

Rules and Regulations Relating to Degree of

Bachelor of Technology (B. Tech.)

(To Be Introduced from Academic Year, 2014-15)

Degree Course (Modified) with Effect from Academic Year 2014-15

(These rules and regulations will supersede earlier rules and regulations)

Preamble

The present education needs to improve its international competitiveness and the employability of its student community. In this age of information technology the education paradigm is shifting from teaching to learning and the role of teacher is a facilitator. The focus of education should be student centred and thrust should be on learning by the students than teaching by the faculty. The contact hours should be optimized so that student can approach to library, use Internet and take up self-study to improve his / her skills.

This curriculum structure has been framed by considering guidelines of National Knowledge Commission (NKC), which suggests appropriate importance of basic courses, core courses and interdisciplinary / elective courses to fulfil the varied needs of the industry.

Features of the CGPA system:

1) The degree course B. Tech. being run under the faculty of Engineering and Technology shall be of 52 credits for 1st, 2nd and 3rd years. There shall be total 200 credits allotted for 4 year degree course.

Note: For lateral entry admitted students (Diploma and B.Sc. students), total No. of credits allotted shall be 148. But B.Sc. student has to complete credits of courses based on Civil Engineering, electrical Engineering and Electronics, Mechanical Engineering & Engineering Graphics of first year in addition to 148 credits of Second year to final year.

2) The credits shall be awarded as follows except for some special subjects:

- 1 credit for 1 hour theory lecture.
- ½ credit for 1 hour practical / tutorial.

3) The batch size for practical for B. Tech. shall be as follows:

- First year & Second year 18 to 22 students
- Third year & final year: 13 to 17 students

4) The batch size for Mini Project, Project, and Seminar shall be of 8 to 10 students. Each teacher can guide maximum 2-3 projects.

5) There shall be some credit courses having grade points and some audit courses having audit points. However audit points shall not be counted in calculation of final SGPA and CGPA.

Course Title: Bachelor of Technology

Abbreviation: B. Tech.

Type of Course: A four year degree course divided into eight semesters with two semesters per year.

Pattern: Semester

Nomenclature of Semesters:

The revised Rules, Regulations and Syllabus for four year courses shall be introduced gradually as follows:

No	Year	Abbreviation	Semester	With effect from
1	First Year	B. Tech. FY	I & II	2014-15
2	Second Year	B. Tech. SY	III & IV	2015-16
3	Third Year	B. Tech. TY	V & VI	2016-17
4	Final Year	B. Tech. Final	VII & III	2017-18

Award of the Degree: Degree shall be awarded to students earning credits of all eight semesters (Minimum 200 Credits) and completing of minimum number of Audit Points as given in Rule 9.

Note: For lateral entry admission (Diploma and B.Sc. students), minimum number of credits shall be 148 and minimum number of Audit Points as given in Rule 9.

Duration of Semester: Each Semester shall be normally of 15 To 16 weeks duration for class room teaching / laboratory work.

Definitions:

- **University:** North Maharashtra University, Jalgaon.
- **Institute:** University Institute of Chemical Technology, North Maharashtra University, Jalgaon.
- **State Government:** Government of Maharashtra.
- **Admission Authority:** Any authority to conduct admission process as prescribed by Government of Maharashtra.
- **DTE:** Directorate of Technical Education, Maharashtra State.

Rule 1: B. Tech. Entry levels into the course, eligibility criteria, admission authority and procedures

Entry levels into the course shall be at the beginning of the Semester - I or at the beginning of the Semester - III.

Admission authority shall be Government of Maharashtra / Directorate of Technical Education and Eligibility criteria and procedure shall be as per directions of admission authority prevailing at the time of admission.

Rule 2: B. Tech. Examinations

Rule 2.1: The Examination conducting authority shall be North Maharashtra University, Jalgaon.

Rule 2.2: The examination at the end of each semester shall be normally held in November / December and April / May in each academic year.

Rule 3: Attendance Rule and Detention Rule

Rule 3.1: The student will not be allowed to appear for the examinations i.e. he / she shall be detained if he / she do not attend minimum 75 % classes of theory, practical etc.

The attendance rules will be governed by DTE rules and relevant ordinance of university as applicable at that time.

Rule 3.2: If a candidate is detained in first term of any year, he / she will not be allowed to register for second term. He / she will have to register for the same in succeeding year(s).

If a candidate is detained in second term of any year, he / she will have to register for the second term of succeeding year(s).

Rule 4: Passing Criteria for Theory Course

Rule 4.1: For the end semester examination (ESE) in Theory courses, minimum passing marks are 40 % i.e. Student has to secure 24 out of 60 and 12 out of 30 marks for the paper of 100 and 50 marks respectively. In case of practical, project and seminar, student must secure minimum 50 % marks.

Rule 4.2: To ensure uniform attention of the students throughout each semester of their study, two internal examinations (IE) i.e. class tests assignments for each subjects shall be conducted in each semester by the institute. For the IE in Theory courses, minimum passing marks are 40% i.e. Student has to secure 16 out of 40 and 8 out of 20 marks for the paper of 100 and 50 marks respectively. In case of practical, project and seminar, student must secure minimum 50 % marks wherever applicable.

Rule 5: Eligibility Criteria for Admission in Next Year

Rule 5.1: Student has to complete minimum 35 Credits in an academic year to be eligible for admission to next year.

Rule 5.2: Student shall be admitted in TY provided he / she has earned all credits of FY and minimum 35 credits of SY. Similarly the student shall be admitted in final year provided he / she has earned all credits of SY and minimum 35 credits of TY.

Note: For latterly admitted B.Sc. students, credits against courses ‘based on Civil Engineering, Electrical Engineering and Electronics, Mechanical Engineering & Engineering Graphics’ of FY shall not be considered while deciding eligibility for TY admission. These students shall be allowed for admission in final year only after earning credits of these courses.

Rules 5.3: If a student secures ‘F’ grade in any course, his/her SGPA and CGPA shall not be declared till he /she earns the credits of that course.

Students should register for offering any elective

Rule 6: Calculation of SGPA and CGPA

Semester Grade Point Average (SGPA):

The performance of a student in a semester is indicated by a number called SGPA. SGPA is the weighted average of the grade points obtained in all courses registered by the student during the semester. It shall be calculated as follows:

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$$\text{SGPA} = \frac{\sum_{i=1}^n C_i p_i}{\sum_{i=1}^n C_i}$$

Where,

C_i = the number of credits earned in the i th course of a semester for which SGPA is to be calculated

p_i = grade point earned in the i th course.

$i = 1, 2, 3, \dots, n$, where 'n' represents the number of courses in which a student is registered in that semester.

The SGPA is rounded up to two decimal places.

Cumulative Grade Point Average (CGPA):

Up-to-date assessment of the overall performance of a student from the time of his / her first registration is obtained by calculating a number called Cumulative Grade Point Average (CGPA), which is weighted average of the grade points obtained in all courses registered by the student since he/she entered the institute. It shall be calculated as follows:

$$\text{CGPA} = \frac{\sum_{j=1}^m C_j P_j}{\sum_{j=1}^m C_j}$$

Where,

C_j = The number of credits offered in the j th course up to the semester for which CGPA is to be calculated.

P_j = Grade point earned in the j th course. A letter grade lower than E in a course shall not be taken into consideration for calculation of CGPA.

$j = 1, 2, 3, \dots, m$, where 'm' represent the number of courses in which a student is registered up to the semester for which the CGPA is to be calculated.

The CGPA is rounded up to two decimal places.

Rule 6.1: Conversion of CGPA to Percentage Marks and Vice-versa

$$\text{CGPA} = (\% \text{ Marks} + 7.5) / 10$$

$$\text{Percentage Marks} = (\text{CGPA} - 0.75) * 10 \%$$

Rule 7: CGPA Improvement

A student shall be allowed to improve his / her CGPA by reappearing for the courses from VII and / or VIII Semesters of B. Tech. as per prevalent policy of the university.

Rule 8: Methodology for award of Grades

Conversion of course marks into Grades shall be done as per table given below:

No.	Marks Range in %	Grade	Grade Point
01	85 - 100	A+	10
02	74-84	A	9
03	64-73	B	8
04	55-63	C	7
05	47-54	D	6
06	40 - 46	E	5
07	Less than 40	F	0

Rule 9: Audit Courses

In addition to academic credits, student has to complete audit courses for obtaining audit points. The following audit courses shall be completed.

- Environmental Science
- Co-curricular activities
- Extra Curricular activities

Rule 9.1: Environmental Science Audit Course

It is compulsory to complete Environment Science audit course for all admitted students. ESE for Environmental Science shall be conducted as per the prevalent rules of the university. There shall be 6 audit points for the Environment Science audit course.

Rule 9.2: Co-curricular Activity

A minimum 16 Audit points for co-curricular activities shall be obtained by the student during his course of study distributed over at least 4 semesters. There is no limit on maximum audit points obtained by the student. The final grade sheet will include the actual number of audit points obtained by the student during his entire course of study.

Note: For lateral entry admission (Diploma and B.Sc. students), student shall obtain a minimum 12 Audit points for co-curricular activities distributed over at least 3 semesters.

No	Name of Activity	Audit Points
01	Technical Conference Attendance (Minimum State Level)	01
02	Technical Paper Presentation (Minimum State Level)	02
03	Award Winning Technical Paper Presentation	04
04	Technical Workshop for Minimum 2 Days	01
05	Technical Courses other than Curriculum for Each Course	02
06	Professional Society Membership (1 point for each membership)	01
07	Any Foreign Language Course (2 points for each course)	02
08	Any other Relevant Activity*	-

***Note:** If the institute wants to include any other activity, the details shall be sent to the university. The Examination committee Chaired by the Director of the institute shall take the decision of approving the activity and allocating number of audit points for the activity.

Rule 9.3: Extra-curricular Activity:

A minimum 8 Audit points for Extra - curricular activities shall be obtained by the student during his course of study distributed over at least 4 semesters. There is no limit on maximum audit points obtained by the student. The final grade sheet will include the actual number of audit points obtained by the student during his entire course of study.

Note: For lateral entry admission (Diploma and B.Sc. students), student shall obtain a minimum 6 Audit points for Extra - curricular activities distributed over at least 3 semesters.

Sr. No.	Name of Activity	Audit Points
01	Sports	
	• Member of Inter College Team	01
	• Member of Inter University Team	02
	• Member of National Level Team	03
02	Cultural Events	
	• Inter College Level	01
	• Inter University Level	02
	• Inter State Level	03
03	Membership of NSS, NCC	01
04	Social Service Activities (Blood Donation, Tree Plantation, Adult Education etc.)	01
05	Any other Relevant Activity*	-

***Note:** If the institute wants to include any other activity, the details shall be sent to the university. The Examination committee Chaired by the director of the Institute shall take the decision of approving the activity and allocating number of audit points for the activity.

Rule 9.4: The grade card in each semester shall contain the information about audit points obtained by the student as shown in the following table:

No	Description	Audit Points Balance	Audit Points Obtained	Total Audit Points
01	Environmental Science			
02	Co-curricular Activities			
03	Extra-curricular Activities			

The final grade card of a student shall contain the information about audit points Obtained by the student as shown in the following table:

No	Audit Course	Grade	Audit Points	
			Minimum Required	Total Obtained
01	Environmental Science	CES / NCES	06	
02	Co-Curricular Activities	CCC / NCCC	16	
03	Extra-Curricular Activities	CEC / NCEC	08	
Total			30	

Rule 9.5: Audit Point Report

The Institute shall send the audit point report of all admitted students in following format:

Sr. No.	Name of The Student	PRN	Exam Seat No	No of Audit Points Obtained	
				Co-Curricular Activity	Extra-Curricular Activity
01					
02					

The Institute shall keep the detailed record of audit points obtained by each student with documentary proof for verification till he / she shall complete the requirement of the degree.

Rule 10: Credit Groups

The syllabus of all branches shall be divided into 5 groups with credit distribution as given in the following table:

Sr. No.	Group Name	Group Code	Number of Credits
01	Basic Sciences	A	35.5
02	Basic Engineering	B	30.5
03	Humanities, Social Science & Management and skills	C	11
04	Programme Core	D	107
05	Electives	E	16
Total			200