ACADEMIC REGULATIONS – 2022

FACULTY OF ENGINEERING & TECHNOLOGY

1. BIOTECHNOLOGY
2. CHEMICAL ENGINEERING
3. CIVIL ENGINEERING
4. COMPUTER SCIENCE & ENGINEERING
5. CYBER FORENSICS AND INFORMATION SECURITY
6. ARTIFICIAL INTELLIGENCE
7. COMPUTER SCIENCE AND BUSINESS SYSTEMS
8. ELECTRICAL AND ELECTRONICS ENGINEERING
9. BIO MEDICAL ENGINEERING
10. ELECTRONICS AND COMMUNICATION ENGINEERING
11. INFORMATION TECHNOLOGY
12. MECHANICAL ENGINEERING

Academic Regulations 2022
FACULTY OF ENGINEERING & TECHNOLOGY

FACULTY OF ENGINEERING & TECHNOLOGY

1.0 PRELIMINARY DEFINITION AND NOMENCLATURE

In this Regulation,

i) "Faculty" means specialized division or category of the Programmes like Engineering & Technology, Computer Applications, Management Studies, Humanities & Sciences etc.

ii) "Programme" means Degree Programme, for example B.Tech, M.Tech etc.

iii) Department means the authority for conducting a programme in a specific discipline/Branch like Civil Engineering, Electrical Engineering etc.

iv) "Course" means a theory or practical subject that is normally studied in a semester like Mathematics, Physics, etc.

1.1 SPECIFIC REGULATIONS FOR B. Tech. & M. Tech. PROGRAMMES

The Faculty of Engineering and Technology currently comprises of Departments functioning under the guidance of a Dean and respective Heads of the Departments. All these Departments listed below have well qualified and experienced Professors and other faculty members, advanced laboratories, sophisticated equipments, adequate computer systems and internet connectivity.

2.0 DURATION OF THE PROGRAMME

2.1 PROGRAMMES OFFERED BY DIFFERENT DEPARTMENTS. THEIR CODES AND DURATION.

S.No	Department	Code	Programme						
			UG	Duration (Semester)		PG	Duration (Semester)		
				Min	Max			Min	Max
1.	Biotechnology Engineering	BT	B.Tech. Bio Technology (FT)	08	12	M.Tech. Bio- Technology (FT)		04	08
2.	Chemical Engineering	CT	B. TECH. Chemical Engineering (FT)	08	12	M.Tech Chemical Engineering (FT)		04	08
			B. TECH. Chemical Engineering (PT)	07	11	M.Tech Chemical Engineering (PT)		06	10
			B.Tech Chemical Engineering (FT) Lateral entry	06	10				
3	Civil Engineering	CE	B.Tech. Civil Engineering (FT)	08	12	M.Tech. Structural Engineering (FT)		04	08
			B.Tech. Civil Engineering (PT)	07	11	M.Tech. Structural Engineering (PT)		06	10
			B.Tech. Civil Engineering (FT) Lateral Entry	06	10	M.Tech. Construction Engineering and Management (FT)		04	08
			B.Design(FT)	08	12	M.Tech. Construction Engineering and Management (PT)		06	10
S.No	Department	Code	Programme						

			UG	Duration (Semester)		PG	Duration (Semester)	
				Min	Max		Min	Max
4	Computer Science & Engineering	CSE	B.Tech. Computer Science and Engineering (FT)	08	12	M.Tech Computer Science and Engineering(FT)	04	08
			B.Tech. Computer Science and Engineering (PT)	07	11	M.Tech Computer Science and Engineering (PT)	06	10
			B.Tech. Computer Science and Engineering (FT)- Lateral Entry.	06	10	M.Tech Cyber Forensics and Information Security(FT)	04	08
			B.Tech. Computer Science and Engineering (Artificial Intelligence) (FT)	08	12			
			B.Tech. Computer Science and Engineering (Cyber Security) (FT)	08	12			
			B.Tech. Computer Science and Engineering (Internet of Things) (FT)	08	12			
			Programme					

S.No	Department	Code	UG	Duration (Semester)		PG	Duration (Semester)	
				Min	**Max**		**Min**	**Max**
			B.Tech. Computer Science and Engineering (Data Science)(FT)	08	12			
			B.Tech. Computer Science and Engineering and Business Systems (FT)	08	12			
			B.Tech. Computer Science and Engineering (Networks)(FT)	08	12			
5	Cyber Forensics and Information Security	CFIS	B.Tech. Cyber Forensics and Information Security (FT)	08	12			
6	Artificial Intelligence	AI	B.Tech. Artificial Intelligence and Machine Learning (FT)	08	12			
7	Computer Science and Business Systems.	CSBS	B.Tech. Computer Science and Business Systems (FT)	08	12			

S.No	Department	Code	Programme						
			UG	Duration (Semester)		PG	Duration (Semester)		
				Min	Max		Min	Max	
8	Electrical and Electronics Engineering	EEE	B.Tech Electrical and Electronics Engineering (FT)	08	12	M.Tech. Power System (FT)	04	08	
			B.Tech Electrical and Electronics Engineering (FT) Lateral Entry	06	10	M.Tech. Power System (PT)	06	10	
			B.Tech Electrical and Electronics Engineering (PT)	07	11				
9	Bio Medical Engineering	BME	B.Tech Bio Medical Engineering (FT)	8	12	-	-	-	
			B.Tech Bio Medical Engineering (FT) Lateral Entry	06	10	-	-	-	

S.No	Department	Code	Programme						
			UG	Duration (Semester)		PG	Duration (Semester)		
				Min	Max			Min	Max
10	Electronics and Communication Engineering	ECE	B. Tech Electronics and Communication Engineering (FT)	08	12	M. Tech VLSI Design and Embedded Systems (FT)		04	08
			B. Tech Electronics and Communication Engineering (FT) Lateral Entry	06	10	M. Tech VLSI Design and Embedded Systems (PT)		06	10
			B. Tech Electronics and Communication Engineering (PT)	07	11				
11	Information Technology	IT	B.Tech. Information Technology (FT)	08	12	M.Tech. (IT) FT		04	08
			B.Tech. Information Technology (PT)	07	11	M.Tech (IT) PT		06	10
			B.Tech. Information Technology (FT) Lateral Entry	06	10				

S.No	Department	Code	Programme					
			UG	Duration (Semester)		PG	Duration (Semester)	
				Min	Max		Min	Max
12	Mechanical Engineering	ME	B.Tech. Mechanical Engineering (FT)	08	12	M.Tech. Design Engineering (FT)	04	08
			B.Tech. Mechanical Engineering (FT) Lateral Entry	06	10	M.Tech. Energy Engineering (FT)	04	08
			B.Tech. Mechanical Engineering (PT)	07	11	M.Tech. Design Engineering (PT)	06	10
			B.Tech Robotics and Automation	08	12	M.Tech. Energy Engineering (PT)	06	10

FT: Full Time, PT: Part Time .

2.1.1 Each semester shall normally consist of 90 working days or 15 weeks or 450 hours.

2.1.2 A student is ordinarily expected to complete the B.Tech programme in eight semesters for regular programme and in 6 semesters under lateral entry scheme. However, a student may complete the programme at a slower pace but in any case, not more than 12 semesters under regular programme and 10 semesters for the lateral entry programme excluding semesters withdrawn on medical grounds etc.(Refer 2.1).Provision is also given for accelerated students to complete the entire theory courses of the programme one semester ahead of the minimum stipulated time period and can be permitted for one full semester internship and Project work.

2.1.3 In compliance with the rules and norms of UGC/AICTE, no student will be allowed to complete the UG/PG degree in less than the minimum duration specified in 2.1.

2.1.4 Break of study from the programme may be permitted by the Registrar for a semester or longer for reasons of ill health or other valid reasons. Normally a student will be permitted to discontinue from the programme only for a maximum period of two semesters or the aggregate of individual discontinuation not exceeding two semesters.

2.1.5 A candidate who has fulfilled the following conditions shall be deemed to have satisfied the requirements for the completion of a semester:
- i) He/ She secures not less than 75% attendance in a given semester taking into account the total number of periods in all courses put together attended by the candidate, as against the total number of periods in all courses offered during that semester.
- ii) He/ She earn a Grade Card from the Controller of Examination for having satisfactorily completed all the courses in that semester, as prescribed from time to time with the knowledge of the Departmental Head.
- iii) His/ Her conduct is considered to be satisfactory unless and otherwise notified by the Head of the Department.

2.1.6 Candidates who do not complete the two semesters of an academic year will not be permitted to write the end semester examination and are not generally allowed to proceed to the next academic year. They are required to repeat the incomplete courses of the semester in the next academic year.

2.1.7 As per the guide lines of UGC Academics Bank of Credit (ABC) system has been introduced and being implemented in the University.

2.2 ELIGIBILITY CRITERIA FOR ADMISSIONS

Admission for all U.G. & P.G. Programmes will be made only to the first year. However, for specific U.G. programmes lateral entries are allowed during the 3rd semester. For details of the Programme and eligibility refer Sec. 22.2.5.

2.2.1 U.G. PROGRAMMES (B. TECH. FULL TIME ,LATERAL ENTRY AND B. TECH. PART TIME).

S.No.	Programme	Eligibility Criteria
1.	B. Tech.(Full Time)	1. Passing in HSC/Equivalent in Academic (Mathematics, Physics and chemistry)* / Vocational stream in the relevant discipline. 2. Age Limit: As stipulated by Ministry of HRD/UGC. *detailed eligibility as per AICTE hand book is given in APPENDIX I.
2.	B. Tech.(Part Time)	1. Passed B.Sc. Degree from a recognized University as defined by UGC, with at least 45% marks (40% marks in case of candidates belonging to reserved category) and passed 10+2 examination with Mathematics as a course with minimum 2 years relevant experience. 2. Diploma (10+3 or 10+2+3) in respective Engineering with minimum 2 years of relevant experience. 3. Candidates who have passed their Diploma courses under Part time are also eligible for seeking admission to the various disciplines of the B. Tech. (Part Time) provided they have completed 25 years of age as on 1st July of that academic year with minimum 2 years of relevant experience.

S.No.	Programme	Eligibility Criteria
3.	B.Tech. (Lateral Entry)	1.Passed Diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category) in ANY branch of Engineering and Technology. For B.Tech Mechanical Engineering- Diploma offered by CIPET approved by AICTE and Diploma in Tool and Die Making offered by NTTF are also eligible. 2. Candidates who have passed their Diploma courses under Part time are also eligible for seeking admission to the various disciplines of the B. Tech, provided they have completed 25 years of age as on 1st July of that academic year. 3.Passed B.Sc. Degree from a recognized University as defined by UGC, with at least 45% marks (40% marks in case of candidates belonging to reserved category) and passed 10+2 examination with Mathematics as a course. a)Provided that the .students belonging to B.Sc. Stream, shall clear the courses Engineering Graphics/ Engineering Drawing and Engineering Mechanics of the First Year Engineering Programme along with the Second year courses. b) Provided that the students belonging to B.Sc. Stream shall be considered only after filling the supernumerary seats in this category with students belonging to the Diploma stream. 4.Passed D. Voc. Stream in the same or allied sector. 5. In the above cases, suitable bridge Courses, if required such as in Mathematics or basic Engineering foundation courses may be suitably designed and implemented.

2.2.2 P.G. PROGRAMMES (FULL TIME)

S. No.	Department	P.G. Programmes Offered	Eligibility for admission
1.	Bio Technology	M. Tech. (Bio - Technology)	B. Tech. (Bio-Technology)
2.	Chemical Engineering	M. Tech. Chemical Engineering	B.E/B. Tech. or AMIE or equivalent in Chemical/Electro Chem./Petrochem.
3	Civil Engineering	M. Tech.-Construction Engineering and Management	B.E./B. Tech. or AMIE or equivalent in Civil Engineering
		M. Tech. – Structural Engineering	B.E./B. Tech. or AMIE or equivalent in Civil Engineering
4..	Computer Science and Engineering	M. Tech. – Computer Science and Engineering	B.E./B. Tech. or AMIE or equivalent in CSE/EEE/ECE/ E&I/ICE/IT or M.Sc. (Electronics) or MCA
		M. Tech. – Cyber Forensics and Information Security	B.E./B. Tech. or AMIE or equivalent in CSE/IT/ECE
5.	Electronics & Communication Engineering	M. Tech. – VLSI Design and Embedded Systems	B.E./B. Tech. or AMIE or equivalent in EEE/ECE/ICE/E&I/CSE/IT
6	Electrical and Electronics Engineering	M. Tech. –Power Systems	B.E./B. Tech. or AMIE or equivalent in EEE/ECE/ICE/ E&I/CSE
7.	Mechanical Engineering	M. Tech. – Design Engineering	B.E./B. Tech. or AMIE or equivalent in ME/Production/Manufacturing/ Design/CAD/CAM/Automobile/ Industrial
		M. Tech.-Energy Engineering	B.E./B. Tech. or AMIE or equivalent in ME/Production/Manufacturing/ Automobile/EEE
8.	Information Technology	M.Tech.-Information Technology	B.E./B. Tech. or AMIE or equivalent in CSE/IT/ECE

2.2.3 P.G. PROGRAMME (PART TIME)

S. No.	Department	P.G. Programmes Offered	Eligibility
1.	Chemical Engineering	M. Tech.-Chemical Engg.	B.E./B. Tech. or AMIE or equivalent in Chemical / Electro Chemical /Petrochemical.
2.	Civil Engineering	M. Tech.-Construction Engineering.	B.E./B. Tech. or AMIE or equivalent in Civil Engineering
		M. Tech.- Structural Engineering	B.E./B. Tech. or AMIE or equivalent in Civil Engineering
3.	Electrical and Electronics Engineering	M. Tech.-Power Systems	B.E./B. Tech. or AMIE or equivalent in EEE/ECE/ICE/E&I
4.	Mechanical Engineering	M.Tech.- Design Engineering	B.E./B.Tech. or AMIE or equivalent in Mechanical/Automobile/Production/ Manufacturing/Industrial
		M.Tech- Energy Engineering	B.E/B.Tech. or AMIE or equivalent in ME/Production/Manufacturing/ Automobile/EEE

** Age limit as stipulated by Ministry of HRD (relaxation applicable for SC/ST candidates as per Government guidelines).

2.2.4 TRANSFER CANDIDATES

Students from other universities/institutes can be transferred to our university if the student satisfies the following conditions.
1. Students should undergo at least 50% of the total duration of the programme in our university.
2. Students without backlogs only permitted for "transfer" from other Institutions.

3.0   STRUCTURE OF THE B.Tech & M.Tech PROGRAMME

3.1   All Under Graduate programmes offered by the University under Engineering &Technology follow semester pattern distributed over eight semesters, six semesters for lateral entry students and duration of semesters recommended by the Admission Committee for transfer candidates.

3.2   Outcome Based Education:
The programmes offered under Engineering and Technology follow the Outcome Based Education (OBE) guidelines and have well defined

1	Program Educational Objectives (PEO)
2	Program Outcomes (PO) and Program Specific Outcomes (PSO)
3	Mission of the Department to Program Educational Objectives (PEO) Mapping
4	Program Educational Objectives (PEO) to Program Outcomes (PO) and (PSO) Mapping
5	Structure of Undergraduate and Post Graduate Engineering Programme
6	Categorization and credit distribution of Courses.
7	Program Articulation Matrix

Each Course has well defined,

1	Course objective
2	Course Outcomes (CO)
3	Lesson Delivery Plan with session-wise Learning Outcomes (SLO)
4	Learning Assessment Scheme
5	Course Designer Details

3.2.1Components of curriculum and credit Distribution for B.Tech:

S.NO	Course Component	Credit Weightage (Approx %)	Category Code
1	Basic Science	17	BS
2	Engineering Science	2	ES
3	Humanities and Social Science	6	HS
4	Program Core	43	PC
5	Program Electives	9	PE
	Open Elective	4	OE
6	Inter-disciplinary	8	ID
7	Skill Component	3	SC
8	Online course(NPTEL/Any MOOC)	1	OC
9	Internship/ Project / Orientation to Entrepreneurship& Project Lab	7	P

3.2.2 Components of curriculum and credit distribution for M.Tech:

S. No	Course Component	Credit Weightage (Approx %)	Category Code
1	Programme Core	41	PC
2	Programme Elective	22	PE
3	Online Course(Open Elective through NPTEL/Any MOOC))	4	OC
4	Interdisciplinary/ Allied Courses	6	ID
5	Projects/Internship/Core Skill	22	P
6	Research Component	5	RC

3.3 Each course is normally assigned a certain number of credits with 1 credit per Lecture period per week, 1 credit per tutorial period per week, 1 credit for 2 periods of laboratory or practical or seminar or project work per week.

3.4 All B.Tech and M.Tech Students will be undergoing online courses offered by NPTEL/SWAYAM/Any MOOC mandatorily of 1 credit 3 credits respectively. Also any other course in the curriculum can be cleared through online platform by the students during the course of study and credit transfer will be done.

3.5 The medium of instruction is English for all courses and evaluation.

3.6 Each semester curriculum shall normally have a prescribed number of courses with a blend of lecture and practical. There are provisions both for fast learners and slow learners.

3.7 For the award of the degree, following the credit pattern, a student has to earn stipulated number of credits specified in curriculum of the relevant branch of study.

3.8 All students shall enroll, on admission, in any one of the professional societies relevant to their branch of study and participate in the activities of the society for their professional development.

3.9	All students shall undergo compulsorily at least one month industrial training during the vacation, any time prior to the seventh semester examination and identify the problems for their project work later.
3.10	All B.Tech Students will enroll for one foreign Language during the 7th semester of their study.

3.10   All B.Tech Students will enroll for one foreign Language during the 7th semester of their study.

4.0   CHANGE OF BRANCH IN B. Tech. PROGRAMME

Change of branch will be considered only at the end of the first semester based on the successful completion and performance of the first semester and no change of branch will be entertained in any other semester.

5.0   STUDENT ASSESSMENT PROCESS

5.1   Objective:

The primary objective of student assessment is to motivate them for right learning. The secondary objective is to grade students according to their academic performance.

5.2   ASSESSMENT METHOD

S.No.	Types	Continuous Assessment Tests	Weightage	End Semester Examination	Weightage
1.	Theory	CAT_1, CAT_2 CAT_3	50	ET	50
2.	ETL(Embedded Theory and Lab)	CAT_1 CAT_2 CAT_3	30	ET	30
		P_1, P_2	20	EP	20
3.	Practical	P_1, P_2	50	EP	50

5.3   CONTINUOUS ASSESSMENT:

Continuous assessment will be based on the following assessment tools for all theory Courses.

5.3.1   Continuous Assessment for B.Tech Programme:

1. CAT 1 :(Full Time)

CAT I comprises of 3 modules.

Module1:

Open book test (Part A-10x1 mark MCQ and Part B-2x10 marks descriptive type)-Unit 1 –Maximum marks 30 & 60 minutes duration. Weightage: 40%

Module 2:

Online MCQ (50 questions in all 5units),Weightage: 30%

Module 3:

Seminar presentation OR Group activity OR Participation in workshop or Symposium or conference by students. Weightage: 30%

CAT 1 :(Part Time):

Part A: 10x1 MCQ and Part B: 4x10marks descriptive type- either/or type) (Units 1&2), Maximum marks 50 & 90 minutes duration.

2. CAT 2(Full Time)

Part A: 10x1 MCQ and Part B: 4x10marks descriptive type-either/or type) (Units 2&3), Maximum marks 50 & 90 minutes duration.

CAT 2(Part Time)

Part A: 10x1 MCQ and Part B: 4x10marks descriptive type--either/or type) (Units 3&4)

-Maximum marks 50 & 90 minutes duration.

3. CAT3:(Full Time & Part Time)

University Exam pattern (All units) – Maximum marks- 100 & 3 hours duration. Part A: 10x1 mark MCQ,Part-B:5x6 marks (5 questions out of 8),Part-C:5x12marks.(5 questions in "either"/"or" pattern, one question from each unit**.**

Weightage for Continuous Assessment mark:

CAT 1   :30% for Full Time & 20% for Part Time

CAT 2   :20% for Full Time & 20% for Part Time

CAT 3   :30% for Full Time & 40% for Part Time

Assignment: 10% (Both Full Time & Part Time)

Attendance: 10% (Both Full Time & Part Time)

Break-up of marks for attendance,

100% attendance: 10 marks

95 to99%   :09 marks.

90 to94%   :08 marks

85 to 89%   :07 marks.

80 to 84%   :06 marks.

75 to 79%   :05 marks

Less than 75   :0 marks.

5.3.2   Continuous Assessment for ETL (Embedded Theory and Lab) courses:

CAT 1 (**weightage**: **30%**)

Module1:P1

A practical test will be conducted at the end of Cycle 1 for a maximum mark of 100

Module1:P2

A practical test will be conducted at the end of Cycle 2 for a maximum mark of 100

CAT2: **(Weightage**:**20%)**

Part A: 10x1 MCQ and Part B: 4x10marks descriptive type-either/or type(Units I,II &III) (Maximum marks 50 & 90 minutes duration.)

CAT3**: (Weightage**: **30%)**

University Exam pattern (All units) – Maximum marks- 100 & 3 hours duration. Part A:10x1 mark MCQ,Part-B:5x6 marks (5 questions out of 8),Part-C:5x12marks.(5 questions in "either"/"or" pattern, one question from each unit**.**

Assignment: **(Weightage: 10%)**
Attendance: **(Weightage: 10%)**

Computation of Continuous assessment mark (100 marks)

60% weightage is given to the above assessments (CAT1, CAT2, CAT3, Assignment and Attendance). The department has to conduct end semester practical Examination along with other practical examination and 40% weightage is given to this practical examination.

5.3.3 Continuous Assessment for Practical courses,

P1,P2 are conducted one at the middle of the semester and the other at the end of the semester. Average of P1 and P2 will be given 75% weightage and 25 % weightage for the attendance for the Continuous assessment mark calculation.

5.3.4 Continuous Assessment and End semester Examination for Engineering Graphics and Machine drawing:

Details of assessment tools, question paper pattern for these courses are given in **Annexure I.**

5.3.5 Continuous Assessment for M.Tech :

- Continuous **assessment will be based on the following assessment tools.**

    1.CAT 1: It comprises of 2 modules. Each module carries 50% weightage.
    Module 1:(Part A-10x1 mark MCQ and Part B-4x10 marks descriptive)-
    Unit 1& II –Maximum marks 50 & 90 minutes duration
    Module2:Any one ILM

    2.CAT 2: It comprises of 2 modules. Each module carries 50% weightage.
      Module 1:(Part A:10x1 MCQ and PartB:4x10 marks descriptive)(Units III &IV)-Maximum marks 50 & 90 minutes duration.
      Module2: Any one ILM

    3.CAT3:
    University Exam pattern (All units) – Maximum marks- 100 & 3 hours duration. Part A:10x1 mark MCQ,Part-B:5x6 marks (5 questions out of 8),Part-C:5x12marks.(5 questions in "either"/"or" pattern, one question from each unit**.**

Weightage for Continuous Assessment mark:
CAT1: 20%
CAT2:20%
CAT3:40%
Assignment:10%
Attendance: 10%

For attendance,
   100%   :10 marks
 95 to99%:09 marks.
 90 to94%:08 marks
 85 to 89%: 07 marks.
 80 to 84%:06 marks.
 75 to 79%:05 marks and less than 75%: 0 marks.

5.3.6   RE- TEST FOR CONTINUOUS ASSESSMENT:

If a student is not able to write any of the tests due to genuine reasons, the Head of the Department concerned may arrange to conduct a special test and the same may be considered for Continuous Assessment. However, not more than one such test shall be conducted for a student in a course for the semester.

5.3.7   <u>Validity of Continuous Assessment mark:</u>

B.Tech:
Continuous Assessment mark awarded for each course will be considered only for the first three attempts in the university examination and the result will be declared on the basis of Continuous Assessment mark(50% weightage) and University end semester examination mark(50% weightage). From the fourth attempt onwards, full weightage (100%) shall be assigned to marks scored in the end semester examinations and the Continuous Assessment marks they have scored during the regular course of study will be ignored.

M.Tech:
Continuous Assessment mark awarded for each course will be considered only for the first two attempts in the university examination and the result will be declared on the basis of Continuous Assessment mark and University end semester examination mark. From the third attempt onwards, full weightage (100%) shall be assigned to marks scored in the end semester examinations and the Continuous Assessment marks they have scored during the regular course of study will be ignored.

5.3.8   INTERNAL EVALUATION PROCEDURE:

The courses under the category Internal Evaluation (IE) in B,Tech and M.Tech Programmes will be evaluated by the faculty members appointed by the Heads of departments .The continuous assessment and end semester University assessment process and rubrics are given in **Annexure I**I.

6.0   ATTENDANCE REQUIREMENT FOR ATTENDING THE END SEMESTER EXAMINATIONS.

The teacher handling a course of study must finalize the attendance percentage and performance report three days prior to the last instruction day of the course of study in the semester and send it to Head of the Department and Dean. The students falling short of 75% attendance are normally not allowed to write the end semester examinations. However, those students who have less than 75% attendance for reasons of medical and other emergency situations can be considered for condoning of attendance by the Vice Chancellor provided their overall attendance in a course of study including the period of illness etc., does not fall below 65%. If the attendance falls short due to medical ground backed by medical certificate, up to 5% shortfall can be condoned by the Dean and if it is more than 5%, the Vice Chancellor will have the discretionary power for condoning on a case-to-case basis. The students falling short of 65% attendance have to re-do the courses in the next academic year.

7.0   END SEMESTER EXAMINATIONS for B. Tech. / M. Tech. Question papers for end semester examination will be set by External Examiners chosen from a panel of qualified and experienced teachers formed by the Controller of Examinations, under the advice of concerned Heads of the Departments and duly approved by the Vice Chancellor.

7.1   Question paper pattern for B. Tech:

Part A: 10x1 marks (no choice)(MCQ)
Part B: 5x6 marks (5 out of 8)
Part C: 5x12 marks ('Either' 'or' type.)

7.2   Question paper pattern for M. Tech:

Part A:10x1 marks (no choice)(MCQ)
Part B: 5x6 marks (5 out of 8)
Part C: 5x12 marks ('Either' 'or' type)

Duration of all theory examinations will be for 3 hour duration and the maximum marks is 100.

Question paper Scrutiny committee:

Controller of Examination (COE) will constitute department wise Question paper scrutiny committee (3 to 4 members from each department) in consultation with the Heads of the departments. Before the start of the university examination (at least 15days before the commencement of the examination) the members of the committee shall be called by COE for the scrutiny of the question papers.

7.3 VALUATION OF END SEMESTER EXAMINATION ANSWER PAPERS

Valuation for all U.G. courses will be done by external faculty drawn from a panel maintained by the Controller of Examinations. Central valuation will be done with adequate arrangements to maintain reliability of the system.

For all P.G. courses double valuation will be done; first by the Internal faculty and the second by the external faculty. Any discrepancy of more than 15% marks may lead to third valuation and the averages of the nearest two valuation marks will be taken as the theory mark of candidate. For all Practical examinations, an external faculty member will be present for conducting the end semester examination and evaluating the student based on his Practical skills as well as knowledge to be ascertained by viva voce.

7.4 REVALUATION OF END SEMESTER EXAMINATION ANSWER PAPERS

For all U.G. courses revaluation will be done on written request by students. After the first revaluation, requests for the revaluation of answer scripts for a second time will not be entertained. However Xerox of answer script may be given to aggrieved students on request and students can challenge the revaluation.
For PG programmes revaluation will not be done.

7.5 PROJECT EVALUATION

The continuous assessment carries 50% and is done through three seminar presentations and the end semester examination carries 50% for the report submitted and viva voce. For the final assessment, both Internal as well as external faculty should be available for a joint assessment.

7.5.1 Rubrics for Project :

Continuous Assessment:

Description				
Review1	Review2	Review3	Guide mark	Total
25	25	25	25	100

End semester University examination

Report	Presentation	Viva Voce	Total
40	40	20	100

7.6 **PASSING CRITERIA FOR ETL COURSES**:

End semester University examination is conducted for theory component by the controller of examination.

Students securing minimum of 50% in End semester University theory Examination and also 50% aggregate of Continuous assessment and End semester examination marks will be declared **PASS.**

8.0   PASSING REQUIREMENT

A Results Passing Board constituted by the Vice Chancellor reviews the results and performance of the students, for any corrective action, if required.

8.1   A candidate shall be declared to have passed the examination, if she/he secures not less than 50%(Average of **Continuous Assessment** and end semester university examination) of total marks prescribed for the course of study with a minimum of 50% marks prescribed for the end semester university examination, as certified by the result passing board.

9.0   AWARD OF LETTER GRADES AND C.G.P.A

Each student is awarded a final letter grade for each course at the end of the semester based on the aggregate of marks obtained through **Continuous Assessment** and external assessment. The letter grades and the corresponding grade points, as recommended by UGC, are a follows:

Letter	Numerical Grade	Normalized Mark range
H	10	90 – 100
S	9	80 – 89
A	8	70 – 79
B	7	60 – 69
C	6	50 – 59
F	-	< 50 Failure due to poor performance
F*	-	>= 50 denotes failure in end semester examination
RA	-	Re - Appear
AB	-	Absent for the End semester examination

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

i)   The Faculty and the Department in which the candidate has studied

ii) The list of courses enrolled during the semester and the marks and grade scored

iii) Grade Point Average (GPA) is computed for each semester.

The GPA, a measure of performance of the students in the semester to which it refers, is calculated as follows:

$$GPA = \frac{\sum_{i=1}^{n} c_i\, g_i}{\sum_{i=1}^{n} c_i}$$

where 'n' is the number of courses registered for the semester, c_i is the number of credits allotted to a Particular course, and g_i is the grade points carried by the letter corresponding to the grade awarded to the student for the course.

iv) Cumulative Grade Point Average (CGPA) is computed at the end of every semester from the 2nd semester onwards to which it refers, and will be calculated as follows:

$$CGPA = \frac{\sum_{i=1}^{m} c_i\, g_i}{\sum_{i=1}^{m} c_i}$$

where 'm' is the total number of courses the student has registered from the first semester onwards upto and including the semester, just completed. 'c_i' is the number of credits allotted to a particular course and 'g_i' is the grade-points carried by the letter corresponding to the grade awarded to the student for the courses. CGPA will be rounded off to the first place of decimal and recorded as such.

10.0   ELIGIBILITY REQUIREMENTS FOR THE AWARD OF DEGREES

A student will have to earn credits as given below for the award of degrees.

01.   All B. Tech. Courses – Full Time – 166
02.   All B. Tech. Courses – Lateral Entries– 129
03.   All B. Tech. Courses – Part Time – 100
       (36 credits for Diploma +-30 credits for Industrial Experience)
04.   M. Tech. Courses (FT & PT) – 75

11.0   CLASSIFICATION OF THE DEGREE AWARDED

Also refer respective programmes for specific details. The general classification of the degree awarded in credit system based education is given below:

A candidate is said to have qualified for the award of degree when he / she has completed and passed courses worth the minimum number of Credits stipulated for that degree [vide Sec. 26.1]

11.1   A candidate who has qualified for the award of degree having passed the examination in all the courses of all semesters in his / her first appearance securing not less than 9.00 CGPA shall be declared to have passed in *First class with Honours.*

11.2   A candidate who has qualified for the award of degree having passed the examination in all courses of all semesters in his / her first appearance securing not less than 8.00 CGPA but less than 9.00 CGPA shall be declared to have passed in *First class with distinction.*

11.3   A candidate who has qualified for the award of degree having passed in all courses at the end of the stipulated minimum period with not less than a CGPA of 6.50 shall be declared to have passed in *First Class.*

11.4   All other candidates (not covered in Secs. 11.1, 11.2 and 11.3) who have qualified for the award of degree before the stipulated maximum period shall be declared to have passed the examination in *Second class.*

ANNEXURE I

Course Code: EBME22001   (II Semester B.Tech)

Course Name: Engineering Graphics

Continuous assessment Tools

CAT-I :
           PART-A   10X1= 10Marks (MCQ-NO CHOICE)
           PART-B   2X2 =   4Marks (NO CHOICE)
           PART-C   1X16=16 Marks (either /or Type)

                             Total marks: 30; Duration: 60minutes

CAT-II
           PART-A   10X1 =10Marks (MCQ-NO CHOICE)
           PART-B   4X2 = 8Marks (NO CHOICE)
           PART-C   2X16=32 Marks (either /or type)

                             Total marks: 50; Duration: 90minutes

CAT-III
           PART-A   10X1= 10Marks (MCQ-NO CHOICE)
           PART-B   5X2 = 10Marks (NO CHOICE)
           PART-C   5X16 = 80 Marks Internal (either /or type)

                             Total marks: 100; Duration: 3 Hours.

University Exam Question paper pattern:

           PART-A   10X1= 10Marks (MCQ-NO CHOICE)
           PART-B   5X2= 10Marks (NO CHOICE)
           PART-C   5X16=80 Marks Internal (either /or type)

                       Total marks: 100; Duration: 3 Hours

Course Code: EBME22005 (III semester B.Tech Mechanical Engineering)

Course Name: Machine Drawing

Continuous assessment Tools:

CAT-I (OPEN BOOK TEST)
      PART-A   10X1=10 Marks (MCQ)
      PART –B   2X10=20 Marks (No Choice)
                                    Total Marks =30; Duration: 60minutes

CAT-II
      PART-A   10X1=10Marks (MCQ)
      PART-B   1X10=10 Marks(No Choice)
      PART -C   1X30=30 Marks
                                      Total Marks =50; Duration: 90minutes

CAT-III
      PART-A   10X1=10Marks (MCQ-No Choice)
      PART-B   5X2 =10 Marks (No Choice)
      PART-C   1X20=20Marks (No Choice)
      PART-D   1X60=60 Marks (No Choice)
                                      Total Marks = 100; Duration: 3 Hours

University Exam Question paper pattern:

      PART-A   10X1=10Marks (MCQ –No Choice)
      PART-B   5X2 =10 Marks (No Choice)
      PART-C   1X20=20Marks (No Choice)
      PART-D   1X60=60 Marks (No Choice)
                                      Total Marks = 100; Duration: 3 Hours

ANNEXURE II

Examination Procedure and Rubrics - Internal Evaluation (I.E) courses .

The courses earmarked as IE(Internal Evaluation) in the E&T curriculum will be evaluated by the respective departments staff duly appointed by the Heads of departments. The assessment procedure and rubrics are as given below.

B.TECH PROGRAMME

1.EBCC22I01:ORIENTATION TO ENTREPRENEURSHIP & PROJECT LAB:

Continuous Assessment:

This component will have three assessments with equal weightages and the mark will be converted to 100 and will be submitted to CoE office.

End semester University examination:

a. The External examinations will comprise of Written and project presentations.
b. The written part will be MCQ's (25 questions) from Entrepreneurship content as per syllabus with a weightage of 40%
c. The Presentation may be a prototype/power point presentation on ideas/idea generation and evaluation/miniature models etc, with a weightage of 60%
d. The written and presentation part of 40% and 60% weightage will be added for 100 and will be submitted to CoE Office as external marks for the subject.

2.EBCC22I02:COMMUNICATIVE ENGLISH LAB:

Continuous assessment:

2 assessments (Each 50% weightage) will be conducted during the semester for the award of continuous assessment mark. Each assessment will have written and oral components.

End semester University examination:

Credit: 1
Duration of Exam: 2 hours
Max.Marks:100(Written 50 marks and Oral 50 marks)

Written Exam: Reading Comprehension, Note making, Film review, Interpreting Advertisement, Short stories, Interpretation of Charts, Note taking, Formal Letters, Resume & covering letters, News paper reports.

For written examination, question paper has to be prepared by the Department conducting the Examination and time for written exam will be one hour.

Oral Exam: Self Introduction, Anchoring, Welcome address, Formal Presentation, Power Point Presentation, Group Discussion, Mock Interviews, Role Plays.

Oral Split up Marks: Content Delivery, Presentation Skills, Communication Skills, Body Language & Eye Contact, Fluency each carries 10 marks.

Time for Oral Presentation is one hour.

3.EBCC22I03: ENVIRONMENTAL SCIENCE (Audit Course):

Continuous Assessment:

The continuous assessment will have two assessments with equal weightages and the mark will be converted to 100 and will be submitted to CoE office.

End semester University examination:

Zero credit – Audit course
a. The External examinations will comprise team/group presentations.
b. The Presentation may be a case study/survey report/field visit report/prototype/power point presentation on ideas/idea generation and evaluation/miniature models/environmental activities etc,
c. Criteria for Team/Group presentation
   a. Theme – 10 marks
   b. Relevance to current scenario – 10 marks
   c. Presentation skills – 30 marks
   d. Innovation – 10 marks
   e. Effectiveness & impact – 10 marks
   f. Project report – 30 marks
d. The Team/Group presentation will be evaluated for 100 marks and will be submitted to CoE Office as external marks for the subject.

4. EBCC22I04/ EBCC22I05:THE INDIAN CONSTITUTION/ THE INDIAN TRADITIONAL KNOWLEDGE(AUDIT COURSE)-ZERO CREDIT.

Continuous assessment mark will be awarded for maximum marks of 100 based on two assessments during the semester. Each continuous assessment can be of MCQ/Descriptive type with one hour duration.

End semester University examination will be conducted as written examination. One hour MCQ type questions (50nos) and 1 hour descriptive type questions should be given with maximum 100 marks.

5. EBCC22I06: SOFT SKILL I -EMPLOYABILITY SKILLS:

Continuous assessment:

2 assessments (Each 50% weightage) will be conducted during the semester for the award of continuous assessment mark. Each assessment will have written and oral components.

End Semester University examination:

Credit: 1
Duration of Exam: 2 hours
Max.Marks:100(Written 50 marks and Oral 50 marks)
Written Exam: Resume & Covering letter, Business Letters, Self Introduction, Email Writing, Dialogue writing.

For written examination, question paper has to be prepared by the Department Conducting the examination and time for written exam will be one hour.

Oral: Group Discussion, Debate, Role plays, Mock Interviews, Situational Round,
Oral Split up Marks: Content Delivery, Presentation Skills, Communication Skills, Body Language & Eye Contact, Fluency each carries 10 marks.
Time for Oral Presentation is one hour.

6. EBCC22I07 : SOFT SKILL II -QUALITATIVE AND QUANTITATIVE SKILLS:

Continuous assessment:

Continuous assessment mark will be awarded based on 2 assessments in MCQ pattern each assessment carrying 50%weightage.

End semester University examination:

Since the syllabus is based on testing the Logical and Arithmetic reasoning of the students, the Question pattern will be ONLY in objective type.

The Examination will be conducted for 100 marks with 50 MCQ type questions and each carries 2 marks. The duration for the End semester Examination will be 2 hours.

7. EBXX22I01, EBXX22I02, EBXX22I03:TECHNICAL SKILL I, II &III:

Continuous assessment:

Description				
Attendance	Review1	Review2	Certificate	Total
20	25	25	30	100

End Semester University Examination

Description				
Relevance	Report	Presentation	Viva	Total
20	30	30	20	100

8. EBOL22I01:ONLINE COURSE THROUGH NPTEL/SWAYAM/MOOC:

Continuous assessment:

The assignment marks obtained in the online portals like NPTEL/SWAYAM/Any MOOC will be considered for all students.

End semester University Examination:

The students successful in the online examination the mark obtained in the examination will be considered for the end semester examination.

For others, the internal examination will be conducted by the department.

9. EBXX22I04 / EBXX22I05: MINI PROJECT-INTERNSHIP/ PROJECT PHASE – 1:

Continuous assessment:

Description				
Attendance	Review1	Review2	Guide mark/Certificate*	Total
15	30	30	25	100

*Applicable for internship only.

End semester University examination

Report	Presentation	Viva Voce	Total
40	40	20	100

10. EBFL22IXX: FOREIGN LANGUAGE:

Continuous assessment mark will be awarded for a maximum marks of 100 based on two assessments during the semester.

End semester written exam will be conducted for 1 hour duration(50% weightage) and oral exam for 1 hour duration (50% weightage) by the faculty in-charge of the foreign language.

M.TECH PROGRAMME:

11. EMCC22IXX: AUDIT COURSE:

Continuous assessment mark will be awarded for maximum marks of 100 based on two assessments during the semester.

End semester University examination will be conducted as written examination. One hour MCQ type questions (50nos) and 1 hour descriptive type questions should be given with maximum 100 marks by the department conducting the audit course.

12. EMXX22I01:TERM PAPER

Continuous assessment:

Description				
Attendance	Review1	Review2	Guide/Mentor mark	Total
15	30	30	25	100

End semester University examination:

Literature Survey	Methodology	Report	Presentation	Viva Voce	Total
20	20	20	20	20	100

13. EMOL22I01:OPEN ELECTIVE: (ONLINE COURSE THROUGH NPTEL/SWAYAM/MOOC)

Continuous assessment:
The assignment marks obtained in the online portals like NPTEL/SWAYAM/Any MOOC will be considered for all students.

End Semester University Examination:
The students successful in the online examination the mark obtained in the examination will be considered for the end semester examination.
For others, the internal examination will be conducted by the department.

14. EMXX22I02: SUMMER INTERNSHIP

Continuous assessment:

Description				
Attendance	Review1	Review2	Guide mark/Certificate*	Total
15	30	30	25	100

End semester Examination:

Report	Presentation	Viva Voce	Total
40	40	20	100

15. EMXX22I03: RESEARCH   PUBLICATION:

Continuous Assessment Mark:

Review1	Review2	Guide/Mentor	Total
40	40	20	100

End Semester University Examination:

Relevance of published paper	Presentation	Viva Voce	Quality of Publication(Scopus/Web of science/UGC care/peer Reviewed journals/Conference Proceedings.	Total
30	20	20	30	100

SEMESTER WISE I.E (Internal Evaluation) COURSES AND UNIVERSITY EXAM DURATION-2022Regulations

B.Tech Programme

SEMESTER – I

Course Code	Course Title	Credit	Examination Duration & Weightage		
			Written Exam Hrs	Practical Exam Hrs	Department Responsible
EBCC22I01	Orientation to Entrepreneurship & Project Lab	1	1Hr(40%)	1 Hr (60%)	I yr E&T

SEMESTER – II

Course Code	Course Title	Credit	Examination Duration & Weightage		
			Written Exam Hrs	Practical Exam Hrs	Department Responsible
EBCC22I02	Communicative English Lab	1	1 Hr (50%)	1 Hr (50%)	English
EBCC22I03	Environmental Science (Audit Course)	0	0	*Presentation &Viva(100%)	I yr E&T

SEMESTER – IV

Course Code	Course Title	Credit	Examination Duration & Weightage		
			Written Exam Hrs	Practical Exam Hrs	Department Responsible
EBCC22I04 EBCC22I05	The Indian Constitution*/ The Indian Traditional Knowledge*	0	MCQ& Descriptive each 1 Hr.(100%)	0	Faculty Handling the course
EBXX22I01	Technical Skill I	1	0	*Presentation &Viva(100%)	Core Department
EBCC22I06	Soft Skill I -Employability skills	1	1 Hr (50%)	1 Hr (50%)	English department

SEMESTER – V

Course Code	Course Title	Credit	Examination Duration & Weightage		
			Written Exam Hrs	Practical Exam Hrs	Department Responsible
EBOL22I01	Online Course(NPTEL/SWAYAM/Any MOOC approved by UGC/AICTE	1	Certification/Exam by Department(2hrs)	0	Core Department
EBXX22I02	Technical Skill II	1	0	*Presentation &Viva(100%)	Core Department

SEMESTER – VI

Course Code	Course Title	Credit	Examination Duration & Weightage		Department Responsible
			Written Exam Hrs	**Practical Exam Hrs**	
EBCC22I07	Soft Skill II -Qualitative and Quantitative Skills	1	2Hrs MCQ(100%)	---	Mathematics department
EBXX22I04	Mini Project/Internship	1	0	*Presentation &Viva (100%)	Core Department
EBXX22I03	Technical Skill III	1	0	*Presentation &Viva (100%)	Core Department

SEMESTER – VII

Course Code	Course Title	Credit	Examination Duration & Weightage		Department Responsible
			Written Exam Hrs	**Practical Exam Hrs**	
EBXX22I05	Project Phase – 1	2	0	*Presentation &Viva(100%)	Core Department
EBFL22IXX	Foreign Language	1	1 Hr (50%)	1 Hr (50%)	Faculty of Foreign Language

M.Tech

SEMESTER I

			Examination Duration & Weightage		
Course Code	Course Title	Credit	Written Exam Hrs	Practical Exam Hrs	Department Responsible
EMCC22IXX	**Audit course -1**	**0**	1Hr MCQ (50%) 1Hr Descriptive (50%)	0	Core Department

SEMESTER II

			Examination Duration & Weightage		
Course Code	Course Title	Credit	Written Exam Hrs	Practical Exam Hrs	Department Responsible
EMCC22IXX	**Audit course-2**	**0**	1Hr MCQ (50%) 1Hr Descriptive (50%)	0	Core Department
EMXX22I01	**Term Paper**	2	0	*Presentation &Viva	Core Department

SEMESTER III

			Examination Duration & Weightage		
Course Code	Course Title	Credit	Written Exam Hrs	Practical Exam Hrs	Department Responsible
EMOL22I01	Open Elective- (NPTEL/SWAYAM/Any MOOC)	3	Certification/Exam by Department(2hrs)	0	Core Department
EMXX22I02	Summer internship	2		*Presentation &Viva(100%)	Core Department

SEMESTER IV

			Examination Duration & Weightage		
Course Code	Course Title	Credit	Written Exam Hrs	Practical Exam Hrs	Department Responsible
EMXX22I03	**Research Publication**	**2**	**0**	*Presentation &Viva(100%)	Core Department

Note:

XX represents the respective department /Programme code.

APPENDIX-1

Norms for Duration, Entry Level Qualifications and Statutory Reservations of the Technical Programmes

1.1 Diploma

Sl. No.	Programme	Duration	Eligibility
i	Engineering and Technology	3 or 4 years	Passed 10th Std./ SSC examination
ii	Applied Arts and Crafts	3 or 4 years	Passed 10th Std./ SSC examination
iii	Design	3 or 4 years	Passed 10th Std./ SSC examination
iv	Hotel Management and Catering Technology	3 years	Passed 10+2 examination
		4 years	Passed 10th Std./ SSC examination
v	All Programmes (Lateral Entry to Second Year Diploma)	2 years	Passed 10+2 examination with Physics/ Mathematics / Chemistry/ Computer Science/Electronics/Information Technology/ Biology/Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/Entrepreneurship as per table 1.3(a). OR 10th + (2 years ITI) shall be eligible for admission to Second Year Diploma Course(s) in ANY branch of Engineering and Technology. (The Affiliating Body will offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc., for the students coming from diverse backgrounds to achieve desired learning outcomes of the programme)
vi	Vocational** (NSQF Level 5)	3 years	Passed 10th Std. / SSC examination.

**In case a student exits after successfully completing the First/ Second year, He/ She shall be provided with Skill Certificate (as per the levels) by the State Technical Board. Skill certificate is purely to provide skills (and not formal education), hence there shall be no equivalence for the same and there shall be no vertical mobility with Skill certificates.

1.2 Post Diploma

Sl. No.	Programme	Duration	Eligibility
i	Engineering and Technology, Applied Arts and Crafts, Hotel Management and Catering Technology	18 Months or 2 years	Passed Diploma examination with at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.

1.3 Under Graduate Degree

Sl. No.	Programme	Duration	Eligibility
i	Engineering and Technology#	4 years	Passed 10+2 examination with Physics/ Mathematics / Chemistry/ Computer Science/ Electronics/ Information Technology/ Biology/ Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/ Entrepreneurship as per table1.3(a) Agriculture stream (for Agriculture Engineering) Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together. OR Passed min. 3 years Diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category) subject to vacancies in the First Year, in case the vacancies at lateral entry are exhausted. (The Universities will offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc., for the students coming from diverse backgrounds to prepare Level playing field and desired learning outcomes of the programme)
ii	Planning	4 years	Passed 10+2 examination with eligibility as per table1.3(a) Obtained at least 45% marks (40% in case of candidates belonging to reserved category) in the qualifying Examination.
iii	Applied Arts and Crafts	4 years	Passed 10+2 examination Obtained at least 45% marks (40% in case of candidates belonging to reserved category) in the qualifying Examination.
iv	Design	4 years	Passed 10+2 examination Obtained at least 45% marks (40% in case of candidates belonging to reserved category) in the qualifying Examination.
v	Hotel Management and Catering Technology	4 years	Passed 10+2 examination Obtained at least 45% marks (40% in case of candidates belonging to reserved category) in the qualifying Examination.
vi	Engineering and Technology (Lateral Entry to Second year)#	3 years	Passed Minimum THREE years / TWO years (Lateral Entry) Diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category) in ANY branch of Engineering and Technology. OR Passed B.Sc. Degree from a recognized University as defined by UGC, with at least 45% marks (40% marks in case of candidates belonging to reserved category) and passed 10+2 examination with Mathematics as a subject. OR Passed D.Voc. Stream in the same or allied sector. (The Universities will offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc., for the students coming from diverse backgrounds to achieve desired learning outcomes of the programme) Refer table 1.10 of Appendix-1
vii	Engineering and Technology (Lateral Entry to Third year)#	2 years	Refer table 1.10 of Appendix-1
viii	Engineering and Technology (Lateral Entry to Final year)#	1 year	Refer table 1.10 of Appendix-1
ix	All Programmes Other than Engineering and Technology/ Planning/ Design	Lateral Entry to Second year	Passed Minimum THREE years / TWO years (Lateral Entry) Diploma examination in a Programme with at least 45% marks (40%marks in case of candidates belonging to reserved category) in appropriate Programme.
x	Vocational (NSQFLevel 7)	3 years	Passed 10+2 examination.

#Respective State Government/ Affiliating University/Board may decide the eligibility criteria for entry level Qualification for different Programmes/ Courses.

NOTE: Admission of B.Tech/B.E. graduates, in other branches of Engineering as an additional degree through Lateral Entry will be facilitated by the respective Technical Universities by allowing them to take admission at appropriate level of B.Tech/B.E. discipline/branch of Engineering. [Refer AICTE circular No. F.No. AICTE/P&AP/Misc/2020 dated 09.08.2021]

1.3 (a) Diploma/Under Graduate Engineering Entry level qualification 10+2 level

Sr. No.	Major Disciplines	Mandatory courses at 10+2 Level	Other relevant course(s) for this discipline
1	Aeronautical Engineering	Phy, Chem, Maths	NA
2	Agriculture Engineering**	Phy, Chem OR Agriculture stream	Maths/Biology/Biotechnology/Agriculture/ Agriculture stream
3	Architecture	As per Norms of Council of Architecture (CoA)	
4	Planning	Maths	For remaining two courses select any courses out of 14*
5	Biotechnology**	Phy, Chem	Select any one from Bio/Biotechnology/Maths
6	Ceramic Engineering	Phy, Chem, Maths	NA
7	Civil Engineering	Phy, Chem, Maths	NA
8	Computer Science and Engineering	Phy, Maths	For remaining single course select any courses out of 14*
9	Chemical Engineering	Phy, Chem, Maths	NA
10	Dairy Engineering	Phy, Chem, Maths	NA
11	Electrical Engineering	Phy, Maths	For remaining single course select any courses out of 14*
12	Energy Engineering	Phy, Chem, Maths	NA
13	Electronics Engineering	Phy, Maths	For remaining single course select any courses out of 14*
14	Mechanical Engineering	Phy, Chem, Maths	NA
15	Fire and Safety Engineering	Phy, Chem, Maths	NA
16	Food Engineering	Chem	For remaining two courses select any courses out of 14*
17	Leather Technology	Chem	For remaining two courses select any courses out of 14*
18	Marine Engineering	Phy, Chem, Maths	NA
19	Metallurgy Engineering	Phy, Chem, Maths	NA
20	Military Engineering	Phy, Chem, Maths	NA
21	Mining Engineering	Phy, Chem, Maths	NA
22	Nano Technology	Phy, Chem, Maths	NA
23	Nuclear Science and Technology	Phy, Chem, Maths	NA
24	Packaging Technology	Nil	Select any courses out of 14*
25	Pharmaceutical Engineering**	Phy, Chem	Select any one from Bio/Biotechnology/Maths
26	Printing Engineering**	Phy, Chem	For remaining single course select any courses out of 14*
27	Textile Engineering	Phy, Chem, Maths	NA
28	Fashion Technology	Nil	Select any courses out of 14*
29	Textile Chemistry	Chem	For remaining two courses select any courses out of 14*

** First one or two Semesters may be so designed that students with Biology/Biotechnology background have adequate courses on Maths and Vice Versa and then the class is at level studying field for the rest of the semesters.

#Physics/ Mathematics / Chemistry/ Computer Science/Electronics/Information Technology/ Biology/ Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/Entrepreneurship

1.4 Post Graduate Diploma / Post Graduate Degree / Post Graduate Certificate

Sl. No.	Programme	Duration	Eligibility
i	Engineering and Technology	2 years	Passed Bachelor's Degree or equivalent in the relevant field. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
ii	Engineering and Technology (Certificate)	1 year	Passed Bachelor's Degree or equivalent in the relevant field. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
iii	Planning	2 years	Passed Bachelor Degree in Planning/ Architecture/ Civil Engineering OR Passed Master Degree of Geography/ Economics/ Social Sciences or equivalent Degree.
iv	Applied Arts and Crafts	2 years	Passed Bachelor Degree in Fine Arts or equivalent Degree. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
v	Design	2 years	Passed Bachelor Degree of minimum 4 years duration. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
vi	Hotel Management and Catering Technology	2 years	Passed Bachelor Degree in Hotel Management and Catering Technology/ Hotel Management of minimum 4 years duration or equivalent Degree. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
vii	MCA	2 years	Passed B.C.A/ B.Sc. (Computer Science)/ B.Sc. (IT) / B.E. (CSE)/ B.Tech. (CSE) / B.E. (IT) / B.Tech. (IT) or equivalent Degree. OR Passed any graduation degree (e.g.: B.E. / B.Tech. / B.Sc / B.Com. / B.A./ B. Voc./ etc.,) preferably with Mathematics at 10+2 level or at Graduation level Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination. (for students having no Mathematics background compulsory bridge course will be framed by the respective University/ Institution and additional bridge courses related to computer subjects as per the norms of the concerned University).
viii	Management (MBA)	2 years	Passed Bachelor Degree of minimum 3 years duration. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
ix	Management (PGCM)	1 year	Passed Bachelor's Degree of minimum 3 years duration. Obtained at least 50% marks (45% marks in case of Candidates belonging to reserved category) in the qualifying examination.
x	Management (PGDM)	2 years*	Passed any Bachelors Degree of minimum 3 years duration. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.
		18 months	Passed any Bachelors Degree of minimum 3 years duration and a minimum of 5 years relevant managerial/ supervisory experience. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in thequalifying examination.
xi	Lateral Entry to Vocational Courses	2 years	Passed Bachelor's Degree in Vocation (Level 7) qualified in related sector with minimum 2 years of industrial experience. Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.

*(with exit option of PGCM after completion of 1ˢᵗ year subject to fulfilling the required credits) refer table 1.3(b)(iii)

1.5 Integrated / Dual Degree Courses

Sl. No.	Programme	Duration	Eligibility
i	Engineering and Technology	5 years	Passed 10+2 examination with Physics/ Mathematics / Chemistry/ Computer Science/Electronics/Information Technology/ Biology/ Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/Entrepreneurship as per table1.3(a) Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together. OR Passed min. 3 years Diploma examination with at least 45% marks (40% marks in case of candidates belonging to reserved category) subject to vacancies in the First Year, in case the vacancies at lateral entry are exhausted. (The Universities will offer suitable bridge courses such as Mathematics, Physics, Engineering drawing, etc., for the students coming from diverse backgrounds to achieve desired learning outcomes of the programme).
ii	Planning	5 years	Passed 10+2 examination with eligibility as per table1.3(a) Obtained at least 45% marks (40% in case of candidates belonging to reserved category) in the qualifying examination.
iii	Hotel Management and Catering Technology	5 years	Passed 10+2 examination. Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the qualifying examination.
iv	MCA	5 years	Passed 10+2 examination with Mathematics/ Statistics/ Accountancy as compulsory subjects. Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the above subjects taken together.
v	MBA	5 years	Passed 10+2 examination. Obtained at least 45% marks (40% marks in case of candidates belonging to reserved category) in the qualifying examination.

1.6 Fellow Programme

Sl. No.	Programme	Duration	Eligibility
i	Fellow Programme in Management	Minimum 3 years but shall not exceed 5 years	Master's Degree or equivalent in Engineering and Technology/ Management/ Economics/ Social Science/Biological Science/ Pure Science/ Commerce/ Humanities with FIRST CLASS