details. Grade Point Average (GPA) of a Semester (SGPA) and Cumulative Grade Point Average (CGPA) of a programme are calculated as follows.																							
$SGPA = \frac{\text{Sum of the product of the GP by the corresponding credits of the courses offered in that semester}}{\text{Sum of the credits of the courses of that semester}}$																							
$SGPA = \frac{\sum C_i GP_i}{\sum C_i}$																							
$SGPA = \frac{\text{Sum of the product of GPs by the corresponding credits of the courses offered for the entire programme}}{\text{Sum of the credits of the courses of the entire semester}}$																							
$SGPA = (\sum \sum C_n i GP_n i) / (\sum \sum C_n i)$																							
		<table><tr><th>Letter Grade</th><th>Grade Points</th></tr><tr><td>O (Outstanding)</td><td>10</td></tr><tr><td>A + (Excellent)</td><td>9</td></tr><tr><td>A (Very Good)</td><td>8</td></tr><tr><td>B + (Good)</td><td>7</td></tr><tr><td>B (Average)</td><td>6</td></tr><tr><td>C (Satisfactory)</td><td>5</td></tr><tr><td>U (Re-appearance)</td><td>0</td></tr><tr><td>SA (Shortage of Attendance)</td><td>-</td></tr><tr><td>W (Withdrawal)</td><td>-</td></tr></table>		Letter Grade	Grade Points	O (Outstanding)	10	A + (Excellent)	9	A (Very Good)	8	B + (Good)	7	B (Average)	6	C (Satisfactory)	5	U (Re-appearance)	0	SA (Shortage of Attendance)	-	W (Withdrawal)	-
Letter Grade	Grade Points																						
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C (Satisfactory)	5																						
U (Re-appearance)	0																						
SA (Shortage of Attendance)	-																						
W (Withdrawal)	-																						
		<p>A student is deemed to have passed and acquired the corresponding credits in a particular course if he / she obtains any one of the following grades: "O", "A+", "A", "B+", "B", "C".</p> <p>"SA" denotes shortage of attendance and hence prevented from writing the end semester examinations. "SA" will appear only in the result sheet.</p> <p>"U" denotes that the student has failed to pass in that course. "W" denotes withdrawal from the exam for the particular course. The grades "U" and "W" will</p>																					

	<p>Where, Ci is the credit fixed for the course 'i' in the any semester GPi is the grade point obtained for the course 'i' in any semester n refers to the semester in which such courses are credited Note: RA grade will be excluded for calculating GPA and CGPA</p>	<p>figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations.</p> <p>If the grade "U" is given to Theory Courses / Laboratory Courses it is not required to satisfy the attendance requirements, but has to appear for the end semester examination and fulfill the passing requirements to earn a pass in the respective courses.</p> <p>If the grade "U" is given to Employability Enhancement Course (EEC) (except Project Work) which is evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, and fulfill the passing requirements to earn pass in the course. However, attendance requirements need not be satisfied.</p> <p>13.2 For the Co-curricular activities such as National Cadet Corps (NCC) / National Service Scheme (NSS) / NSO / YRC / Science club / Literary Club/ Fine Arts Club, a 'completed' remark will appear in the Grade Sheet on successful completion of the same. Every student shall put in a minimum of 75% attendance in the training and attend the camp or events of the clubs compulsorily. The training and camp or club events shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in subsequent years. Successful completion of any one of the above co-curricular activities is compulsory for the award of a degree.</p> <p>13.3 The grades O, A+, A, B+, B, C obtained for the one / two credit course (not part of the curriculum) shall figure in the Grade Sheet under the title 'Value Added Courses / Internship / Industrial training. The courses for which the grade obtained is U, will not figure in the Grade Sheet.</p>
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13.4 For the students who complete the Audit Course satisfying attendance requirement, the title of the Audit Course will be mentioned in the Grade Sheet. If the attendance requirement is not satisfied, it will not be shown in the Grade Sheet.

13.5 After results are declared, Grade Sheets will be issued to each student which will contain the following details:

- The college in which the student has studied
- The list of courses registered during the semester and the grade scored.
- The Grade Point Average (GPA) for the semester and
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards.

GPA for a semester is the ratio of the sum of the products of the number of credits acquired for courses and the corresponding points to the sum of the number of credits acquired for the courses in the semester. CGPA will be calculated in a similar manner, considering all the courses registered from first semester. RA grades will be excluded for calculating GPA and CGPA.

$$\text{GPA / CGPA} = \frac{\sum_{i=1}^n C_i \text{ GPI}}{\sum_{i=1}^n C_i}$$

	<p>where C_i is the number of Credits assigned to the course</p> <p>GPI_i is the point corresponding to the grade obtained for each course</p> <p>n is number of all courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.</p>
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[Signature]
Dean Academics

Dean (Academics)
HICET



[Signature]
Principal

PRINCIPAL
Hindustan College Of Engineering & Technology
COIMBATORE - 641 032.

Anna University Communications

(For reference)



REGISTRAR

ANNA UNIVERSITY
SARDAR PATEL ROAD, CHENNAI-600 025.
www.annauniv.edu

Phone : +91 44 2235 2161
: +91 44 2235 7003
Office : +91 44 2235 7004
Fax : +91 44 2235 1956
E-Mail : registrar@annauniv.edu

Letter No.5883/AU/CAC/Rel. Grading/2022

To
The Principals of Autonomous Colleges
Anna University.

26.09.2022

Sir/Madam,

Sub: Anna University – Uniform Evaluation Method of Students based on Relative Grading - Rêg.
Ref: Revised Annexure I approved by 28th Academic Council Meeting, dated: 12.08.2022.

With reference to the above, it is informed that the 28th Academic Council of Anna University has ratified the implementation of the relative grading and uniform evaluation method for all the UG / PG students of University Departments, Non-Autonomous Colleges and Autonomous Colleges affiliated to Anna University, who all joined from the academic year 2021 - 2022 onwards. The 28th Academic Council has also made a few modifications in the procedure as explained in the revised Annexure-I.

As per revised Annexure-I, the uniform evaluation method consists of the norms to be followed for the award of marks for internal and end semester examinations of all types of courses (except Laboratory courses and Project work), passing requirements, relative grading and award of letter grades and classification of degree. For Laboratory courses and Project work absolute grading method is to be followed. For Theory courses with Laboratory component / Laboratory courses with Theory component the weightage of marks have been revised as per the details given in the revised Annexure-I. Further details are provided in the revised Annexure-I.

This shall be followed for the evaluation and passing of results for all the UG / PG students, who have joined in the Academic year 2021-2022. from semester II onwards.

This decision is taken with the approval of the competent authority.

This is for your information and necessary action at your end.

Encl: Revised Annexure-I

Copy to:

1. PS to Vice Chancellor
2. PA to Registrar
3. The Chairpersons, Faculty of Civil / Mechanical / Electrical / ICE / Technology / Management Sciences / S&H / Architecture & Planning, AU, Ch - 25.
4. Office of the Controller of Examinations.
5. The Stock File, CAC.

P.R.I.-
REGISTRAR i/c

REVISED ANNEXURE - I

A few excerpts from Regulation 2021 of B.E/B.Tech Programmes of Non-Autonomous colleges Affiliated to Anna University is given below. The same shall be adopted for all the UG/PG students following from academic year 2021-2022 onwards studying in University Departments and Autonomous Colleges of Anna University.

PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all the theory courses, laboratory courses, theory courses with laboratory component and project work the continuous assessment shall be awarded as per the procedure given below:

THEORY COURSES

Two assessments each carrying 100 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the two assessments).

Assessment I (100 Marks)		Assessment II (100 Marks)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project / any other experiential Learning	Written Test	Individual Assignment / Case Study / Seminar / Mini Project / any other experiential Learning	Written Test	
40	60	40	60	200*

**The weighted average shall be converted into 40 marks for internal Assessment.*

A minimum of two internal assessments will be conducted as a part of continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

LABORATORY COURSES

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records are to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

Internal Assessment (100 Marks)*	
Evaluation of Laboratory Observation, Record	Test
75	25

* Internal assessment marks shall be converted into 60 marks

THEORY COURSES WITH LABORATORY COMPONENT / LABORATORY COURSES WITH THEORY COMPONENT

Weightage of internal assessment and end semester examination marks will be 50% each. The distribution of marks for the theory and laboratory components in the internal assessments and end semester examination for different types of courses are provided in the table.

L	T	P	C	Internal		End semester examination
				Assessment 1	Assessment 2	
1	0	4	3	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
1	0	2	2	Laboratory (25%)	Theory (25%)	Laboratory only (50%)
2	0	2	3	Theory (25%)	Laboratory (25%)	Theory (25%) Laboratory (25%)
3	0	2	4	Theory (25%)	Laboratory (25%)	Theory (35%) Laboratory (15%)
2	0	4	4	Theory (25%)	Laboratory (25%)	Theory (15%) Laboratory (35%)

The procedure for the conduct of internal assessments for theory and laboratory components shall be as per the clause 12.1 and 12.2 respectively*.

The weighted average shall be converted into 50 marks for internal Assessment.

* Autonomous Colleges may adopt Theory courses with Laboratory component and Laboratory courses with Theory component with different L T P C formats and the weightage of marks for Theory and Laboratory components may be fixed in proportion to lecture and practical contact periods. However, the weightage for internal and end semester examination marks will remain as 50% each.

PROJECT WORK / INTERNSHIP AND LABORATORY COURSES

For the Project Work / Internship and Laboratory Courses fixed grading procedure shall be followed.

PASSING REQUIREMENTS

A student who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester University Examinations] with a minimum of 45% of the marks prescribed for the end-semester University Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and laboratory courses (including project work).



REGISTRAR

ANNA UNIVERSITY
SARDAR PATEL ROAD, CHENNAI-600 025.
www.annauniv.edu

Phone : +91 44 2235 2161
 : +91 44 2235 7003
Office : +91 44 2235 7004
Fax : +91 44 2235 1956
E-Mail : registrar@annauniv.edu

Letter No:4041/AU/CAC/Rel. Grading/2022

25.06.2022

To
The Principals of Autonomous Colleges
Anna University.

Sir/Madam,

Sub: Anna University – Uniform Evaluation Method of Students based on
Relative Grading - Reg.

Ref: Approval of Vice-Chancellor, dated 24.06.2022.

With reference to the above, the Academic Council of Anna University had decided to introduce a uniform evaluation method for all the UG / PG students of University Departments, Non-Autonomous Colleges and Autonomous Colleges affiliated to Anna University, who all joined from the academic year 2021 - 2022 onwards.

This uniform evaluation method consists of the norms to be followed for the award of marks for internal and end semester examinations of all types of courses, passing requirements, relative grading and award of letter grades and classification of degree. Further details are provided in Annexure I.

This shall be followed for the evaluation and passing of results for all the UG / PG students who have joined from the academic year 2021-2022 onwards in University Departments, Non-autonomous and Autonomous colleges affiliated to Anna University.

This decision is taken with the approval of the competent authority.

This may be taken up for ratification in the forthcoming Academic Council of Anna University, Chennai.

This is for your information and necessary action at your end.

[Signature]
REGISTRAR i/c

Encl: Annexure I

Copy to:

1. PS to Vice Chancellor
2. PA to Registrar
3. The Chairpersons, Faculty of Civil / Mechanical / Electrical / ICE / Technology / Management Sciences / S&H / Architecture & Planning, AU, Ch - 25.
4. Office of the Controller of Examinations.
5. The Stock File, CAC.

ANNEXURE - I

A few excerpts from Regulation 2021 of B.E/B.Tech Programmes of Non-Autonomous colleges Affiliated to Anna University is given below. The same shall be adopted for all the UG/PG students following from academic year 2021-2022 onwards studying in University Departments and Autonomous Colleges of Anna University.

PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all the theory courses, laboratory courses, theory courses with laboratory component and project work the continuous assessment shall be awarded as per the procedure given below:

THEORY COURSES

Two assessments each carrying 100 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the two assessments).

Assessment I (100 Marks)		Assessment II (100 Marks)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	
40	60	40	60	200*

**The weighted average shall be converted into 40 marks for internal Assessment.*

A minimum of two internal assessments will be conducted as a part of continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

LABORATORY COURSES

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records are to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

Internal Assessment (100 Marks)*	
Evaluation of Laboratory Observation, Record	Test
75	25

** Internal assessment marks shall be converted into 60 marks*

THEORY COURSES WITH LABORATORY COMPONENT

If there is a theory course with laboratory component, there shall be two assessments: the first assessment (maximum mark is 100) will be similar to assessment of theory course and the second assessment (maximum mark is 100) will be similar to assessment of laboratory course respectively. The weightage of first assessment shall be 40 % and the second assessment be 60%.

The weighted average of these two assessments shall be converted into 50 marks and rounded to the nearest integer.

Assessment I (40% weightage) (Theory Component)		Assessment II (60% weightage) (Laboratory Component)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Evaluation of Laboratory Observation, Record	Test	
40	60	75	25	200*

*The weighted average shall be converted into 50 marks for internal Assessment.

PASSING REQUIREMENTS

A student who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester University Examinations] with a minimum of 45% of the marks prescribed for the end-semester University Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and laboratory courses (including project work).

If a student fails to secure a pass in a theory course / laboratory course (except electives), the student shall register and appear only for the end semester examination in the subsequent semester. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination), then the student shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the University end semester examinations alone.

AWARD OF LETTER GRADES

The award of letter grades will be decided based on relative grading principle. The relative grading is applicable to ONLY those students who have passed the examination as per the passing requirements enumerated above. For those students who have not passed the examination, Reappearance (RA) shall be awarded as shown in the below Table.

For those students who have passed the course, the relative grading shall be done. The marks of those students who have passed only shall be inputted in the software developed for relative grading. The evolved relative grading method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. For a given course, if the students' strength is greater than 30, the relative grading method shall be adopted. However, if the students' strength is less than 30 then the fixed grading shall be followed with the grade range as specified below.

O	A+	A	B+	B	C	RA
91 - 100	81 - 90	71 - 80	61 - 70	56 - 60	50 - 55	< 50

The performance of a student shall be reported using letter grades, each carrying certain points as detailed below:

Letter Grade	Grade Points*
O (Outstanding)	10
A + (Excellent)	9
A (Very Good)	8
B + (Good)	7
B (Average)	6
C (Satisfactory)	5
RA (Re-appearance)	0
SA (Shortage of Attendance)	0
W (Withdrawal)	0

A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "O", "A+", "A", "B+", "B", "C".

'SA' denotes shortage of attendance and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.

"RA" denotes that the student has failed to pass in that course. "W" denotes **withdrawal** from the exam for the particular course. The grades RA and W will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations.

If the grade RA is given to Theory Courses/ Laboratory Courses it is not required to **satisfy the attendance requirements**, but has to appear for the end semester examination and fulfil the passing requirements to earn a pass in the respective courses.

If the grade RA is given to EEC (Employability Enhancement Course) (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfill the passing requirements to earn pass in the course. However, attendance requirement need not be satisfied.

CLASSIFICATION OF THE DEGREE AWARDED

FIRST CLASS WITH DISTINCTION

A student who satisfies the following conditions shall be declared to have passed the examination in **First class with Distinction**:

- Should have passed the examination in all the courses of all the eight semesters (10 Semesters in case of Mechanical (Sandwich) and 6 semesters in the case of Lateral Entry) in the student's First Appearance within five years (Six years in the case of Mechanical (Sandwich) and Four years in the case of Lateral Entry). Withdrawal from examination will not be considered as an appearance.
- Should have secured a CGPA of not less than 8.50.
- One year authorized break of study (if availed of) is included in the five years (Six years in the case of Mechanical (Sandwich) and four years in the case of lateral entry) for award of First class with Distinction.
- Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

FIRST CLASS:

A student who satisfies the following conditions shall be declared to have passed the examination in **First class**:

- Should have passed the examination in all the courses of all eight semesters (10 Semesters in case of Mechanical (Sandwich) and 6 semesters in the case of Lateral Entry) **within five years**. (Six years in case of Mechanical (Sandwich) and Four years in the case of Lateral Entry).
- One year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of five years (Six years in case of Mechanical (Sandwich) and four years in the case of lateral entry) for award of First class.
- Should have secured a CGPA of not less than 6.50.

SECOND CLASS:

All other students who qualify for the award of the degree shall be declared to have passed the examination in **Second Class**.

The corresponding specific changes are to be made to B.Arch. / M.Arch. /M.Plan. / MBA / M.Sc.(5years).
