MANAKULA VINAYAGAR
INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)
Kalitheerthalkuppam, Puducherry - 605 103

B.Tech Regulation- 2025

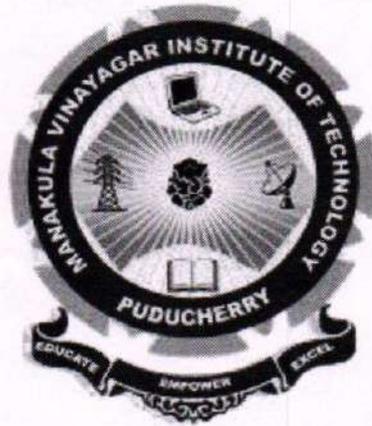## Accredited by
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MANAKULA VINAYAGAR
INSTITUTE OF TECHNOLOGY
(An Autonomous Institution)

Approved by the AICTE, New Delhi – Affiliated to Pondicherry University
Accredited by NAAC WITH 'A' Grade and NBA (National Board of Accreditation)
Kalitheerthalkuppam, Puducherry - 605 107
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REGULATIONS 2025

(R - 2025)

for

B.Tech Degree Programme

(With effect from academic year 2025-2026)

DEAN (Academics)

MANAKULA VINAYAGAR
INSTITUTE OF TECHNOLOGY,
Kalitheerthalkuppam, Puducherry-605 107

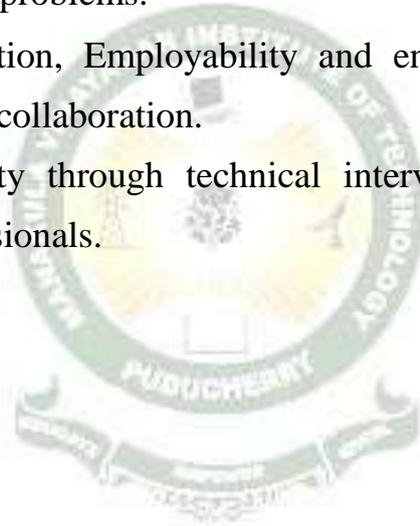B.Tech Academic Regulations (R 2025)

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Vision

To be a globally reputed Technical Institution creating Competent leaders and Skillful innovators in Science, Technology and Management.

Mission

- Providing a dynamic and creative learning environment for its students to acquire exemplary technical, analytical, professional skills.

- Imbibing a spirit of innovation and research among its students and faculty for solving critical problems.

- Promoting Innovation, Employability and entrepreneurship skills through industry academia collaboration.

- Serving the society through technical intervention and creating socially responsible Professionals.

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B.Tech Academic Regulations (R 2025)

MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY

(An Autonomous Institution)

BACHELOR OF TECHNOLOGY PROGRAMME (Eight Semesters)

REGULATIONS 2025 (R-2025)

CHOICE BASED CREDIT SYSTEMS (CBCS) (Common to all B. Tech. Programmes)

1. INTRODUCTION

1.1 Manakula Vinayagar Institute of Technology (MVIT), with its motto "Educate, Empower and Excel," envisions to foster knowledge, skills, attitude, and values of aspiring youths to enable them to become global citizens. To achieve this transformation, the institution has evolved a flexible academic curriculum designed in accordance with the Outcome Based Education (OBE) which is acquired by the learners of a programme under 'Learner Centric' Model.

1.2 All the Under Graduate Engineering programmes shall be governed by the rules and regulations provided in this version of Academic Regulations (R-2025). The curriculum of each programme provides broad-based knowledge, quality course content, academic flexibility, and scope for multi-disciplinary learning activities and opportunities for industry-oriented projects.

1.3 The provisions made in this document shall govern the policies, procedures, curriculum, conduct of the examinations, and evaluation systems.

1.4 The semester system shall be adopted for academic activities in the institute. Normally, odd semester starts in the second week of June and even semester starts in the second week of December.

1.5 Stringent evaluation norms will be followed to maintain quality of engineering education. The examination system will be transparent and governed by the rules and regulations with time-bounded activities.

Objectives of CBCS

- To transform educational delivery from teacher-centric to student-centric approaches, emphasizing learner autonomy and self-directed educational pathways that enable critical thinking and independent learning.

- To facilitate holistic development through a balanced curriculum that integrates academic rigor with practical applications for professional success.

- To enable students to curate personalized educational experiences by selecting from a diverse range of inter-disciplinary, intra-disciplinary, and skill-oriented courses that align with their career aspirations and personal interests.

- To foster adaptive learning environments that accommodate varied learning styles and paces, ensuring inclusivity and equitable educational opportunities for all students regardless of their background or prior preparation.

- To cultivate critical industry-relevant competencies through structured internships, industry-collaborative projects, and specialized training programs that bridge the academia-industry gap effectively and enhance employability.

- To promote entrepreneurial mindset and innovation culture through specialized incubation facilities, innovation labs, and mentorship programs.

- To incorporate sustainable development principles and ethical considerations across disciplines, preparing socially responsible professionals who contribute positively to societal advancement and environmental stewardship.

- To implement continuous assessment methodologies that evaluate both knowledge acquisition and skill application.

- To create global learning opportunities through international collaborations, credit exchange programs, and globally recognized certification courses.

- To integrate traditional knowledge systems, cultural values, and indigenous innovations into contemporary educational frameworks while promoting regional languages and culture as valuable sources of wisdom and identity.

1.6 The rules and regulations shall be subjected to amendment made by the Academic Council (AC) from time to time.

2. PRELIMINARY DEFINITIONS AND NOMENCLATURE

Term	Definition
Institute	Manakula Vinayagar Institute of Technology
University	Pondicherry University
Programme	B.Tech. Degree
Discipline/Department	Branch or specialization of B.Tech Degree Programme like Electrical and Electronics Engineering, Mechanical Engineering, Electronics and Communication Engineering, etc.
Course	Theory/Integrated/Practical courses that are normally studied in a semester. E.g., Mathematics, Computer Programming, etc.
Professional Core Course	Compulsory course in the curriculum
Professional Elective Course	A course that can be chosen from the listed courses by a student based on their interest which is not covered in professional core courses.
Open Elective Course	A course that can be chosen by a student based on their interest from the list of multi-disciplinary courses offered by other departments.
Head of the Institution	The Principal
Controller of Examinations (CoE)	The authority who is responsible for all Examination related activities of the institution
Lateral Entry	Admission of students directly into the second year of B.Tech. Degree programme after the completion of Diploma Course in Engineering

Term	Definition
L – T – P – PW – SL/TM - C	L - Lecture, T - Tutorial, P - Practical, PW – Project Work, SL – Self Study, TW – Term Work and C - Credits respectively
Curriculum	The various components/courses studied in each programme that provides an appropriate outcome in the chosen branch of study.
Semester Grade Point Average (SGPA)	Weighted average of grade points of courses in a semester.
Cumulative Grade Point Average (CGPA)	Weighted average of grade points of all courses in all semesters completed by a student
Odd semester	The Semester that is typically from June to November
Even semester	The Semester that is typically from December to May
Period	50 minutes duration of a Theory/Integrated course / Practical class
Day	8 periods in a calendar day
Enrollment	Enlistment of a student on roll in an academic year
Arrear	A course in which a student has not fulfilled the examination passing criteria in the end semester examination.
CAT	Continuous Assessment Test
CAM	Continuous Assessment Marks
ESE	End Semester Examination
ESM	End Semester Examination Marks
EEC	Employability Enhancement Course
Regular Examination	End semester examination conducted for the courses prescribed in the curriculum of that semester.
Arrear Examination	End Semester examination conducted for the students who have not fulfilled the examination passing criteria in the previous attempt(s).
Supplementary Examination	An additional examination exclusively conducted in the fifth and eighth semester for the students with a maximum of two arrears overall.
First Attempt	Appearing for the end semester examination of a course in a semester for which the students have registered. If a student failed to appear for the end semester examination after registration, it is also treated as first attempt.
Academic Council (AC)	An Apex academic body having the power to scrutinize and approve the proposals with or without modification of the Board of Studies with regard to programme of study, academic regulations, curricula, syllabi and modifications thereof, instructional and evaluation arrangements, methods, and procedures relevant thereto, etc.
Board of Studies (BoS)	An Apex academic body having the powers to approve the various courses, suggest teaching methodologies, coordinate research and other academic activities keeping in view the objectives of the institute.

Term	Definition
Curriculum Designing and Restructuring Committee (CDRC)	The committee prepares the Regulations and Curriculum in accordance with Standards and specifications prescribed by Accreditation Bodies, National Education Policy, etc. and ensuring Up to date curriculum of all Programs offered by the Institute, based on timely requirements of Industry.
	Reviews, revises and prepares curriculum structure based on the institutional policy and suggests improvements in syllabus of a course(s) prepared by course teacher(s) and forwards the curriculum to BoS for further recommendations.
Academic Standing Committee (ASC)	ASC shall perform the functions under emergency situations which are subject to ratification by the Academic Council (AC).
Academic Appeal Board (AAB)	If a student finds some anomaly in the award of marks in the Continuous Assessment Test/End Semester examination, they can make an appeal to the Academic Appeal Board for review of marks awarded.
Department Advisory Committee (DAC)	The Committee that formulates a process to review the post-implementation effects of curriculum and suggest various measures to ensure academic standard and its excellence of the course offered by the department.
Department Academic Review Committee (DARC)	It monitors the academic progress and conduct of classes throughout the semester and takes appropriate corrective measures to improve the quality of curriculum delivery.
Programme Academic Coordinator (PAC)	Coordinates all the academic activities of the department viz. Curriculum revision, framing of syllabus, time table, re-registration of course(s), display and submission of attendance status and BoS meeting as a member secretary.
BoE	Board of Examination
CEC	Credit Equivalence Committee
DEC	Department Evaluation Coordinator
NEP	National Education Policy
SDGs	Sustainable Development Goals (SDGs)
QCM	Quality Circle Meeting
AICTE	All India Council for Technical Education
UGC	University Grants Commission
NBA	National Board of Accreditation
NAAC	National Assessment and Accreditation Council
CRCE	Complaint Redressal Committee for Examination
IQAC	Internal Quality Assurance Cell

3. BRANCHES OF STUDY

Manakula Vinayagar Institute of Technology offers the following B.Tech degree programmes

Branch	I	B.Tech. Electrical & Electronics Engineering
Branch	II	B.Tech. Electronics & Communication Engineering
Branch	III	B.Tech. Computer Science & Engineering
Branch	IV	B.Tech. Information Technology
Branch	V	B.Tech. Mechanical Engineering
Branch	VI	B.Tech. Robotics and Automation
Branch	VII	B.Tech. Food Technology
Branch	VIII	B.Tech. CSE (Internet of Things & Cyber security including Block chain Technology)
Branch	IX	B.Tech. Artificial Intelligence and Machine Learning

The branch allocation shall be ordinarily done at the time of admission (for both Regular and Lateral Entry candidates)

4. ELIGIBILITY CRITERIA FOR ADDMISSION

All candidates seeking admission to the First year of B.Tech.degree and direct admission to the Second year of B.Tech. Degree under the Lateral Entry scheme shall be required to satisfy the eligibility rules prescribed by All India Council for Technical Education (AICTE) / Pondicherry University/ Government of Puducherry as notified from time to time.

5. DURATION OF THE PROGRAMME

A student after securing admission shall pursue B.Tech programme with 16 instruction weeks per semester for a minimum period of 4 academic years (8 semesters), if not he / she has to complete the degree within the maximum period of 7 years (14 semesters) starting from the commencement of the first semester. For a student admitted in lateral-entry mode, the minimum and maximum period of study shall be 3 academic years (6 semesters) and 6 academic years (12 semesters) respectively starting from the commencement of the third semester.

6. PROGRAMME STRUCTURE

6.1 The medium of instruction is English.

6.2 A student admitted to the B.Tech. programme in a particular branch of engineering will earn the degree in that branch by fulfilling all the requirements prescribed in the regulations during the tenure of study.

6.3 The student is also permitted to opt for earning an Honors degree in the same discipline of Engineering in addition to the degree in his/her own discipline of engineering. The student will be allowed to exercise this option at the end of first year based on his/her academic performance

in the first year (must secure a minimum of 7.0 CGPA for opting Honors degree in first attempt up to second semester). The students admitted through lateral entry must secure a minimum of 70% in the Diploma programme for opting Honors degree.

6.4 The student is also permitted to opt for earning a Minor degree in another discipline of engineering in addition to the degree in his/her own discipline of engineering. The student will be allowed to exercise this option at the end of first year based on his/her academic performance in the first year (must secure a minimum of 7.0 CGPA for opting Minor degree in first attempt up to second semester). The students admitted through lateral entry must secure a minimum of 70% in the Diploma programme for opting Minor degree.

6.5 The student opting for B.Tech. Degree with Honors or B.Tech. degree with Minor is required to earn additional 18-20 credits starting from the third semester. The students admitted in the second year through lateral entry and opting for Honors / Minor degree will earn the additional 18-20 credits starting from the third semester.

7. CURRICULUM STRUCTURE

7.1 The National Education Policy (NEP) envisages several transformative initiatives in higher education. These include:

i) The introduction of holistic and multidisciplinary undergraduate education that would help to develop all capacities of human beings—intellectual, aesthetic, social, physical, emotional, and ethical and moral in an integrated manner. It also focuses on soft skills such as complex problem solving, critical thinking, creative thinking, communication skills and rigorous specialization in a chosen field (s) of learning.

ii) Adoption of flexible curricular structures in order to enable creative combinations of disciplinary areas for study in a multidisciplinary context that would also allow flexibility in course options that would be an offer to students, in addition to rigorous specialization in a course or courses. Hence, meticulous care has been taken in designing the curriculum that focuses more on the skill enhancement of the students.

7.2 The curriculum has been evolved after finalizing the Programme Educational Objectives (PEOs) and the corresponding Programme Outcomes (POs). Programme Specific Outcomes (PSOs) has been evolved based on the knowledge and skills has been developed over the duration of Programme. The curriculum that evolved should broadly ensure the achievement of the POs and PSOs, and thus the PEOs of the programme.

7.3 Definition of Credit

Table 7.1 Definition of Credits

1 Hour Lecture (L) per week	1 Credit
1 Hour Tutorial (T) per week	1 Credit
2 Hour Practial (P) / Project per week	1 Credit

7.4 Category of Courses and its Credit Distribution

Table 7.2 Credit details for all courses

Name of course	Number of hours/week			SL*	Credits
	L	T	P		
Theory	3	-	-	6	3
Theory with Tutorial	3	1	-	6	4
Integrated course	2	-	2	6	3
Practical	-	-	2	6	1
Mini Project	-	-	2	20	1
Project work	-	-	16	40	8
2 weeks Industrial training /Internship#	-	-	-	40	1
4 weeks Industrial training /Internship	-	-	-	40	2
6 weeks Industrial training /Internship	-	-	-	40	3

SL - Project Based Learning/ Experiential Learning/   Seminars / Case studies/ Simulation and Role-Playing/ Portfolios
#1 week = 40 internship hours

7.5 Range of Credits

The total credits of all the branches for the four-year B. Tech. degree Programme shall be in the range of **160 to 170** (Minor variation is allowed as per AICTE guidelines). ”Minor Degree or Honors will cumulatively require additional 18-20 credits in the specified area in addition to the credits essential for obtaining the Under Graduate Degree in Major Discipline”.

Table 7.3 Credit Requirements

Type of Degree	B.Tech (XXX)	B.Tech (Hons.) (XXX)	B.Tech (XXX) with Minor (YYY)
Credits Requirements **	**160-170**	**160-170 + (18-20)**	**160-170 + (18-20)**

*** Minimum credit requirements specified in the AICTE regulations are discipline specific permitting minor deviations from the norms.*
"xxx" refers to the respective Degree and "yyy" refers to the Specialization opted in Minor degree.

The courses of study shall include theory, practical, Integrated and project work/internships as given in the curriculum and shall be in accordance with the prescribed syllabus.

The curriculum of every programme will have courses that are categorized as follows:

Table 7.4 Category wise credit distribution and its weightage
(Depends on the recommendation of AICTE of each programme)

Sl. No	Category	Credits as per the recommendation of AICTE
1.	Humanities, Social Sciences and Management Courses (HSM)	12 – 15
2.	Basic Science Courses (BSC)	16 – 32
3.	Engineering Science Courses (ESC)	17 – 29
4.	Professional Core Courses (PCC)	58 – 64
5.	Professional Elective Courses (PEC)	9 – 16
6.	Open Elective Courses (OEC) (Multidisciplinary and common courses)	9 – 12
7.	Core Enrichment Course (CEC) (Includes project work, seminar, internships)	16
8.	Employability Enhancement courses (EEC)	Nil
9.	Mandatory Courses (MNCC) [Environmental Sciences, Induction training, Indian Constitution, Essence of Indian Knowledge Tradition, Professional Ethics]	Nil

Every B. Tech. Programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

i. **Humanities and Social Sciences including Management Courses (HSM)** include English for communication, Employability Skills, Engineering Ethics and Human Values and Management courses.

ii. **Basic Science Courses (BSC)** include Mathematics, Physics, Chemistry, Biology, Environmental Science and Sustainability, etc.

iii. **Engineering Science Courses (ESC)** include Engineering Practices, Engineering Drawing, Basics of Civil / Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc

iv. **Professional Core Courses (PCC)** include the core courses relevant to the chosen specialization /branch

   v.   **Employability Enhancement**(Professional Competency) courses carry zero credit

   vi. **Mandatory courses** carry zero credit.

7.6 Off campus courses and Transfer of Credits

Students are permitted to optionally enroll and study a maximum of three off campus courses in physical/online/hybrid mode under each UG programme with the approval of CDRC and Head of the Institution as per the Regulations. The successful completion of these courses through any of the following modes shall be considered in lieu of professional elective / open elective courses of curriculum as approved by CDRC.

i)   Students are permitted to optionally enroll and study these courses through SWAYAM / NPTEL platforms and credit transfer is to be done based on the marks and certificate provided by the NPTEL. The number of credits and transfer of credits are based on the procedure and the Mapping of the marks with the grades is explained in Clause13.3.1. The mapping of marks with grades is applicable, only if the student passes the course as per the guidelines of NPTEL.

ii) All Elective courses including online courses will carry maximum 3 credits. The student can earn the credits towards the Open Elective Courses (OEC) by completing the online courses offered in National Programme on Technology Enhanced Learning (NPTEL), Massive Open Online Courses (MOOC), Study Webs of Active learning for Young Aspiring Minds (SWAYAM) etc., anytime between third and eighth semester on prior approval of the courses by the Curriculum Designing and Restructuring Committee (CDRC) of the Institute. Credits earned through the NPTEL,MOOC, SWAYAM courses will be confined to 2 or 3 credits and subject to a maximum of 9 credits during the entire programme of study. **The credits earned in such online course(s) which can be <u>4 or 3+1 or 2+2 or 3 or 2+1 credits, can be considered, instead of one elective course subject to the maximum of FIVE elective courses.</u>** The open electives are the inter-disciplinary subjects, offered by various departments.

7.7 Course Numbering Scheme

Each course is denoted by a unique code consisting of 8 alphanumeric characters.

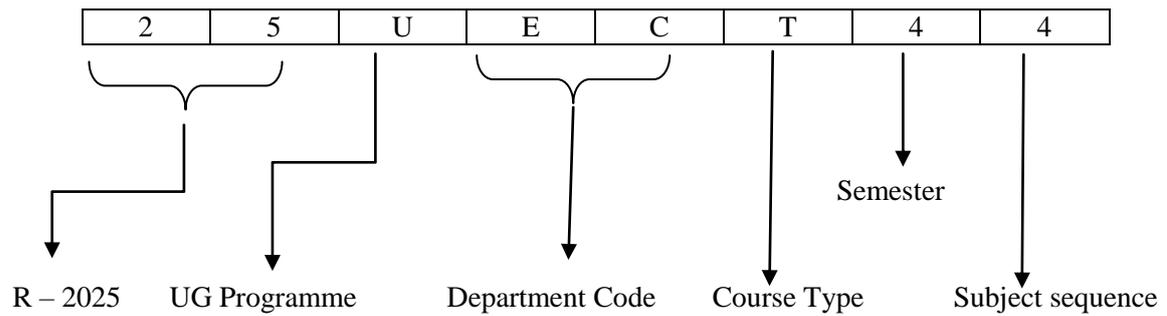The detail of the numbering scheme is shown in Fig. 1.

2	5	U	E	C	T	4	4

R – 2025   UG Programme   Department Code   Course Type   Semester   Subject sequence

Fig. 1 Course code formation

DEPARTMENT CODE	COURSE TYPE	SEMESTER
AI- Artificial Intelligence and Machine Learning	T – Theory	1
CS – Computer Science and Engineering	P - Practical	2
	I - Integrated course	
EC – Electronics and Communication Engineering	L – Professional Elective	3
EE – Electrical and Electronics Engineering	O – Open Elective	4
	W - Project Work, mini project, internship, implant training, seminar	5
FT – Food Technology		
IT – Information Technology		6
IC – IOT, Cyber security and Block chain Technology	E-Employability Enhancement courses	7
ME – Mechanical Engineering	H – Honors	8
RA – Robotics and Automation	M – Minor	
HS –Professional Communication for Engineers & Management	MCC – Mandatory Course	
MA – Mathematics	CCC – Certification course	
PH – Physics	CCN – NPTEL Course	
CH – Chemistry		
PC – Professional Competency		
GE – General Engineering		

7.8 Mandatory Induction Programme

The students are expected to undergo a mandatory three-week induction programme comprising of physical activity, creative arts, universal human values, proficiency modules, lectures by eminent people, visits to local areas and familiarization to department/branch immediately after admission. The Induction Programme shall cover the Universal Human Values (UHV-I).

7.8.1 Universal Human Values

The Induction Programme shall cover the Universal Human Values (UHV-I). The Course UHV-II shall be offered to all the B.Tech students in anyone of the Semesters from 1 to 4 with an objective of helping the students to see the need for developing a holistic perspective of life and

sensitizing the scope of life - individual, family, society, nature/existence and strengthening self-reflection.

7.9   Integrated Courses

Integrated course is recommended in order to enrich the practical knowledge of students. In this course, the theory part contains 5 units, and a minimum of 10 experiments, which also include experiments from all units, shall be given as the practical part.

7.10   Elective Courses

The elective courses are categorized into Professional Electives and Open Electives.

7.10.1   Professional Electives

i.   Professional Electives provide knowledge on specialized or advanced courses of the major stream of study to the students. Professional Electives are offered by the parent Department related to the major programme of study.

ii.   The students should acquire Maximum 18 credits as specified in the curriculum for all B.Tech programs from 4th to 8th semester during the programme. The elective course will be offered only if thirty or more number of students registers for the course. However, if the student enrolment in a class is less than 30, the head of the department will decide the elective course based on the majority of Students option.

iii.   The electives are categorized into verticals based on various specialization domains from semester 4 onwards.

iv.   Students can select all Professional electives from a selected vertical to specialize themselves in the specific domain or select courses from multiple verticals to satisfy diverse interests.

7.10.2   Open Electives

i.   Open Elective Courses are interdisciplinary elective courses offered by departments other than the parent department. Three Open Elective courses will be offered starting from the 3rd to 8th semester.

ii.   If the course has a prerequisite, it is the responsibility of the student to complete those prerequisite conditions specified for the course.

iii.   The elective course will be offered only if thirty or more number of students registers for the course. However, if the student enrolment in a class is less than 30, the head of the department will decide the elective course based on the majority of Students option.

7.11 Project work

7.11.1 Mini Project

There shall be two Mini Projects, which the student shall pursue as a team consists of maximum 3 students during the second and third year (fourth and sixth semester respectively). The aim of the mini project is to make the student to understand the real time hardware/software applications. The student should gain thorough knowledge on the problem he/she has selected and the application of the concepts by developing the hardware/software in the Project.

7.11.2 Final year Project (Phase I and II)

Project work may be assigned to a group of students not exceeding 3 per group, under the supervision of project supervisor(s). Each student batch shall be required to undertake a suitable project in industry/research organization/department in consultation with the Head of the Department and the supervisor. A student shall register for the Project Phase I and II in 7th and 8th semester respectively. The project team and the project title can be decided in the 6th semester itself.

7.11.3 The process and guidelines for industry/Research organization projects

(i) Students opting for the industry / research organization project should decide, identify and interact with relevant industry/ research organization in 6th semester itself. Training and Placement cell shall help to establish contact with industries. Students shall take necessary help from their department for exact plan of action and apply to the industry / research organization through proper channel. The project coordinator shall decide the schedule appropriately.

(ii) Students shall submit the application attached with relevant details viz. correspondence with industry, area and nature of project and its proposal to the department before the end of 6th semester.

(iii) Students shall be allowed to do the final year project work in the industry. Head of the Institution and Dean Academics / Dean R&D / Dean Placement shall issue permission letter to the students on the recommendation of HoD and supervisor.

(iv) An internal supervisor from the department and mentor from the industry/ research organization where the project is to be undertaken shall be allocated to the students. Both supervisors should discuss and finalize the scope of the project work and monitor the progress together.

(v) Internal supervisor should visit the industry a minimum of 3 times in a semester to see the progress of his/her students and a brief report should be submitted to the HoD about the progress.

(vi) Students should maintain a record on the progress and get the approval from both internal and external supervisors at least twice in a month either by physically or through email communication. If the progress is not found satisfactory due to any reason, the supervisor should take the corrective action, after consulting with project coordinator and HoD.

(vii) Progress report and certificate of completion of the project work from the industry / research organization shall be submitted by the students to the respective supervisor. The mode of evaluation shall be same as that of the in-house project.

7.11.4 The Process and guidelines for in-house project

i) Students execute their in-house project in the Department with proper approval from the HoD through the respective supervisor.

ii) Students should maintain a record on the progress and get the approval from supervisor at least once in a week. If the progress is not found satisfactory due to any reason, the supervisor should take the corrective action, after consulting with project coordinator and HoD.

7.12 Mandatory Courses

Mandatory Courses are to be completed successfully by a student within the respective semesters. The Mandatory Courses included in the curriculum are Climate Change, Sports, Yoga and NSS, Environmental Science, Constitution of India, Behavioral Science, etc., Right to Information and Good Governance, Essence of Indian Traditional Knowledge and Gender Equality. These courses have no credit and will not be considered for CGPA calculation.

7.13 Employability Enhancement Courses (EEC)

7.13.1 Professional Competency

Professional Competency Courses include courses on Soft Skills, Communication Skills, Aptitude, Foreign Languages, Entrepreneurship, etc. Employability Enhancement Courses are included as part of bringing in holistic development among students. Students are made more employable and society ready for the future.

7.13.2 Certification Courses

Students shall choose an International / Reputed organization certification course of 40-50 hours

duration specified in the curriculum(It is mandatory to do 3 to 5 courses) which will be offered through the Centre of Excellence. These courses have number of credits based on the topics covered. Some of the courses are non-credit compulsory courses and it will not be considered for CGPA calculation.

7.14 Industrial Training / Internship

The student is required to undergo 'internship' in industry / research laboratory / higher learning institution for a minimum period of 2 weeks during vacations and shall complete the internship before the completion of 7th semester. In this case the training has to be undergone either 4 or 6 weeks period. The credits will be allocated based on the number of weeks.

(i)   The internship carries 1, 2 or 3 credits based on the number of weeks.

(ii)   Each spell of internship shall be for a period not less than 2 weeks.

(iii) The main purpose of internship is to enhance the general professional outlook and capability of the student to advance his/her chances of improving the career opportunities. The student should get prior approval from the Head of the Department and Training and Placement cell in the college before undertaking the internship and need to submit a detailed report after completion for the purpose of assessment. The internship marks will be given in 7th semester mark sheet.

7.15 Industrial Visit

Every student is preferred to go for at least one Industrial Visit every year, starting from the second year of the Programme. The Heads of Departments shall ensure that necessary arrangements are made in this regard

7.16 Sustainable Development Goals (SDGs) – NEP 2020

Sustainable Development Goals (SDGs) are incorporated in the curriculum as per NEP 2020 through Guest Lecture/Value added Courses/Online courses/Mandatory Courses/ Elective Courses / Projects.

7.17 Honors Degree in the same Engineering discipline

a. The student shall be given an option to earn a honors degree in the same discipline of engineering at the end of first year based on his academic performance in the first year.

b. A student is eligible to exercise this option if he has passed all the subjects offered in the first year in the first attempt itself and has earned a CGPA of not less than 7.0.

c. Honors degree in a particular discipline of engineering shall be offered for a batch of students if and only if a minimum of 5 eligible students opt for it.

d. The student is required to earn an additional 18-20 credits (over and above the prescribed maximum credits in the curriculum) starting from the third semester onwards to become eligible for the award of Honors degree. 18-20 credits shall be earned by the student by

completing 5 additional courses of 4 credits each, one in each of the 5 semesters starting from the third to seventh semester. The syllabus of these 5 courses are framed so as to cover advanced topics in that discipline of engineering.

e. The students admitted in the second year through Lateral Entry Scheme will also be given a chance to opt for Honors degree. Eligibility to avail this option is 70% and above in the Diploma programme. The student will join the existing batch of students in the third semester and earn 18 - 20 credits by registering the prescribed courses offered up to the seventh semester.

f. A student can exercise the option to withdraw from the Honors degree at any time after entry.

g. Details about the courses completed and credits earned for Honors degree will appear only in the 'Eighth Semester Grade Sheet' and 'Consolidated Grade Sheet'. These details will be listed under the heading 'Credits Earned for Honors degree'. In the case of students who have either withdrawn from Honors degree or become ineligible for Honors degree, the credits earned for the courses registered and successfully completed for Honors degree will be listed under the heading 'Additional Credits Earned'.

h. The CGPA will be calculated for all the courses credited by the students inclusive of major and honors courses

i. Nomenclature of Honors Degree is 'B.Tech.(Honors) in XXX ', where XXX is Discipline in which the student has enrolled

7.18 B.Tech. with Minor degree in another Engineering discipline

a. The student shall be given an option to earn a minor degree in another discipline of engineering of his choice at the end of first year based on his academic performance in the first year.

b. A student is eligible to exercise this option if he has passed all the subjects offered in the first year in the first attempt itself and has earned a CGPA of not less than 7.0.

c. Minor degree in a particular discipline of engineering shall be offered for a batch of students if and only if a minimum of 5 eligible students opt for it.

d. The student is required to earn an additional 18-20 credits (over and above the prescribed maximum credits in the curriculum) starting from the third semester onwards to become eligible for the award of minor degree. 18-20 credits shall be earned by the student by completing 5 additional courses of 4 credits each, one in each of the 5 semesters starting from the third to seventh semester. The curricular content of these 5 courses are framed in

such a way that that these courses will essentially cover the core minimum knowledge required to be fulfilled for award of degree in the discipline of engineering in which the student chooses to earn the minor degree.

e. The students admitted in the second year through Lateral Entry Scheme will also be given a chance to opt for Minor degree. Students with 70% and above in the Diploma programme are eligible to avail this option. The student will join the existing batch of students in the Third semester and earn 18 - 20 credits by registering for prescribed courses offered up to seventh semester.

f. The syllabus for these five courses is designed to encompass the minor discipline of engineering from a selected vertical to obtain the minor degree.

g. A student can exercise the option to withdraw from the Minor degree at any time after entry.

h. Details about the courses completed and credits earned for Minor degree will appear only in the 'Eighth Semester Grade Sheet' and 'Consolidated Grade Sheet'. These details will be listed under the heading 'Credits Earned for Minor degree'. In the case of students who have withdrawn from Minor degree, the credits earned for the courses registered and successfully completed for Minor degree will be listed under the heading 'Additional Credits Earned'.

i. Nomenclature of Minor Degree is 'B.Tech. in XXX with Minor in YYY', where XXX is Discipline in which the student is enrolled and YYY is Discipline which the student has opted as Minor.

j. The CGPA will be calculated for all the courses credited by the students inclusive of major and minor courses.

7.19 Academic Bank of Credit (ABC)

The scheme of academic bank of credits will facilitate the transfer and consolidation of credits by using an academic bank account opened by the students across the country by taking up courses in any of the eligible HEIs. The validity of the credits earned and kept in the academic credit account will be to a maximum period of seven years or as specified by the ABC time to time.

8   COURSE ENROLMENT & REGISTRATION

8.1 All the students of the B.Tech programme shall register for the courses during a specified period in the beginning of the semester provided he/she fulfills the eligibility criteria prescribed for enrolment and registration of courses in that particular semester. List of students enrolled in a particular semester of a branch of study shall also include

(i) Students who rejoin the programme after temporary break (Clause16)

(ii) Students who rejoin the programme after being stopped from moving to next higher semester due to non-fulfillment of attendance requirement (Clause 10.2)

(iii) After registering for all the courses, the student must attend the classes, satisfy the Attendance requirements, earn Continuous Assessment Marks (CAM) and appear for the End Semester Examinations (ESE).

8.2 Pre-Registration

A list of open elective courses offered in the next higher semester will be made available to the students three weeks before Pre-Registration. Open Elective courses will be offered from third to seventh semester. In order to facilitate proper planning of open elective courses to be offered in a semester, it is essential for the students to declare their intent to register for an open elective course well in advance, before the actual start of the semester classes, through the process of Pre-Registration. A student can choose the open elective courses in consultation with the concerned Class Adviser.

8.3 Arrear Course Registration

(i) In the first attempt of writing the End Semester Examination of a course if a student fails, He/She can retain the existing CAM and proceeds to write the End Semester Examinations/ Supplementary exams as and when it is conducted.

(ii) The student(s) will be allowed to write their arrear course(s) as per their Regulations till its existence. Thereafter the student(s) has to register for the arrear course(s) only for the equivalent course (s) prescribed by the respective board as per the Regulations in-force and student(s) will be assessed forthetotal100 marks in the End Semester Examinations.

(iii) A student who fails in Project work / Mini Project / Seminar shall register for the course again, when offered next, and redo the course. In this case, the student shall attend the reviews and fulfill the attendance requirements as per Clause10.1 and earn continuous assessment marks.

(iv) The student who fails in summer industrial training / internship shall attend the training / internship again and redo the course with the same organization or different organization with the approval of the HOD.

(v) If a student fails in a subject because of less marks in continuous assessment mark (Less than 40%) He / She has to re-earn the continuous assessment mark as per clause 8.4 in that case.

(vi) If a student fails in the End semester examination with re-earned CAM of a course, He / She has to rewrite the End semester exam in that particular course.

8.4   Re-earn the Continuous Assessment Marks (CAM)

If a student wishes to re-earn the Continuous Assessment Marks (CAM), He / She has to re-register by paying the prescribed fee for the course in the subsequent semester. The student has to re-earn the CAM by taking-up all the internal tests, assignments and presentation as per the norms of regulations. However, the higher marks scored by the students in his/her attempts for CAM shall be considered.

8.5   Rejoining

(i)   The candidate, at the time of rejoining, should follow the regulations which exist in force.

(ii)   The candidate rejoining in new Regulations shall apply to the Head of the Institution in the prescribed procedure through the Head of the Department at the beginning of the readmitted semester itself for prescribing additional/equivalent courses in the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.

9   ASSESSMENT PROCEDURES FOR AWARDING MARKS

i)   Performance in each course of study shall be evaluated based on (i) Continuous Assessment Tests during the semester **of one and a half hours duration** and (ii) End Semester Examination at the end of every semester (Odd semester during November/ December and Even Semester during April /May of 3 hours duration. All Credit courses are evaluated for 100 marks comprising of Continuous assessment and End Semester exam.

ii)   Each course (Theory, Integrated and Practical courses including project work & viva voce examinations) shall be evaluated for a maximum of 100 marks. For Theory course, the weightage of continuous assessment is 40% and end semester examination is 60%. For Practical course, the weightage of continuous assessment is 60% and end semester examination is 40%. For Integrated course, the weightage of Theory is 50% and Practical is 50% and evaluation system to be followed as such for theory/Practical courses as mentioned above.

iii) The End Semester Examination for project/ mini project shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 3 students) by an external examiner and an internal examiner, followed by a viva-voce examination. For Project Phase I and II/ Mini Project, the weightage of continuous assessment is 60% and end semester examination is 40%

iv)   Industrial training /Intern shall carry 100 marks and shall be evaluated through viva-voce examinations only.

v)   Certification / Mandatory course shall carry 100 marks and shall be evaluated through continuous assessment test

9.1 Theory Courses

All theory courses shall be assessed as follows:

Table 9.1 Assessment method for Theory courses

Assessment	Continuous Assessment marks (CAM)– 40						End Semester Examination (ESE) Marks	Total Marks
	CAT 1	CAT 2	Model Exam	Attenda nce	Assignm ent*	Activity #		
Marks	7.5	7.5	10	5	5	5	60	100

Application oriented / Problem solving / Design / Analytical in content beyond the syllabus

 # Project Based Learning/ Experiential Learning/ Seminars / Case studies/ Simulation and Role-Playing/ Portfolios

i) Continuous Assessment:

Continuous Assessment mark for all theory course is 40.Continuous Assessment Marks shall be based on attendance, Continuous Assessment tests, assignments and activities.

a) Attendance:

Attendance carries 5 marks and the distribution of marks is as follows:

- 5 marks for 95% and above
- 4 marks for 90% and above but below 95%
- 3 marks for 85% and above but below 90%
- 2 marks for 80% and above but below 85%
- 1 mark for 75% and above but below 80%

b) Continuous Assessment Tests:

Continuous Assessment mark for all theory course is 25. Performance in all the tests will be taken for assessment as follows:

Table 9.2 Weightage of assessment marks for theory courses

Sl. No	Test	Test Mark	Weightage for Internal Marks	Duration of the test (Hours)
1.	CAT 1	50	7.5	1.5
2.	CAT 2	50	7.5	1.5
3.	Model Exam	100	10	3
Continuous Assessment Test Marks for Theory Courses			25	

c) Assignments:

- Assignments carry 5 marks.
- The assignment should be in the form of Application oriented / Problem solving / Design / Analytical in content beyond the syllabus.

d) Activities

- Activities carry 5 marks

- Activities consist of Project Based Learning/ Experiential Learning/ Seminars / Case studies/ Simulation and Role-Playing/ Portfolios
- The Project Based Learning/ Experiential Learning/ Seminars / Case studies/ Simulation and Role-Playing/ Portfolios should be assessed by the concept of article, report and presentation.

ii) End Semester Examination:

The duration of examination shall be 3 hours with a maximum of **100** marks.

iii) Question Paper Pattern for Theory courses

The question paper pattern of CAT, Model and End Semester Examination for Theory courses as per the Table 9.3, 9.4 and 9.5 shall be followed.

Table 9.3 Question Paper pattern for CAT 1 and 2

2 Mark Questions	13 Mark Questions	14 Mark Question	Total Marks
5	2 (either or)	1(Compulsory)	
10	26	14	50

Table 9.4 Model and End semester Examination Question Paper pattern

2 Mark Questions	13 Mark Questions	15 Mark Questions	Total Marks
10 (two questions from each unit)	5(either or)	1(Compulsory)	
20	65	15	100

The Controller of Examination schedules the Continuous Assessment Tests/Model examination for all courses. All departments are expected to conduct the Continuous Assessment tests for 1 hour 30 minutes & the Model Examination for 3 hours duration and upload the internal assessment marks in the controller of examination web portal after evaluation.

9.2 Practical Courses

Faculty in-charge of Practical courses shall evaluate the practical course for 60 marks. All practical courses shall be assessed as follows:

Table 9.5 Assessment Method for practical courses

Assessment	Continuous Assessment Marks (CAM)					End Semester Examination Marks	Total Marks
	Performance in Practical Classes			Model Practical Examination	Attendance		
	Conduction of practical	Record work	Viva				
Marks	20	10	5	15	10	40	100

i) **Continuous Assessment:**

Continuous Assessment Marks shall be based on attendance, regular performance of the student in practical classes and a model practical examination conducted at the end of the semester.

a) **Attendance:**

Attendance carries 10 marks and the distribution of Marks for Attendance is as follows:

- 10marks for 95% and above
- 8 marks for 90% and above but below 95%
- 6 marks for 85% and above but below 90%
- 4 marks for 80% and above but below 85%
- 2 marks for 75% and above but below 80%

b) **Performance in practical classes**

The regular performance in the practical class (conduction of practical -20 marks, Record work -10 marks and viva - 5 marks) will be evaluated for 35 marks.

c) **Performance in the Model practical examination**

Performance in the Model practical examination will be evaluated for 15 marks. The pattern of Model Practical Examination will be similar to the End Semester practical Examination.

ii) **End Semester Examination:**

The End Semester Examination of the practical courses will be evaluated for 100 marks by a panel of examiners comprising of an internal examiner and an external examiner. The Break-up of marks is as follows:

Objective:	10 marks
Procedure / Algorithm:	30 marks
Experiment / Program Execution:	30 marks
Result / Output:	20 marks
Viva-Voce:	10 marks

9.3 Integrated Course

Total Continuous Assessment mark for a theory course is 50. The breakup is as follows:

Table 9.6 Assessment method for integrated courses

Assessment	Continuous Assessment marks (CAM)							End Semester Examination (ESE) Marks	Total Marks
	Continuous Assessment (Theory)					Continuous Assessment (Practical)			
	CAT 1	CAT 2	Model Exam	Attendance	Assignment	Conduction of Practical	Model Practical	Theory / Practical*	
Marks	5	5	5	5	5	10	15	50	100

*Based on the weightage of Theory and practical components as distributed in Table 9.7

Weightage of internal assessment and End Semester Examination marks will be 50% each. The distribution of the marks for the theory and laboratory components in the Continuous assessments and End Semester Examination for the courses with different credit distributions are given below.

Table 9.7 Distribution of the marks for the Integrated course components (Refer Annexure I)

L	T	P	C	Continuous Assessment Marks		End semester Examination
				Theory	Practical	
1	0	6	4	25%	25%	Practical only (50%)
1	0	4	3	25%	25%	Practical only (50%)
1	0	2	2	25%	25%	Practical only (50%)
2	0	2	3	25%	25%	Theory (25%), Practical (25%)
2	0	4	4	25%	25%	Theory (15%), Practical (35%)
3	0	2	4	25%	25%	Theory (35%), Practical (15%)

i) Continuous Assessment (Theory part):

Continuous Assessment Marks for theory part (25 marks) shall be based on attendance (5 marks), assignment (5 Marks) and Continuous Assessment tests (15 marks).

a) For Continuous assessment, for theory plus laboratory courses, the weighted average shall be converted into 50 marks.

The procedure for the conduct of Continuous assessments for theory which will be converted into 25% as internal marks

  i) For 1 credit: one written test (75%) and one assignment (25%) covering all the theory topics

  ii) For 2 credits: Two written tests (75%) and two assignments (25%)

  iii) For 3 credits: Three written tests (75%) and three assignments (25%) and for laboratory components as per the Clause 9.2

b) Attendance

Attendance carries 5 marks and the distribution of marks is as follows

- 5 marks for 95% and above
- 4 marks for 90% and above but below 95%
- 3 marks for 85% and above but below 90%
- 2 marks for 80% and above but below 85%
- 1 mark for 75% and above but below 80%

ii) Continuous Assessment (Practical part):

The Evaluation for practical part is only through continuous assessment (25 marks) and End semester practical internal evaluation (100 marks). The Break-up of marks for End semester practical internal evaluation is as follows:

Objective:	10 marks
Procedure / Algorithms:	25 marks
Experiment / Program Execution:	40 marks
Result / Output:	20 marks
Viva-Voce:	5 marks

iii) End Semester Examination:

The duration of examination shall be 3 hours with a maximum of 100 marks.

iv) Question Paper Pattern for Integrated courses

The question paper pattern of CAT, Model and End Semester Examination for Theory courses as per the Table 9.8 and 9.9 shall be followed.

Table 9.8 Question Paper pattern for CAT 1 and 2

2 Mark Questions	13 Mark Questions	14 Mark Question	Total Marks
5	2 (either or)	1(Compulsory)	
10	26	14	50

Table 9.9 Model and End semester Examination Question Paper pattern

2 Mark Questions	13 Mark Questions	15 Mark Questions	
10 (two questions from each unit)	5 (either or)	1 (Compulsory)	Total Marks
20	65	15	100

9.4   Project work

9.4.1   Mini Project

The Mini Project and Seminar shall carry 100 marks and shall be evaluated through two reviews as continuous assessments. The first and second reviews are to be evaluated by a three member committee constituted by the HOD which includes the supervisor, coordinator and an expert from the Department. At the end of the semester the student shall submit a brief report on the Mini Project along with hardware / software model. The End Semester marks (Final Review)

review will be conducted based on this report and Viva-Voce Examination which includes Internal and external examiners and the evaluation report shall be sent to Controller of Examinations by the Head of the Department.

There shall be two reviews that will be considered for assessing the continuous assessment marks for a Mini Project work with weightage as indicated in Table 9.10

Table 9.10 Continuous Assessment Method for Mini Project

Assessment	Review 1			Review 2		
	Novelty	Presentation	Q & A	Presentation	Demonstration	Viva
Marks	40	40	20	30	40	30
Total Marks	100			100		

i) End Semester Examination

The End Semester Examination of the Mini Project will be evaluated for 100 marks by a panel of examiners comprising of an internal examiner and an external examiner. This will be assessed as follows:

Table 9.11End Semester Assessment Method for Mini Project

End Semester Marks (Final Review)		
Evaluation of Mini Project report and Viva-voce	Report	30
	Viva	30
	Demonstration	40
Total ESM		100

9.4.2 Final year Project (Phase I and II)

The Project work carried out in the seventh and eighth semesters shall be assessed as follows:

Table 9.12 Assessment method for Project work

Assessment Method	Marks	
	Phase I	Phase II
Continuous Assessment (Internal Evaluation)	50	50
End Semester Examination (External Evaluation)	50	50
Total	100	100

Criteria for Assessment of Project Work

- Interim project report shall be submitted before the project review with the approval of the supervisor. The Project Report prepared according to the approved guidelines and duly signed by the supervisor and the Head of the Department shall be submitted as per the timeline announced by the department.

- The End Semester Examination for the project work shall consist of an evaluation of the final project report by an external examiner, followed by a viva-voce examination

conducted by a committee consisting of the external examiner and an internal examiner. The Controller of Examinations (CoE) shall appoint Internal and External Examiners for the End Semester Examination of the Project Work.

- The Continuous Assessment Marks (CAM) and End Semester Examination marks (ESM) distribution for the Project Work is given in the Table 9.13.

Table 9.13 (a) CAM and ESM break-up for Project Phase I

Sl.No	Description			Total	Weightage
1	**Continuous Assessment Marks**				
a	Review1	Review Committee#	50	100	20
		Supervisor	50		
b	Review2	Review Committee#	50	100	20
		Supervisor	50		
c	Review3	Review Committee#	50	100	20
		Supervisor	50		
	Total CAM				60
2	**End Semester Marks**				
a	Evaluation of Phase I Report and Viva-voce	Review	30	100	40
		Presentation and Viva	40		
		Demonstration	30		
	Total ESM				40

Table 9.13 (b) CAM and ESM break-up for Project Phase–II

Sl.No	Description			Total	Weightage
1	**Continuous Assessment Marks**				
A	Review1	Review Committee#	50	100	20
		Supervisor	50		
B	Review2	Review Committee#	50	100	20
		Supervisor	50		
C	Review3	Review Committee#	50	100	20
		Supervisor	50		
	Total CAM				**60**

2				End Semester Marks	
A	Evaluation of final report and Viva-voce	Report	20	100	40
		Presentation and Viva	40		
		Demonstration	20		
B	Expected Outcome from The project##	Publication/ communication of papers /prototypes /patents etc	20		
			Total Marks		100

*The review committee consists of internal faculty members nominated by the Head of the Department. The Supervisor of the student being examined shall not be part of the committee.*

*Expected outcome from the project, in terms of paper publication, patents, product development, and industry projects, shall be awarded based on the document proof submitted by the student concerned.*

9.5   Industrial Training/Internship

- The evaluation of 'Internship' is through internal assessment only (continuous assessment) as per Table 9.14
- A committee comprising of two faculty members appointed by Head of the Department will assess the internship for 100 marks.

Table 9.14 Assessment method for Industrial Training / Internship

Assessment	Continuous Assessment Marks (CAM)		Total Marks
	Report	**Presentation**	
Marks	50	50	100

9.6   Employability Enhancement Courses (Refer Annexure I)

(i)   The evaluation of 'Employability Enhancement Courses' is through internal assessment only (continuous assessment) as per Table 9.15.

(ii)   The faculty In-charge will conduct the assessment for 100 marks, by evaluating the report and adopting any one of the methods like Project Demonstration/ presentation/ any evaluation method which assesses student's specific skill set as relevant to the course.

(iii)   The marks scored in these courses will not be taken into consideration for the SGPA/ CGPA calculations in the grade sheet.

Table 9.15 Assessment method for Employability Enhancement courses

Assessment	Continuous Assessment Marks (CAM)			Total Marks
	Attendance	Report	Presentation/ Demo/ Skill Test	
Marks	10	40	50	100

9.7   Certification Courses

Certification Courses are required to be completed to fulfill the degree requirements. All **Certification** courses are assessed internally for 100 marks as per Table 9.16.

(i)   The Course coordinator handling the course will assess the student through attendance and MCQ test, and declare the student as "pass" on satisfactory completion. A letter grade "P" is awarded to declare pass.

(ii)   The marks scored in these courses will not be taken into consideration for the SGPA/CGPA calculations in the grade sheet.

Table 9.16 Assessment method for Certification courses

Assessment	Continuous Assessment Marks (CAM)		Total Marks
	Attendance	MCQ Test	
Marks	10	90	100

9.8   Mandatory Courses (Refer Annexure I)

▪   **Mandatory Courses** are required to be completed to fulfill the degree requirements. All Mandatory Courses are assessed internally for 100 marks as per Table 9.17.

▪   The **Faculty In-charge** handling the course will assess the student through activities, quizzes, and debates, and declare the student as **"Pass"** on satisfactory completion. A letter grade **"P"** is awarded to declare pass.

▪   The marks scored in these courses will **not** be taken into consideration for the **SGPA/CGPA calculations** in the grade sheet.

▪   Mandatory courses will be included in the Grade Sheet

Table 9.17 Assessment method for Mandatory courses

Assessment	Continuous Assessment Marks (CAM)			Total Marks
	Attendance	MCQ Test	Presentation /Activity/ Assignment	
Marks	10	30	60	100

10   ELIGIBILITY FOR APPEARING END SEMESTER EXAMINATION

10.1 Requirement for appearing in the end semester examination

The students are expected to maintain 100% attendance in all courses because attendance carries weightage in continuous assessment marks. A student will be qualified to appear for end semester examinations in a particular course of a semester only if he/she satisfies the below mentioned requirements.

10.1.1 The student is permitted to appear for End Semester Examinations, only if he/shemaintains minimum 75% of attendance. If he/she secured attendance greater than or equal to 60 % and less than 75% in the current semester can be considered in case of the following reasons:

i) Medical reasons (hospitalization / accident and or illness). The medical certificate obtained from a medical officer not below the rank of Assistant Director should be submitted to the CoE through the Head of the Department.

ii) Due to participation in sports events or any competitions or NCC and / or NSS activities with prior written permission from the Head of the Institution/Dean Academics through the Head of the Department.

He/she has to pay the necessary condonation fee prescribed by the college authority with necessary supporting documents for his/her absence.

10.1.2 The student shall be considered for exemption from the prescribed attendance requirement for the reasons stated above. If exempted, the student shall be permitted to appear for the End Semester Examination of that course. In all such cases, the student should have submitted the required documents on joining after the absence, to the CoE through the Head of the Department.

10.1.3 If any student is suspended for any reason during the semester, the days of suspension of a student on disciplinary grounds will be considered as days of absence for calculating the percentage of attendance for each individual course.

10.2 Movement to Next Higher Semesters

10.2.1 **A student can move to the next semester** provided only if he/she fulfills the minimum attendance requirement for appearing in the end semester examination.

10.2.2 **The student who has failed to fulfill the above conditions** will not be permitted to move to the higher semester, and shall rejoin the programme in the next academic year in the same semester after fulfilling all the requirements as per the regulations.

10.2.3 **A student who rejoins the programme after a temporary break** shall be governed only by the rules, regulations, course of study, and syllabi in force at the time of rejoining the course.

10.3 **Provision for Withdrawal from Examination**

10.3.1 **Complete Withdrawal (applicable only for nil arrear students)**

A student, who is eligible to appear for the semester examinations, will be permitted to withdraw from appearing for the entire End Semester Examinations as one unit (Complete Withdrawal) for valid reasons and on the recommendation of the Head of the Department and with the approval of the Dean Academics, CoE and Head of the Institution. Complete Withdrawal application shall be made before the commencement of the first examination pertaining to the semester. Such withdrawal shall be permitted only once during the entire programme.

10.3.2 A student who has completely withdrawn from appearing for End Semester Examinations in a particular semester should appear for the examinations of all the withdrawn subjects in the next semester itself.

10.3.3 If all other conditions are satisfactory, the candidate who withdraws is also eligible to be awarded DISTINCTION whereas he/she is not eligible to be awarded a rank.

10.4 **Scribe for End Semester Examination**

10.4.1 If any student is not in a position to write end semester examinations on account of temporary physical disability or injury due to accident and applies for a scribe (writer) with a medical certificate obtained from a medical officer not below the rank of Assistant Director level, then a scribe shall be allowed/assigned by CoE to such student. Normally, such scribe shall neither be a student nor a degree holder of any technical programme having similar competency. The student shall, however, apply in a prescribed proforma to CoE and requesting permission for using the scribe well in advance, not on the day of examination, to make necessary arrangements (Scribe, Separate Examination Hall etc.). CoE shall take the undertaking from the scribe in a prescribed proforma. Such student shall produce the permission letter from the CoE for using scribe to the invigilator. He/She should pay the TA/DA and other charges to the scribe. Scribe shall be allowed extra time as per the norms specified by the Controller of Examinations.

10.4.2 Student admitted with differently abled category and those who can write, but at much slower speed as compared to normal student, he/she may be allowed an extra time of 30 minutes for 50 marks paper and 45 minutes for 100 marks paper to write the examination for all the courses. He / She shall seek permission from CoE for the extra time on account of his/her percentage of disability by producing necessary medical certificate from medical officer not below the rank of Assistant Director.

10.5 Supplementary Examinations

Supplementary Examination is an additional examination which will be conducted after declaration of the End Semester Examination results/revaluation results. This examination will be conducted in fifth and eighth semesters for the students who are having a maximum of two arrears overall and he/she is permitted to write maximum of two papers in that semester alone. For supplementary examination, the continuous assessment marks of the last attempt will be considered.

10.6 Malpractice in Examinations

If any student caught red-handed due to malpractices in examinations, then he/she shall be punished as per the recommendations of the Complaint Redressal Committee for Examination (CRCE) constituted by CoE with the approval of Head of the Institution. The CRCE shall inquire and decide the punishment for the unfair means as specified in the Examination manual.

10.7 Mitigation Examination

Mitigating circumstances are serious or extraordinary events that take place during an examination that significantly affect candidate performance. They might fall into a number of categories:

- Personal ill health
- Accident
- Bereavement
- Ill health of a dependent

Personal ill health or injury through accident during the examination, which affects a candidate's performance, can be considered by BoE with the recomendations of class advisor and HoD. Bereavement or the ill health of a dependent can be considered under by BoE with the recomendations of class advisor and HoD if a candidate is informed of the situation during the course of the examination he/she is taking. This option is permitted for the studentswho have no history of arrears.

11 REQUIREMENT FOR PASSING THE EXAMINATION

11.1 Consolidation of Marks and PassingMinimum

The Controller of Examinations of the Institution consolidates the Internal Assessment marks uploaded by the Departments and marks secured by students in the end-semester examination.

A student shall be declared to have passed the examination in a course of study only if he/she secures not less than **40% marks in the end-semester examination and secures an overall aggregate of 40% .**

11.2 A student is declared to have successfully passed a theory based course if he/she has secured:

The student has to obtain at least 40% marks in the end semester exams to pass and secures an overall aggregate of 40%..

11.3 A student is declared to have successfully passed a practical / project based course if he/she has secured:

The student has to obtain at least 40% marks in the end semester exams to pass and secures an overall aggregate of 40%.

11.4 A student is declared to have successfully passed an Integrated course based course if he/she has secured:

A minimum of 40% marks in the End Semester Examinations marks (Theory) and a minimum of 40% marks in the End Semester Examinations (ESE) marks (Practical). The student has to obtain at least 40% marks in the end semester exams to pass secures an overall aggregate of 40%.

12 GRIEVANCE REDRESSAL MECHANISM IN EVALUATION

12.1 Grievances related to the entire process of Continuous Assessment shall be addressed to Academic Appeal Board as given in Regulations under Clause 20.5

12.2 Grievances related to End Semester Examination of Theory Courses for regular and arrear examinations can be redressed as follows:

12.2.1 Photocopy of the Answer Script

After declaration of results, photocopy of valued answer scripts with the marks awarded to individual answers shall be made available to the students on submission of an application along with the prescribed fees to the Controller of Examinations.

12.2.2 Revaluation

Students can apply for revaluation by submitting an application along with the prescribed fees to the Controller of Examinations. The revaluation is extended to the students those who have maximum of Five arrears in theory papers. Applications for revaluation should be filed within 15 days from the date of declaration of results.

13. LETTER GRADES AND CALCULATION OF GPA AND CGPA

13.1 Total marks secured by a student in each course shall be converted into a letter grade. The following Table shows the seven letter grades and corresponding meaning and the grade points for the calculation of Cumulative Grade Point Average (CGPA).

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits, and the mapping of marks to grades may be done as per the following table:

Table 13.1 Letter Grade with grade points

Range of Marks	Assigned Grade	Grade Points
91-100	A$^+$	10
81-90	A	9
71-80	B$^+$	8
61-70	B	7
51-60	C$^+$	6
46-50	C	5
40-45	D	4
<40	F	0
Not Applicable	F^A(Fail due to shortage of attendance and therefore, to repeat the course)	0

Note: -F- denotes failure in the course; - F^A - denotes Fail due to absent.

13.2 After the results are declared, grade sheets will be issued to the students. The grade sheets will contain the following details:

a) The Programme in which the candidate enrolled.

b) The list of courses enrolled during the semester and the grades scored.

c) The Semester Grade Point Average (SGPA) for the semester and the Cumulative Grade Point Average (CGPA) of all enrolled courses from first semester onwards.

d) SGPA is the ratio of sum of the products of the number of credits (C) of courses registered and the corresponding Grades Points (GP) scored in those courses, taken for all the courses and sum of the number of credits of all the courses.

$$\text{Semester Grade Point Average (\textbf{SGPA})} = \frac{\sum_i (C_i \times GP_i)}{\sum_i C_i} \quad i = 1\ to\ n$$

Where n= Number of credit courses in that semester. C_i is the Credit of ith course in that semester and GP$_i$ is the Grade Point earned by the student for that ith course. The SGPA is rounded off to two decimals.

e) CGPA will be calculated in a similar manner, considering all the courses enrolled from first semester. F^A grades are to be excluded for calculating SGPA and CGPA.

f) The percentage marks will be calculated directly from the marks secured by the students in the End Semester Examination (ESE).

$$\textbf{\textit{Percentage}(\%)\textbf{Marks} = \textbf{CGPA} \times \textbf{10}}$$

13.3 Students are permitted to optionally enroll and study these courses through SWAYAM / NPTEL platforms and credit transfer is to be done based on the marks and certificate provided by the NPTEL.

Table 13.2 Duration of the course and Number of credits

Sl. No	No of weeks	No of credits
1	4	1
2	8	2
3	12	3
4	16	4

13.3.1 Mapping of the marks with the grade:

The mapping of marks with grades is applicable, only if the student passes the course as per the guidelines of NPTEL.

Table 13.3 Mapping of marks with grades

Letter Grade	Marks
A+	81-100
A	71-80
B+	61-70
B	51-60
C+	40-50

Students are also permitted to enroll courses in online mode offered by the Universities in India /IIT/ IISC / IIM / NIT etc. The transfer of credits shall be decided by the Credit Equivalence Committee (CEC).

13.4 Mandatory courses will be included in the Grade sheet. These courses have no credit and will not be considered for CGPA calculation.

14. AWARD OF CLASS AND RANK IN B.TECH. DEGREE

A student shall be declared to be eligible for the award of B.Tech. Degree provided for which the student has Successfully completed the course requirements and has passed all the prescribed End Semester Examinations in all the eight semesters (six semesters for lateral entry) within a maximum period of 7 years (6 years for lateral-entry) calculated from the commencement of the first semester to regular entry students and third semester for lateral entry students.

14.1 Classification of Degree

After successful completion of the programme, degree will be awarded as per the following classifications based on the final CGPA

14.1.1 First class with Distinction

Student who satisfies the following conditions shall be declared to have passed the End Semester Examinations in First class with Distinction:

i) Students who have successfully completed the programme within eight consecutive semesters (six consecutive semesters for lateral entry students) and obtained a final CGPA of 8.0 or above by passing the End Semester Examination in all the courses from third to eighth semester in the first attempt will be declared to have passed in **First**

Class with Distinction.

ii) Students who have secured a final CGPA of 8.0 or above but failed to clear the courses offered from third to eighth semester in the first attempt are not eligible for **First Class with Distinction** classification. However, Students who have opted for authorized complete withdrawal (only one time) from examination will also be eligible for **First Class with Distinction** classification but it will not be considered for Ranking.

14.1.2 First Class

A student who satisfies all the following conditions shall be declared to have passed the End Semester Examinations in First class:

a) Should have passed the examination in all the courses of all eight semesters (6 semesters in the case of Lateral Entry) within Five years (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 (four years in the case of lateral entry)

b) Should have obtained a final CGPA not less than 6.0 shall be declared to have passed in **First Class**.

c) Students who have lost the eligibility for **First Class with Distinction** classification by failing to clear the courses offered from third to eighth semesters in the first attempt but securing a final CGPA of 8.0 or above shall also be declared to have passed in **First Class**.

14.1.3 Second Class

All other students (not covered in S.No.1 and 2 under Clause 14.1) who qualify for the award of B.Tech. degree shall be declared to have passed the examination in **SECOND CLASS**.

14.1.4 If the students who failed in the final year in one or two courses, who has no history of arrears are eligible to appear for the supplementary examination immediately after revaluation process. If he/she cleared the courses and his/her CGPA will be taken into account for the eligibility of claiming the appropriate class (either First class/First class with distinction).

14.2 Gold Medals and Ranks

For the Award of Institution Topper (Ranks and Gold Medal) for each branch of study, the CGPA secured from the 1st to 8th semester alone should be considered and it is mandatory that the candidate should have passed all the courses from the 1st to 8th semester for Regular candidates whereas for Lateral Entry candidates from the 3rd to 8th semester in the first attempt. Rank certificates would be issued to the first five candidates in each branch of study.

14.3 Honors Degree

A candidate who qualifies for the award of the degree and who satisfies the following conditions shall be declared to have earned the B.Tech degree with Honors:

i) Should have passed the examination in all the courses of all the eight semesters (six semesters for lateral entry candidates) in the First Appearance within eight consecutive semesters (six consecutive semesters for lateral entry candidates) excluding the authorized break of study (vide Clause 16) after the commencement of his / her study.

ii) Withdrawal from examination shall not be considered as an appearance.

iii) Should have secured a CGPA of not less than 7.5

15. PROVISIONS FOR EXIT IN B.TECH. COURSE

(For courses where AICTE specifies multiple exits in the model curriculum)The curriculum and the syllabus for all B.Tech programmes have been planned in compliance with the NEP guidelines proposed by AICTE. Accordingly, students joining B.Tech programmes shall have all benefits NEP offers in terms of exercising exit options at different stages during the course of study. Every B.Tech programme governed under this school board shall adopt the NEP guidelines, as and when proposed/amended by AICTE, and the following scheme will be applied for all such B.Tech programmes. NEP 2020 suggests that a student can exercise exits at multiple stages of the course of study. As per AICTE norms, a student can have two possible exits before the completion of the Full Engineering degree and may get a UG Diploma or B.Sc. degree in the relevant discipline if he/she fulfils the following conditions:

15.1 UG Diploma/Certificate in the relevant branch of study

A student should be able to get a UG Diploma if he/she completes:

a. 50% of the credits for B.Tech. (80-85 credits)

b. 50% of the program core courses

c. Students exiting the program after earning 50% credit requirements will be awarded a UG Diploma provided they secure an additional 6 credits through summer internships/ apprenticeship of 2 months duration.

d. Students admitted through lateral entry cannot exercise the exit option as he will not be able to meet out the 50% Credits for B.Tech degree.

15.2 B.Sc. in the relevant branch of study

A student should be able to get a B.Sc. degree if he/she completes:

a. 75% of the credits for B.Tech (120 -122 credits) and at least 3 years in the program

b. 100% of the core program courses

c. Students exiting the program after earning 75% credit requirements will be awarded a B.Sc. provided they secure an additional 6 credits through 2 summer internships/ apprenticeship for 2 months each.

d. With B.Sc. degree, the student is eligible for entry into programs which take B.Sc. degree as eligibility criteria.

15.2.1.1 Award of Class in B.Sc. degree

A candidate who satisfies the course requirements for all semesters and who passes all the examinations within a maximum period of 6 years (5 years for lateral entry candidates) reckoned from the commencement of the first semester to which the candidate was admitted shall be declared to have qualified for the award of B.Sc. degree in the relevant discipline.

i) A candidate who qualifies for the award of the B.Sc. degree passing in all subjects pertaining to semesters the 3 to 6 in his/her first appearance within 4 consecutive semesters (2 academic years) and in addition secures a CGPA of 8.0 and above for the semesters 3 to 6 shall be declared to have passed the examination in **FIRST CLASS with DISTINCTION**.

ii) A candidate who qualifies for the award of the B.Sc. degree by passing in all subjects relating to semesters 3 to 6 within a maximum period of six semesters after his/her commencement of study in the third semester and in addition secures CGPA not less than 6.0 shall declared to have passed the examination in **FIRST CLASS**.

iii) All other candidates who qualify for the award of B.Sc. degree shall be declared to have passed the examination in **SECOND CLASS.**

15.2.1.2 Re-entry to complete the program

A student exiting with a UG Diploma or B.Sc. should be entitled to re-enroll in the programme of the same Engineering discipline. Only students admitted to the B.Tech programme and exercised an exit option are eligible for readmission to the B.Tech programme under the same discipline. It is suggested that all credits will be transferred, if the student enrolls back within a limited period (3 years) of exiting. In case a student enrolls after that, then the decision on the transfer of credits should be based on the changes in the curriculum the student studied. A candidate after exit may rejoin the course only at the commencement of the semester at which he/she discontinued, provided he/she pays the prescribed fees to the University. The total period of completion of the B.Tech Course reckoned from the commencement of the first semester to which the candidate was admitted shall not in any case exceed 7 years, including of the period of discontinuance.

15.2.1.3 Completion Possibility in other Institutions

A student can earn a UG Diploma/B.Sc. in one institution (Engineering) and complete the degree program in another institution (same Engineering discipline only).

(Note: If these exit options are accepted for multiple B.Tech. programs, it is suggested that AICTE actively communicate these to the industry and other bodies, so they recognize these and

accept them as bona-fide credentials for the purposes of recruitment and/or eligibility for admission to programs, appearing in competitive examinations, etc.)

16 TEMPORARY BREAK OF STUDY FROM THE PROGRAMME

A student shall be permitted to withdraw temporarily from the college for the reason beyond his/her control. The applicable rules are:

(i) After withdrawal, the student shall rejoin next year in the same semester during which the student has withdrawn.

(ii) The student shall apply to Dean Academics through HoD stating the reasons for withdrawal along with supporting documents, consent letter from his/her parent/guardian and clearance/no due from all the concerned departments.

(iii) Dean Academics shall examine the case and recommend for the approval/ratification from Academic Council (AC) /Academic Standing Committee (ASC).

(iv) A student availing temporary withdrawal from the college under the above provision shall be required to pay such fees and/or charges as may be fixed by the AC/ASC for his/her name to be enrolled. However, it may be noted that the fees/charges once paid shall not be refundable.

(v) The total period of completion of the course reckoned from the commencement of the first semester to which the candidate was admitted shall not exceed 7 years for regular entry students and 6 years for lateral entry students in any case including of the period of discontinuance

17 TERMINATION FROM THE PROGRAM

A student shall be terminated from the programme in the following cases:

i) Involved in ragging and not obeying disciplinary rules structured by college.

ii) Not completing the programme in prescribed period; Students shall have to complete B.Tech programme in the maximum period of 7 years (14 semesters) for regular entry and 6 years (12 semesters) for lateral entry from the date of admission. If not completed, such student will be declared as Failed to Complete Technical Education (FCTE). However, genuine cases with proper justification may be referred to AC for extending programme completion period.

18. DISCIPLINE AND CONDUCT

18.1 Any act of misconduct committed by a student inside or outside the campus shall be an act of violation of discipline of the college. Violations of the discipline shall include:

(i) Interference to teaching, examination, administrative work, curricular or extra–curricular activities and any act likely to cause disruption.

(ii) Damaging or defacing the property inside or outside the college campus.

(iii) Engaging in any attempt at wrongful confinement of teachers, employees and students of the college.

(iv) Use of abusive and derogatory slogans or intimidators' language or incitement of hatred and violence.

(v) Ragging in any form ("Ragging means causing, inducing, compelling or forcing a student whether by way of a practical joke or otherwise to do any act that detracts human dignity or violates person or exposes him to ridicule or to forbear from doing lawful act, by intimidating, wrongfully re-straining, wrongfully confining or injuring him or by using criminal force to him or by holding out to him any threat of such intimidation, wrongful restraint, wrongful confinement, injury or the use of criminal offense), as per the directions of Supreme Court of India, is a criminal offence.

(vi) Eve teasing or disrespectful behavior to a student.

(vii) An assault upon or intimidation of, or insulting behavior towards a teacher, officer, employee or student or any other person.

(viii) Getting enrolled in more than one programme /course of study simultaneously.

(ix) Committing forgery, tampering the documents or records, identity cards, furnishing false certificate or false information.

(x) Organizing instant agitation / meetings without prior permission in the campus.

(xi) Viewing/downloading offensive information /data, images and executable files, sending obscene mails/messages via Facebook / twitter / other social sites using college servers/personal electronic gadgets in the college premises.

(xii) Sharing the login and password and other details of IT facilities provided to other outside students.

(xiii) Refusing to provide an identity card when demanded by any teacher/ college authority.

(xiv) Consuming or possessing alcoholic drinks, dangerous drugs or other intoxicants in the college campus.

(xv) Possessing or using any weapons and fire arms in the college campus.

(xvi) Encroachment of hostel, accommodating guests or other persons in hostels without permission.

(xvii) Malpractice in examination

(xviii) Indulging in anti-national activities contrary to the provisions of acts and laws enforced by Government.

(xix) Any other act which may be considered by the Head of the Institution or the Discipline Committee to be an act of violation of discipline.

18.2 Any act of indiscipline of a student reported to the Head of the Institution shall be referred to Disciplinary Committee of the college. The Committee shall enquire into the charges and recommend suitable punishment if the charges are substantiated. The penalties/ punishment/ actions may include:

(i) Written warning and information to the parents/guardian.

(ii) Imposition of fine

(iii) Suspension from the College/Hostel/Mess/Library or availing of any other facility.

(iv) Suspension or cancellation of scholarship /fellowship /studentship or any financial assistance from any source.

(v) Recover of loss caused to college property.

(vi) Debarring from participation in sports/NSS/student club activities.

(vii) Disqualifying from holding any representative position in the Class/College/Hostel/ Mess/ Sports/ Clubs and in similar other bodies.

(viii) Disqualifying from appearing in placement and receiving any awards.

(ix) Expulsion from the Hostel/Mess/Library/Club/College for a specified period by forfeiting fees.

(x) Debarring from appearing for an end semester examination.

18.3 Student(s) involved in any act of indiscipline /malpractice in examination shall be issued notice to him/her, asked to be present before the Complaint Redressal Committee for Examination (CRCE) on the day at specified time and venue with his/her parents/guardian. He/She shall give written reply/oral explanation to the charges levied against him/her for consideration. If the implicated student(s) fails to appear before the committee, then decision shall be taken as absent, on the basis of available evidence/documents which shall be binding on the concerned student.

18.4 Every admitted student shall be issued photo identification (ID) card which must be worn by the students when he/she is inside in the college campus/college bus.

19. ACADEMIC CALENDAR

19.1. The academic activities of the college shall be governed by the academic calendar prepared for each academic semester and approved by the AC/ASC. It shall be notified at the beginning of each academic semester. Academic calendar shall incorporate schedule of admission, course registration, course delivery, examination/evaluation, course feedback, course/graduate exit

survey, co-curricular activities, compensation of holidays in case of academic loss, meetings (AC, ASC, IQAC, BoS, and Alumni), Academic audit and vacation.

19.2 The curriculum shall be typically delivered in two semesters in an academic year. Each semester shall be of 20 weeks (approximately 100 working days) duration, including evaluation, grade moderation and result declaration. Generally, 14-16 weeks for course content delivery and 4-6 weeks for examination /evaluation shall be assigned in each semester. The academic session in each semester shall provide at least 75 teaching days with 40 hours per week. The odd and even semesters of an academic year normally begin from second week of June and second week of December respectively.

19.3 The academic calendar should be strictly adhered to all other activities including co-curricular and extra-curricular activities that should be scheduled so as not to interfere with the curricular activities as stipulated in the academic calendar.

20. VARIOUS COMMITTEES AND ITS FUNCTIONS

20.1 Academic Council (AC)

Composition of Academic Council

1. The Principal (Chairman)
2. All the Heads of Departments in the Autonomous College
3. Four teachers of the Autonomous College representing different categories of teaching staff by rotation on the basis of seniority of service in the College.
4. Not less than four experts/academicians from outside the Autonomous College representing such areas as Industry, Commerce, Law, Education, Medicine, Engineering, Sciences, etc., are to be nominated by the Governing Body.
5. Three nominees of the University, not less than Professors.
6. The Controller of Examination of the Autonomous College
7. A faculty member nominated by the Principal (Member Secretary).

Term: The term of the nominated members shall be three years.

Meetings: Meetings of the Academic Council shall be held at least once every six months.

Functions of the Academic Council:

a) To scrutinize and approve the proposals with or without modification of the Board of Studies with regard to courses of study, academic regulations, curricula, syllabi and modifications thereof, instructional and evaluation arrangements, methods, procedures relevant thereto, etc., provided that where the Academic Council differs on any proposal, it shall have the right to return the matter for reconsideration to the Board of Studies concerned or reject it, after giving reasons to do so.

b) To make regulations regarding the admission of students to different programmes of study in the Autonomous College, keeping in view the policy of the Government.

c) To make regulations for sports, extra-curricular activities, and proper maintenance and functioning of the playgrounds and hostels.

d) To recommend to the Governing Body proposals for the institution of new programmes of study.

e) To recommend to the Governing Body institution of scholarships, studentships, fellowships, prizes, and medals, and to frame regulations for the award of the same.

f) To advise the Governing Body on suggestions(s) pertaining to academic affairs.

g) To perform such other functions as may be assigned by the Governing Body.

20.2 Board of Studies (BoS)

Composition of Board of Studies:

1. Head of the Department concerned (Chairperson).

2. All faculty members of the Department.

3. Two subject experts from outside the parent University are to be nominated by the Academic Council.

4. One expert is to be nominated by the Vice-Chancellor from a panel of six recommended by the Autonomous College Principal.

5. One representative from industry/corporate sector/allied areas to be nominated by the Principal.

6. One member of the College alumni to be nominated by the Principal.

7. Experts from outside the Autonomous College, whenever special courses of studies are to be formulated, to be nominated by the Principal.

Term: The term of the nominated members shall be three years.

Meetings: Meetings of the Board of Studies shall be held at least once every six months.

Functions: The Board of Studies shall recommend the following to the Academic Council:

1. Courses of studies

2. Measures for the improvement of the standards of teaching and research

3. Any other academic matter.

20.3 Curriculum Designing and Restructuring committee (CDRC)

Composition of CDRC

1. Head of the Institution

2. Deans of Academic, Placement & R& D

3. Heads of all the department

4. One faculty member from each department

Functions:

- Modifying Regulations and Curriculum in accordance with Standards and specifications prescribed by Accreditation Bodies, National Education Policy, etc.

- Conduct Needs Assessment and Analysis with respect to each program and suggest changes to be made in the Curriculum and Syllabi

- Ensure Up to date curriculum of all Programs offered by the Institute, based on timely requirements of Industry.

- Suggest Curriculum delivery methods that include Pedagogical alternatives and learner-centered approaches for each course, for facilitating the achievement of Program Educational Objectives of all programs offered by the Institute.

20.4 Academic Standing Committee (ASC)

Composition of Academic Standing Committee is same as that of AC, except external members. ASC shall perform the functions under emergency situations subject to ratification by the AC.

20.5 Academic Appeal Board (AAB)

The Academic Appeal Board is constituted with Dean Academics as convener and two senior level professors as members, and the concerned Head of the Department and Class Advisor as co-opted members. The board will receive the grievances/complaints in writing from the aggrieved student regarding anomaly in award of marks. The board will examine the complaints and recommend appropriate measures to the Head of the Institution, for necessary action.

The entire process of Continuous Assessment / End semester shall be made transparent, in which students can get the explanation of marks being awarded from the course instructor, if and when required. However, if a student finds some anomaly in the award of marks in the continuous assessment, he/she can make an appeal to the Academic Appeal Board for review of marks awarded. Before appealing for such review, a student shall first approach the concerned Course Instructor and then the concerned Head of the Department, with a request to do the needful. Only after exhausting the above options and in situations where satisfactory actions / remedial measures have not been taken, the student may appeal to the Academic Appeal Board.

20.6 Department Advisory Committee (DAC)

The Department Advisory committee (DAC) develops and recommends new or revised goals and objectives of the programmes offered in the Institution. The committee also reviews and analyzes the gap between curriculum and industry requirements and gives necessary feedback or suggestions to fulfill the gaps, which includes the importance of placements, higher studies, and entrepreneurship. The DAC consists of faculty members of the department, academicians from other institution, resource persons from industry, Alumni and parents.

The composition and functions of the DAC are given below:

1. Chairperson: Head of the concerned Department
2. Internal Members: Two senior faculty members of the department
3. Industry Representative : One representative from industry/corporate sector / is related to the placement
4. One academician from other Institution
5. One meritorious alumnus
6. One parent
7. One student
8. Member secretary: Programme Academic Coordinator

Term: The term of the nominated members shall be three years.

Meetings: The meeting may be scheduled as and when necessary, but once in a year.

Functions of DAC

The DAC of a department in the college shall

a. Formulate a process to review the outcomes of the activities related to curriculum and curriculum implementation.
b. Suggest measures to ensure academic standard and excellence of the course offered by the department.
c. Dissemination and Review of Department Vision, Mission, PEOs, POs, and PSOs.
d. Defining and redefining the Department Vision, Mission, Programme Educational Objectives (PEOs) and Programme Specific Outcomes (PSOs) based on the recommendations by department academic committee.
e. Analyze the PEOs, POs & PSOs attainment and revise the COs for improving the attainment of the same.
f. Review target set for attainment of course outcomes and programme outcomes.
g. Suggest the methodologies for innovative teaching and evaluation techniques; enhancement of industry institute interaction.
h. Guide and provide support to department for enhancing interaction with outside world.
i. Plan strategically to enhance the academic quality of department.
j. Suggest the minor an honor courses based on current industrial requirements
k. Total budget for department activities and equipment/ software purchase year based on previous academic year or new laboratory established in the current academic year
l. Resolve the address issues expressed by the stakeholders through feedback.
m. Plan to conduct activities for Professional bodies and their student Chapters

20.7 Board of Examinations (BoE)

Composition

1. Head of the Institution (Chairperson)
2. Dean Academics

3. Controller of Examination(CoE): Member Secretary

4. One expert possessing ten years of industrial/ field experience nominated by the Chairman Coordinators (Examinations, Assessment, Results and Tabulation)

Functions of BoE:

a) The BoE shall

   i) Ensure proper performance of the various duties in conducting examinations viz. paper setting, time table preparation, assessment and declaration of results.

   ii) Recommend examination reforms and shall implement after the approval of academic council.

   iii) Prepare the detailed time table of examinations as per the schedule approved by academic council.

   iv) Arrange for strict vigilance during the conduct of examination so as to avoid use of unfair means by the students, faculty and invigilators.

b) Chairman, BoE shall constitute Complaint Redressal Committee for examination (CRCE) consisting of three members as and when required to deal with the complaints related to the conduct of examinations.

c) The recommendations of the CRCE shall be approved by Chairman for the BoE to take appropriate disciplinary actions in the concerned matter. The disciplinary actions shall be endorsed by the BoE.

d) The BoE shall perform duties and responsibilities that are assigned by Academic Council of the institute from time to time.

20.8 Complaint Redressal Committee for examination (CRCE)

Composition

1. Principal (Chairperson)
2. COE (Member Secretary)
3. Dean Academics
4. HODs
5. Senior faculty member of the staff or student department
6. Three or five faculty members (depending on the issue to be handled) nominated by Principal

Functions

- Malpractices in examinations
- Instances of plagiarism
- Complaints regarding misconduct during exam periods
- Grievances related to exams received from students and staff via the Grievance Cell
- Misconduct by teachers or students resulting in serious consequences during exams
- Individual notifications will be sent to committee members to convene and examine thecase

- Resolve the Addressing issues and submit the investigation report to the Chairperson
- The Chairperson will make the final decision and, if necessary, impose penalties
- Final decisions and penalties will be reviewed and approved at the subsequent Academic Council Meeting

Meetings

Complaint Redressal Committee for Examinations will be convened when necessary to investigate examination related issues or resolve issues.

20.9 Department Academic Review Committee (DARC)

Composition

1. Head of Department (Chairperson)
2. Five faculty members (at least one from each specialization) nominated by HOD
3. Member Secretary: Programme Academic Coordinator / Programme Evaluation Coordinator

Functions of DARC

a. Review, revise and prepare curriculum structure based on institutional policy, suggest improvements in syllabus of a course/s prepared by course teacher/s and forward the curriculum to BoS for further recommendations.

b. Check appropriateness of course objectives, course outcomes, and mapping of COs with POs and suggest necessary improvements/modifications.

c. Monitor the academic progress throughout the semester, conduct of classes and take appropriate corrective measures to improve the quality of curriculum delivery.

d. Review academic performance of students.

e. Counsel the concerned course teachers for improvement based on student feedback, academic and question paper audit reports.

f. Verify the attainment level of course outcomes and programme outcomes.

g. Formulate strategy to collect feedback from stake holders, analyze the collected feedback and forward the analysis to DAC.

h. Contribute to maintain academic standard as well as improving the quality of the courses offered by the department and enhance industry–institute interaction.

i. Suggest open and professional electives considering societal needs.

j. Recommend methodologies for innovative teaching and evaluation techniques to BoS.

k. Coordinate research, teaching, extension and other academic activities in the department/college.

l. Carry out preparatory work for defining /redefining the Programme Educational Objectives (PEOs) and Programme Outcomes (POs) periodically.

m. Monitor evaluation of course attainments leading to achievement of programme outcomes and report the results of assessment to BoS.

20.10 Programme Academic Coordinator (PAC)

The functions and duties of PAC are:

a. Coordinating all academic activities of the department viz Curriculum revision, framing of syllabus, time table, member secretary for BoS meeting, re-registration of course/s, display

and submission of attendance status.

b. Conducting internal academic audit and department advisory committee meeting as a member secretary.

c. Monitoring the academic activities and conduct of classes.

d. Extending necessary help to department academic and evaluation committee.

e. Recording and forwarding all academic related documents to Dean Academics.

f. Working in association with Dean Academics.

20.11 Department Evaluation Coordinator (DEC)

The functions and duties of DEC are:

a. Conduct course and graduate exit survey, make arrangements for feedback from stakeholders (industry/employer/alumni/student) and feedback analysis.

b. Monitor the assessment of course outcome.

c. Compute / assess / evaluate the achievement of PEOs and POs as per NBA/NAAC requirements.

d. Compile the information required for the preparation of Annual Quality Assurance Report (AQAR) by the Internal Quality Assurance Cell (IQAC).

e. Extend necessary help to department academic and evaluation committee.

20.12 Class Advisor

Head of the Department will allot one faculty member to be the class advisor for a particular batch of students throughout their period of study.

The role of class advisors is as follows:

a. To motivate and closely monitor the performance of the students.

b. To maintain all important documents of the students for reference/inspection by all committees.

c. To work closely with the student counselors on matters related to students and update the details from time to time in student's profile for further reference.

d. To build a strong alumni base for the institution by maintaining a possible rapport with students and parents.

20.13 Quality Circle Meeting (QCM)

Every class has a class committee constituted by the HoD to discuss about the effectiveness of various Academic activities through Quality Circle Meeting (QCM).

The members of the class committee will be as follows:

1. Chairperson – Class advisor of the class

2. All the course handling staff of the class

3. Students (a minimum of 6 consisting of 3 boys and 3 girls on pro-rata basis)

The following Points will be discussed in the QCM

1. Clarify the regulations of the programme and the details of rules therein.

2. Inform the student representatives about the academic schedule including the dates of assessments and the syllabus coverage for each assessment.

3. Inform the student representatives about the details of Regulations regarding marks assigned for each assessment. In the case of practical courses (laboratory/ drawing / project work / seminar etc.) the breakup marks for each experiment / exercise / module of work, should be clearly discussed in the Quality Circle meeting and informed to the students

4. Analyze the performance of the students of the class after each continuous assessment test and initiate steps for improvement.

5. Identify slow learners, if any, and request the faculty concerned to provide additional help / guidance / coaching to such students.

6. Discuss and sort out problems experienced by students in the classroom and in the laboratories.

7. The QCM shall be constituted within the first week of the commencement of any semester.

8. The chairperson of the Class Committee may invite the student mentors and the Head of the Department to the Quality Circle meeting.

9. The Head of the Institution may participate in any class committee meeting.

10. The Chairperson is required to prepare the minutes of every meeting, submit the same through the Head of the Department to the Principal within two days of the meeting and arrange to circulate the same among the students and faculty concerned. Points need action by the management shall be brought to the notice of the management by the Principal.

Meetings

Quality Circle Meetings (QCM) are to be conducted as scheduled below

Meeting 1	One week before the 1st Continuous assessment test
Meeting 2	One week before the 2nd Continuous assessment test
Meeting 3	One week before the Model Exam

During the first meeting of the class committee, the students are to be informed about the assessment procedure as per the framework of the Regulations. During these meetings the student representatives shall meaningfully interact and express opinions and suggestions of the students of the class to improve the effectiveness of the teaching learning process.

20.14 Course Committee for Common Courses

Each common theory / laboratory course offered to more than one class / branch shall have a Course Committee, comprising all the faculties who are teaching the common courses and one of them is nominated as a Course Coordinator.

Sl. No	Nature of common courses	Person Responsible for Forming Course Committee and Nominating Course Coordinator
1	For common courses handled in a particular department	Respective HoD
2	For common courses handled in more than one department	Controller of Examinations (CoE) inform the course committee details to the Principal to get approval for the same and intimate to the concerned faculty

The course committee will ensure that a common question paper is prepared for the tests / exams and uniform evaluation is to be carried out. The Course committee will meet a minimum of 3 times in each semester. The schedule for the course committee to meet is as follows.

Meeting 1	One week before the beginning of the semester
Meeting 2	One week before the 1st assessment test
Meeting 3	One week before the 2nd assessment test

21. REVISION OF REGULATIONS AND CURRICULUM

The Institute may from time-to-time revise, amend or change the regulations of curriculum and syllabus as and when found necessary.

Annexure I

9.3 Integrated Course

Weightage of internal assessment and End Semester Examination marks will be 50% each. The distribution of the marks for the theory and laboratory components in the Continuous assessments and End Semester Examination for the courses with different credit distributions are given below.

Table 9.7 Distribution of the marks for the Integrated course components

L	T	P	C	Continuous Assessment Marks		End semester Examination
				Theory	**Practical**	
1	0	6	4	25%	25%	Practical only (50%)
1	0	4	3	25%	25%	Practical only (50%)
1	0	2	2	25%	25%	Practical only (50%)
2	0	2	3	25%	25%	Theory (25%), Practical (25%)
2	0	4	4	25%	25%	Theory (15%), Practical (35%)
3	0	2	4	25%	25%	Theory (35%), Practical (15%)

i) **Continuous Assessment (Theory part):**

Continuous Assessment Marks for theory part (25 marks) shall be based on attendance (5 marks), assignment (5 Marks) and Continuous Assessment tests (15 marks).

a) For Continuous assessment, for theory plus laboratory courses, the weighted average shall be converted into 50 marks.

The procedure for the conduct of Continuous assessments for theory component which will be converted into 25% as internal marks

i) For 1 credit theory component: one written test (75%) and one assignment (25%) covering all the theory topics

ii) For 2 credits theory component: Two written tests (75%) and two assignments (25%)

iii) For 3 credits theory component: Three written tests (75%) and three assignments (25%) and for laboratory components as per the Clause 9.2

Table 9.7.1 Continuous Assessment marks for Different Types of Integrated course for theory component

Type	CAT1	CAT2	Model Exam	Weightage of Assessment			Attendance	Assignment	Total
				CAT1	CAT2	Model Exam			
1	-	-	✓	-	-	15	5	5	25
2	-	-	✓	-	-	15	5	5	25
3	-	-	✓	-	-	15	5	5	25
4	-	✓	✓	-	7.5	7.5	5	5	25
5	-	✓	✓	-	7.5	7.5	5	5	25
6	✓	✓	✓	5	5	5	5	5	25

9.6 Employability Enhancement Courses

Employability Enhancement Courses are required to be completed to fulfill the degree requirements.

(i) The evaluation of 'Employability Enhancement Courses' is through **continuous assessment only** as per Table 9.15.1.

(ii) The faculty In-charge will conduct the assessment for 100 marks, by evaluating the report and adopting any one of the methods like Project Demonstration/ presentation/ any evaluation method which assesses student's specific skill set as relevant to the course.

(iii) The **Faculty In-charge** handling the course will assess the student through activities, like presentation, demo and skill test and declare the student as **"Pass"** on satisfactory completion (min 40% marks in the assessment). A letter grade **"P"** is awarded to declare pass.

(iv) The marks scored in these courses will not be taken into consideration for the SGPA/ CGPA calculations in the grade sheet.

Table 9.15.1 Weightage of Continuous Assessment Test for Employability Enhancement Courses

Sl. No	Test	Test Mark	Weightage for Assessment	Duration of the test (Hours)
1.	CAT 1 (**Presentation/ Demo/ Skill Test**)	50	**15**	1.5
2.	CAT 2 (**Presentation/ Demo/ Skill Test**)	50	**15**	1.5
3.	Model Exam (**Presentation / Demo / Skill Test**)	100	**20**	3
	Total		**50**	

9.8 Mandatory Courses

- **Mandatory Courses** are required to be completed to fulfill the degree requirements. All Mandatory Courses are assessed through **continuous assessment only** for 100 marks as per Table 9.17.1 and Table 9.17.2.

- The **Faculty In-charge** handling the course will assess the student through activities, quizzes, and debates, and declare the student as **"Pass"** on satisfactory completion (min 40% marks in the assessment). A letter grade **"P"** is awarded to declare pass.

- The marks scored in these courses will **not** be taken into consideration for the **SGPA/CGPA calculations** in the grade sheet.

- Mandatory courses will be included in the Grade Sheet

Table 9.17.1 Weightage of Continuous Assessment Test for Mandatory Courses

Sl. No	Test	Test Mark	Weightage for Assessment	Duration of the test (Hours)
1.	CAT 1 (MCQ **Test**)	50	**7.5**	1.5
2.	CAT 2 (MCQ **Test**)	50	**7.5**	1.5
3.	Model Exam (MCQ **Test**)	100	**15**	3
Total			**30**	

Table 9.17.2   Assessment method for various activities (presentation/ quiz / debate/ assignment) of Mandatory Courses

Assessment	Continuous Assessment Marks (CAM) for various activities			Total Marks
	Presentation	Activity (Quiz / Debate)	Assignment	
Marks	20	20	20	60

Annexure II

Question paper pattern for the theory examination of the Physical science course consisting of physics and chemistry component, as per the table 9.4.1

Table 9.4.1 Model and End semester Examination Question paper pattern

Part A (Physics)			Part B (Chemistry)			
2 Mark Questions	9 mark Questions	11 Mark Question	2 Mark Questions	9 mark Questions	11 Mark Question	Total Marks
6 (Two questions from each unit)	3 (Either or)	1(Compulsory)	6	3 (Either or)	1(Compulsory)	
12	27	11	12	27	11	
50			50			100

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