

***ORDINANCE: B.TECH -M.TECH. (INTEGRATED) EXAMINATION**

Notwithstanding anything contained in any other ordinance with regard to the matters hereunder, the course of study for the Degree of Bachelor of Technology in the faculty of Engineering & Technology and the conditions for admission thereto shall be as under:

1. The B.Tech-M.Tech (Integrated) Course shall extend over a minimum period of five academic years except in the case of Lateral Entry Admissions in which the minimum duration of the course shall be of four academic years. However, **candidate will have the option to move out with a B.Tech degree in parent discipline after successful completion of four years (three years in case of lateral entry admissions).** During the first course (first four years), each academic year shall be divided into two semesters. Each semester will be of about 16-18 weeks duration and **flexible credit based teaching during the last year of the integrated programme, may be adopted.**
2. A candidate will be eligible for admission to the first semester of this course only if he/she fulfills the following requirements:
 - (i) That the candidate has passed the Senior Secondary Certificate (10+2) Examination with at least five subjects from any recognized Board/University with Physics and Mathematics as compulsory subjects alongwith anyone of the following subjects:
 - (a) Chemistry;
 - (b) Bio-Technology;
 - (c) Computer Science;
 - (d) Biology

However, for admission to B.Tech-M.Tech Integrated.(Bio-Technology) with Bio- Technology in first course, the candidates with Physics, Chemistry and Biology or Bio-Technology shall also be considered if otherwise eligible for this course.

OR

- (ii) That the candidate has passed Diploma Course in Engineering/Technology of three year duration or more from a recognized Board/University or its equivalent Diploma Examination.
3. Candidates with Diploma of 3 years (after Matric), Diploma of 2-years (after + 2), 2–years Certificate Course (after Matric) Plus Diploma of 2-years or of more duration may be allowed **lateral entry at 3rd Semester** level of B.Tech-M.Tech integrated Degree Course. Such candidates will be considered for admission to the 3rd semester of B.Tech-M.Tech. integrated in any discipline under Lateral Entry System only if they have passed Diploma Course in any discipline from a recognized Board/University with at least 60% marks in aggregate.

OR

That he/she has passed the Degree in Science (B.Sc.) with Mathematics as one of the subjects with a minimum of 60% marks in aggregate.

- 4(a) At the end of each Semester there shall be an examination wherein candidates may be examined in the courses prescribed for that semester. Each Semester Examination shall be designed as First Semester Examination, Second Semester Examination, and Third Semester Examination and so on.

- 4(b) The last date(s) by which examination forms must reach the Controller of Examination shall be as fixed by this University.
5. The first and subsequent semesters examination shall be open to a regular student who:-
- (i) has passed the requisite qualifying examination as laid down in Clause 1 if he is a candidate for the first semester examination (Diploma course in the case of lateral entry in Third Semester under Clause 2) or has passed the preceding semester examination if he is a candidate for the second/third/fourth/fifth/sixth/seventh/eighth semester examination, as the case may be. This is, however, subject to Clause 6 below.
 - (ii) has his/her name submitted to the Controller of Examinations by the Principal of the College/Institute and produces the following certificates signed by the Principal of the College/Institute:-
 - (a) of good character;
 - (b) of having remained on the rolls of the College/Institute of this University for the semester preceding the examinations;
 - (c) of having attended not less than 75% of the total number of lectures delivered in each subject/paper(s). This requirement shall be fulfilled separately for each course of study. The attendance shall be counted upto the date of commencement of preparatory holidays i.e. 7 days before the commencement of the examination.

The Principal of the College/Institute is empowered to condone the shortage of attendance upto 10% of the total lectures delivered in each subject/paper(s) in exceptional cases on reasonable grounds.

Provided that the candidate who has not attended the requisite number of classes for any subject(s) will be eligible to take examination in the remaining subjects. Provided further that a candidate who is deficient in attendance shall have to repeat those courses in which he/she is deficient in the subsequent session.

- 6.1 The courses of the study and the subjects of examinations shall be as approved by the Academic Council from time to time. The examination shall consist of :-
- (a) **Theory Papers:-** Theory papers to be set by the External Paper-setters taken from the panel recommended by the respective Board of Studies and approved by the Academic Council. The Answer-books shall be evaluated by the External Examiner(s).
 - (b) **Practical Examination** : - Examinations in practical / viva-voce shall be conducted jointly by the External/Internal Examiners taken from the panel recommended by the respective Board of Studies and approved by the Academic Council.
 - (c) **Sessional** :- Sessional work to be evaluated by the teachers concerned based on the work done during the semester on the basis of the following weightages:-

I. For Theory Subjects:

(i) Class test (Two best of three)	40%
(ii) Class Attendance (Lecture/Tutorial) (Marks will be awarded proportionate to the attendance)	40%
(iii) Class Work	20%

II. For Practical/Project Courses:

(i) Viva-Voce/Test	20%
(ii) Laboratory Record	20%
(iii) Class Attendance (Marks will be awarded proportionate to the attendance)	40%
(iv) Class work	20%

For seminar courses the marks will be awarded by the teacher Incharge of the seminar and for comprehensive viva-voce the marks will be awarded by a Committee of three teachers including the Head of the department concerned.

- 6.2 The candidate is required to obtain Pass Marks in each of the Theory and Practical papers in aggregate of the external and internal assessment/sessionals subject to obtaining pass marks separately in each paper of external examinations. The internal assessment award of any candidate who fails in one or more papers of any semester examination shall be carried forward to the next examination. He/she will, however, have the option to improve his/her marks of sessional examinations at the time of appearing in the Reappear Papers.
- 6.3 The marks in the sessional work shall be awarded by the teachers concerned and countersigned by the Head of the Department and the same be forwarded to the Controller of Examinations of the University one week before the commencement of examination of the Semester.
- 6.4 The Head of Department will preserve the record of Internal Assessment/Sessional, for inspection, if needed by the University, upto six months from the date of declaration of result.
7. If a candidate has after attending the course of studies in the college and being eligible, either not appeared or appeared in any semester Examination and failed in one or more courses for that examination, he/she can appear for such course(s) at subsequent examinations without attending a fresh course of studies for that semester in the college according to the syllabus for regular students. Such a candidate may, in the meantime, prosecute his/her studies for the next higher semester(s) and appear in the examination(s) for the same along with the examination for the lower semester(s).

A candidate whose result is declared late for no fault of his/her, should attend classes of the next higher Semester.

Provided that after completion of their studies for the whole duration of the course upto eighth semester, the candidates will be allowed to appear in the examination as an ex-student for the left out paper(s).

¥Provided still further that a candidate who fails to pass the B.Tech-M.Tech (Integrated) Examination within a period of **Seven years (six years** in respect of candidates admitted under clause 3) of his/her admission to the course, shall be required to repeat B.Tech-M.Tech (Integrated) course de novo.

8. The minimum pass marks for any Semester Examination shall be:-

- (i) 40% in each Written paper, Practicals/viva-voce examination separately.
- (i) 40% in the aggregate of Internal assessment and external examination marks for each Theory subject(s)/Practical papers subject to obtaining pass marks separately in each paper of external examination.

Provided that a candidate, who fails to obtain the requisite marks in aggregate of sessional and external examination as provided in Clause 8 above, shall be required to re-appear in the examination in the concerned subject in the subsequent examination (s). Such a candidate will have the option to repeat the sessional work also.

9. The candidates shall be examined according to the Scheme of Examination and Syllabus as approved by the Academic Council from time to time. A candidate who fails in an examination or having been eligible fails to appear in an examination shall take the examination according to the Syllabus prescribed for regular students appearing for that examination.

10. **CREDIT-BASED SYSTEM OF EVALUATION:**

Credit-based system followed in the University in order to determine the division & performance of a candidate will be as under:-

i) **CREDIT COUNTS:-**

All courses would have a credit count and teaching of subjects would be reckoned in terms of Credits. The number of credits of a course shall ordinarily be calculated as under:-

- (a) **LECTURES/TUTORIALS:** One Lecture per week shall be assigned One Credit. For one Tutorial period per week, HALF a credit is to be assigned.
- (b) **PRACTICALS:** One lab period per week shall be assigned HALF a credit.
- (c) **SEMINAR/GROUP DISCUSSION :** One Credit each.
- (d) **Minor Project :** One project period per week shall be assigned HALF a credit.
- (e) **Major Project :** One project period per week shall be assigned HALF a credit.

For Pre-final Semester Project Work No credit counts would be there.

(f) The Four credits are fixed for the courses like **FIELD TRAINING,**

COMPREHENSIVE VIVA-VOCE and GENERAL FITNESS & PROFESSIONAL APTITUDE.

(g) Dissertation/Thesis (for second course of M.Tech) if any, will have no credit count. Dissertation/Thesis will be evaluated jointly by one External & one Internal Examiner. Successful completion of the Thesis/Dissertation work will be mandatory for the award of M.Tech degree.

GRADING:-

i) The Academic Performance of a student shall be graded on a **TEN-POINT SCALE**. The award of Grades based upon marks obtained out of 100 shall be made as follows:

MARKS	GRADE	MARKS
86 ≤ and above upto	O	< 100
76 ≤ and above upto	A+	< 85
66 ≤ and above upto	A	< 75
56 ≤ and above upto	B+	< 65
51 ≤ and above upto	B	< 55
46 ≤ and above upto	C	< 50
40 ≤ and above upto	P	< 45
--	F	--
--	Ab	--

ii) Letter grade will be awarded to the candidates. Each letter grade indicates the level of performance in the course and has a grade point for purpose of computing the **Semester Grade Point Average (SGPA) / Cumulative Grade Point Average (CGPA)** as given below:

Letter Grade	Performance	Grade Point
O	Outstanding	10
A+	Excellent	9
A	Very Good	8
B+	Good	7
B	Above Average	6
C	Average	5
P	Pass	4
F	Fail (required to re-appear in the exam.)	
Ab	Absent	-

SGPA:- indicates the performance of the student in the current semester and is computed as below:

Grade points earned in the current semester/ Total credits in the semester.

CGPA:-

It indicates the performance of a student since his/her entry into the course including the current semester.

CGPA is the weighted average of all the grades awarded to a student since his entry into the University upto and including the latest Semester and computed as follows :-

$$CGPA = \frac{\sum C_i G_i}{\sum C_i}$$

$$\sum C_i$$

= Total Grade Points earned since his entry/total credits.

Where C_i denotes credits assigned to the i^{th} course and G_i indicates the grade point equivalent to the letter grade obtained by the candidate in the i^{th} Course.

iii) The division obtained by each student is classified on the following basis:

Division	C.G.P.A.
First with Distinction	8.0 or more
First	6.75 or more but less than 8.0
Second	Below 6.75

iv) In order to compare the students of this University vis-à-vis other Universities where percentage of marks are shown in the final result, the following conversion formula will be used for calculating the percentage of marks from CGPA.

Percentage of marks obtained by a student = (9.0 x C.G.P.A.)

10. The following provisions shall be for moving from First course to Second course:-

- a) Options have to be invited from all the students of Integrated course during third year 31st March of the Session to categorically specify if they are interested to opt out of the integrated course after passing the First course or they are interested to move to the Second course of the Integrated scheme.
- a) Scheme of examination upto 3rd year shall remain same for both B.Tech (4-year) and B.Tech-M.Tech (Integrated) courses.
- b) Scheme of examination of final year of the first course of Integrated course shall include some of the paper(s) of the Second course. Paper(s) of the Second course will be taught on every Saturday.
- c) Additional courses of the Second course taught during final year of the first course will be shown in the detailed marks card of the final year of the first course but credits of these PG paper (s) shall not be counted while computing the SGPA/CGPA of the final year of the first course. Credits earned by the candidate in these PG paper(s) shall be transferred to the second course of the integrated course and shall be counted in computing CGPA of the second course for the award of PG (M.Tech) degree.
- d) While moving from First course to Second course of integrated scheme, Reappear, if any, in the first course will be carried over to the Second course of integrated scheme provisionally subject to passing of Re-appear papers within prescribed chances/period.
- e) During Fifth year of the course, departments shall follow TRIMESTER pattern and shall include all other papers of the second course in three trimesters including dissertation/thesis work.
- f) Candidates shall be awarded two degrees (two certificates) after successful completion of the integrated course.

B. Tech degree in the parent discipline shall be awarded after successful completion of the first four years of the Integrated course while M.Tech degree in parent discipline with or without specialization shall be awarded after successful completion of five years of the Integrated course.

11. The medium of instruction and examination shall be English.
12. The amount of examination fee to be paid by a regular/re-appear candidate for each semester/trimester examination shall be as prescribed by the University from time to time.
13. At the end of each Semester examination, the Controller of Examinations shall publish the results provided that in case where candidate who was permitted to take examination for higher Semester under Clause 7 above has not cleared the lower Semester examination, his/her result for the higher semester examination will be declared provisionally.
14. Notwithstanding the integrated nature of this course which is spread over more than one academic year, the Ordinance in force at the time a student joins the course shall hold good only for the examination held during or at the end of that academic year and nothing in this ordinance shall be deemed to debar the University from amending the Ordinance and the amended Ordinance, if any, shall apply to all students whether old or new.

*** (Approved by the AC vide Res. No. 8(2) dated 05.04.2010 and BOM vide Res. No. 4(2) dated 13.04.2010.)**

® Approved vide AC Res. No.19 dated 29-11-2010 and BOM Res. No. 5 dated 19-2-2011), w.e.f. the session 2010-11

¥ Amended vide AC Res. No. 9 dated 26-6-2017 and BOM Res. No. 6 dated 6-7-2017