# **ORDINANCES**

Approved in First, Thirteenth, Meeting of Board of Management held on 14-3-2014 and First, Third & Fourth Academic Council Meetings held on 11-6-2014, 25-4-2015 & 20-11-2015 and Modified in Subsequent Academic Council Meetings and Board of Management Meetings



# **Bachelor of Technology**

**From Session 2017-2018** 

MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY GORAKHPUR-273 010 (UP), INDIA

# MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY GORAKHPUR (UP) - INDIA

(Approved in First Meeting of Board of Management held on 14-3-2014 and modified in subsequent meetings)

### First Ordinances

In pursuance of the provisions of section 31 of The Uttar Pradesh Madan Mohan Malaviya University of Technology Act, 2013, these are the first Ordinances for Madan Mohan Malaviya University of Technology, Gorakhpur:

### The Uttar Pradesh Madan Mohan Malaviya University of Technology

### FIRST ORDINANCES, 2014

Short title, commencement and Definitions Sec. 31 (1)

- 1. These Ordinances may be called the Madan Mohan Malaviya University of Technology, Gorakhpur. First Ordinances, 2014
- **2.** They shall come into force at once.
- **3.** Anything contained in ordinances, regulations and rules made there under in violation to provisions of Act shall be void and the provisions of Act shall prevail.
- **4.** In these Ordinances, unless the context otherwise requires
  - (a) 'Act' means the Uttar Pradesh Madan Mohan Malaviya University of Technology Act, 2013 as amended from time to time.
  - (b) 'Section' means a section of the Act.
  - (c) 'University' means the Madan Mohan Malaviya University of Technology, Gorakhpur.
- 5. Words and expression used herein but not defined and defined in the Act shall have the same meaning as assigned to them in the Act.
- 6. UNDER SECTION 31-1(a) The Admission of students, the courses of Study and Fees therefore, the qualifications pertaining to the award of degrees, diploma, certificates and other academic distinctions, the conditions for the grant of fellowships and awards and the like
  - (a) University may start the other Degree, Diploma, Certificate programmes and other academic distinctions as deemed necessary for fulfilling its objectives and the Ordinances for the same shall be as prescribed by Academic Council and Board of Management.
  - (b) Courses of Study shall be as prescribed by the Academic Council and approved by Board of Management.
  - (c) Fellowships and Awards shall be instituted as per the requirement with the approval of Vice Chancellor under intimation to the Academic Council and Board of Management
  - (d) Ordinances for Bachelor of Technology (B.Tech.), Master of Technology (M.Tech.), Master of Business Administration (M.B.A.), Master of Computer Applications (M.C.A.) and Doctor of Philosophy (Ph.D.) Degree programmes running in the University at the time of

its reconstitution from Madan Mohan Malaviya Engineering College, Gorakhpur are detailed ahead. Ordinances for other programmes as started from time to time shall be as prescribed by the Academic Council and Board of Management.

### 6.1 ORDINANCES FOR B.TECH. PROGRAMMES FROM ACADEMIC SESSION 2014-15

### 6.1.1 ADMISSION

- (a) University offers full time B.Tech. Degree Programme in various disciplines of Engineering and Technology.
- (b) Admission to B.Tech. first year in Semester I and lateral admission in B.Tech. second year in semester III (for B.Sc. graduates/Diploma Holder candidates only) will be made as per the rules prescribed by the University from time to time.
- (c) The reservation policy as prescribed by U.P. State Government or its directions regarding admission from time to time shall be adhered in the admission.
- (d) The selection will be based on the merit of the candidate in the admission process.
- (e) Admission on migration of a candidate from any other University to Madan Mohan Malaviya University of Technology is not permitted.
- (f) If, at any time after admission, it is found that a candidate has not fulfilled all the requirements stipulated in the offer of admission or has committed some fraudulent act or gross misconduct at any stage then the University reserves the right to revoke the admission of the candidate.

### 6.1.2 ELIGIBILITY FOR ADMISSION

### 6.1.2.1 For B. Tech. First Year

- (a) The candidate should have passed 10 + 2 examination with at least 45% marks (40% in case of candidate belonging to SC/ST category) and also with at least 50% marks (45% in case of candidate belonging to SC/ST category) in Mathematics, Physics and Chemistry each without grace.
- (b) Candidates who have passed Intermediate of U.P. Board or (10+2) standard from other recognized board with Agriculture securing minimum 50% marks or as prescribed by the University from time to time are eligible for admission to first year of 4 year B. Tech. (Agriculture Engineering).

### 6.1.2.2 For Admission to B. Tech. Second Year through Lateral Entry Scheme

(a) Candidates who have passed 3/4 year Diploma with minimum 60% marks from institutions recognized by the U.P. Board of Technical Education or equivalent in any branch of Engineering/Technology except Agriculture Engineering or B.Sc. Graduates who have passed from any recognized University of the India securing minimum 60% marks with mathematics as a subject in B.Sc. and having passed 10+2 standard examination of U.P. Board or other recognized board securing minimum 50% marks in Physics & Mathematics as compulsory subjects in Intermediate of U.P. Board or from other recognized board or as prescribed by the University from time to time

- are eligible for admission to second year in any branch of Engineering/Technology except Agriculture Engineering.
- (b) Candidates who have passed 3/4 year Diploma with minimum 60% marks from institutions recognized by the U.P. Board of Technical Education in Agriculture Engineering are only eligible for admission to second year of Agriculture Engineering
- **6.1.2.3** Academic Council of the University has the power to repeal and modify the eligibility criteria for admission.

### 6.1.3 PROGRAMME DURATION

- (a) The duration of the B. Tech. programme for the candidates admitted in semester I will be four academic years (eight semesters).
- (b) The duration of the B. Tech. programme for the candidates admitted in semester III will be three academic years (six semesters).
- (c) The duration of each semester will generally be 90 working days or as prescribed by the University from time to time.
- (d) There are two regular semesters in a year. The semester that begins in July (*July to November/December*) is known as the *Odd Semester* and the semester that begins in December/January (*December/January to May*) is known as the *Even Semester*. Academic session may be scheduled in the summer season as well.
- (e) The maximum time allowed for completion of the programme for the candidates admitted in semester I/semester III (for diploma holders/B.Sc. Graduates) shall be six/five years respectively, beyond which the admission of the candidate shall be automatically cancelled. The candidate will not be allowed to continue in the subsequent years of the programme, if the sufficient time period is not available for its completion in stipulated maximum duration.
- (f) The student may complete the programme at a slower pace by taking more time but not more than prescribed maximum duration as per the provision of **Clause 6.1.9**.

### 6.1.4 CHANGE OF BRANCH

(modified in 11<sup>th</sup> meeting of Academic Council and 17<sup>th</sup> meeting of BOM)

- **6.1.4.1** The branch change is not permitted for B.tech first year student, after the last date of notification of admission cell about the closure of admission process.
- **6.1.4.2** The option for branch change is given to the second year meritorious students only. The change of branch among the students having similarly eligibility qualification may be allowed on the basis of merit of B.Tech first year examination as per clause 6.1.4.3 and 6.1.4.4.
- **6.1.4.3**. After change of branch the number of students in that branch should not fall below the sanctioned intake by more than ten percent and should not go above the sanctioned intake. For this purpose, the intake refers to the total sanctioned intake in the class inclusive of NRI students and exclusive of fail students in the class & admissions granted on supernumerary basis such as

Government nominee students etc. The branch change is not applicable to NRI students and the admissions granted on supernumerary basis such as Government nominee students, etc.

- **6.1.4.4** The option for branch change is applicable for all those students who have registered in B.Tech first year as per clause 6.1.9.2 and passed their examinations (Semester-1 and -2) in one attempt (without any F-grade) subject to the followings:
- (a) Maximum number of students permitted to change the branch shall be top 5% of the students sanctioned intake in first year in their respective branch (es) as per clause 6.1.4.3.
- (b) Branch change in second year shall be strictly in accordance with the branch merit list prepared by the university on the basis of cumulative grades (CGPA) obtained by a student in the first year. In case two or more students secure equal grades, inter-se-merit of such students shall be determined as follows: Firstly, by the total marks obtained in Mathematics in each semester. If number remains equal, then marks scored in Physics shall be taken into account for finalizing the merit.
- (c) Branch change in second year shall be made only against clear vacancy (due to cancellation, withdrawl, etc. of admission in first year) in a particular branch. After branch change the intake must not be more than approved intake.
- (d) Vacancy shall be calculated in every branch within seven days after the declaration of first year (main) result of that academic session.
- (e) Branch change shall not be permitted to any course where promoted student is equal to or greater than approved intake. Under no circumstances, there shall be any exceptions to this stipulation.
- (f) The student will shift to other branch with a condition that he/she will have to take extra credits of the subjects of first year which are pre-requisite to any subject of that course.
- (g) In cases where student result could not be declared (within 7-days of result declaration) because of any discrepancy, such student shall not be entitled for change of branch.

### 6.1.5 CURRICULUM STRUCTURE OF THE PROGRAMME

**6.1.5.1** The University follows a specialized credit-based semester system. Every programme will have a specific curriculum for all semesters (semester I to semester VIII) with a syllabi consisting of theory, practical, project work, etc., as given below and shall be in accordance with the prescribed syllabus. The courses shall be covered through lectures, tutorials, laboratory classes, seminar, industrial and practical training, project, tours etc. as prescribed by the University.

### **Undergraduate Core Courses (UCC)**

- (i) Basic Sciences & Maths (BSM)
- (ii) Engineering Fundamentals (EF)
- (iii) Departmental Core (DC)
- (iv) Management (M)
- (v) Humanities & Social Science Core (HSSC)
- (vi) Project (P)

# **Undergraduate Programme Electives (UPE)**

- (i) Programme Electives (PE)
- (ii) Open Elective (OE)
- (iii) Humanities & Social Science Elective (HSSE)

### **Audit Courses**

- (i) Audit Course (AC)
- (ii) Seminar
- (iii) Industrial/Practical Training (IPT)

Every department will prescribe Seminar as audit requirement for the B. Tech. Degree. Seminar is a course wherein under the guidance of a faculty member a student is expected to do an in-depth study in a specialized area by doing survey of published technical literature, understanding different aspects of the selected topic and arriving at a status report. While doing a seminar, the student is expected to critically analyze works of various authors/researchers, learn the investigation methodologies, study concepts, techniques and the results presented in these papers, and present a seminar report. It is mandatory to give a seminar presentation of stipulated duration before a panel constituted for the purpose by the department.

The duration for industrial/practical training of project based type preferably will be of 60 to 75 days duration after semester VI which could be under Cooperative Education Model (CO-OP Model). If student could not be assigned for 60 to 75 days project based training in industry, he/she has to complete 30 days industrial training along with 30 to 45 days society/ commercial/industrial problem related minor project under the supervision of designated faculty supervisor from his/her department of University. The student will submit a report on the industrial/practical training and/or minor project report to the Head of Department for evaluation through a committee of faculty members constituted by the Head of Department.

Each course is assigned a certain number of credits as follows. Few audit courses as per demand and requirement of students shall be offered.

- (a) 1 credit per lecture hour per week
- (b) 1 credit per tutorial hour per week
- (c) 1 credit per 2 hours laboratory/practice/project per week.

The curriculum for any B.Tech. Programme of study has been designed with total minimum credits of 180 and total minimum 20 credits of audit courses for those admitted in 1<sup>st</sup> year of B.Tech. Program. The minimum credit requirement will be 130 and total minimum 14 credits of audit courses for lateral entry in II year of B. Tech.

If the department is offering more than 180/130 credits to the students entering in 1<sup>st</sup> /3<sup>rd</sup> semesters, then students of that department will have an option to drop one or more subjects of his choice provided that the dropped subjects are part of the Undergraduate Programme Elective (i.e. PE, OE and HSEE as mentioned in the

Clause 6.1.5.2). However, the student will have to earn the minimum credit requirements as mentioned above.

The dropped subject will not be shown in the grade sheet and transcript of the student. (modified in  $11^{th}$  meeting of Academic Council and  $17^{th}$  meeting of BOM)

### 6.1.5.2 Overall Credit Structure

	Credit C	Courses	
Undergraduate Core Courses (UCC)		Undergraduate Programme Electives (UPE)	
Category	Min. Credits	Category	Min. Credits
Basic Sciences & Maths (BSM)	36	Program Electives (PE)	16
Engineering Fundamentals (EF)	24	Open Electives (OE) (Other Departments)	3
Departmental Core (DC)	78	Humanities & Social Science Elective (HSSE)	3
Management (M)	6		
Humanities & Social Science	4		
Core (HSSC)			
Project (P)	10		
Total	158	Total	22
Grand Total	180 (min	nimum)	
	Audit C	ourses	
Audit Course (AC)			16
(Min. 3 credits audit subjects f	rom other	departments will be offered	
during Semester I-V)			
Seminar			3
Industrial/Practical Training (IPT)	)		1
Total	20 (mini	mum)	

Each student has to register for a set of courses as offered by his/her department in each semester by paying the stipulated fees, which include tuition fee, examination fee, enrolment fee, development fee, insurance fee, degree fee, alumni fee, internet charges, hostel fee, mess advance, miscellaneous user charges etc. as applicable from time to time.

### 6.1.5.3 NCC/NSS/NSO Training

One of the three activities, National Cadet Corps (NCC) or National Sports Organization (NSO) or National Social Service (NSS) training is compulsory for all the Undergraduate students. A student who has not completed the NCC/NSO/NSS requirements in first four semesters will not be permitted to continue the B.Tech. Degree Programme. These are normally conducted during evenings of week days or Sunday and are designed for character building and to sensitize the students towards social/national issues. These activities carry no credits and a student should

satisfactorily complete the prescribed NCC/NSO/NSS programme by securing 'S' grade as prescribed in **Clause 6.1.6.1**.

### 6.1.5.4 Other Activities

The other general proficiency activities will include Games/Sports/Cultural/Literary/Practical/Field Activities/Industrial visit/Extension Lectures. It will be carried out beyond class hours. Students may be taken on conducted tours through industrial works arranged by the department to expose them to various technologies employed in the industry. The curriculum will also include other curricular, co-curricular activities and extra curricular activities as may be prescribed by the University from time to time. The general proficiency remark as per Clause 6.1.6.2 (h) shall appear in the Grade Card of the student in each semester.

### 6.1.6 GRADING SYSTEM AND ASSESSMENT PROCEDURE

### 6.1.6.1 Grading System

The academic performance evaluation of a student will be according to a Letter Grading system based on class performance of students. The Letter Grades and the corresponding Grade Points are as follows. Grades falling between A(+) and D in different subjects are called pass grades, while the students securing F grade will be treated fail in the subject and shall have to\_re-register, or appear in re-major examination or repeat the semester as per provision of Clause 6.1.7 & 6.1.9, respectively.

Letter Grade	<b>Grade Points</b>	Description
A(+)	10	Outstanding
A	9	Excellent
B(+)	8	Very Good
В	7	Good
С	6	Average
D	5	Below Average
F	0	Fail
U	=	Short Attendance
W	=	Withdrawal
I	=	Incomplete
AP	=	Audit Pass
AF	-	Audit Fail
S	-	Satisfactory Completion
Z	-	Course Continuation

### **Grade Award System**

	State 11 war a System				
Grade	<b>Grade Points</b>	Marks (in %)			
A(+)	10	90-100			
A	9	80-89			
B(+)	8	70-79			
В	7	60-69			
С	6	50-59			

D	5	40-49
F	0	<40

### 6.1.6.2 Tests & Examinations

(6.1.6.2 (a), (b) and (c) modified in  $8^{th}$  meeting of Academic Council and  $13^{th}$  meeting of BOM)

The theory and practical examinations shall comprise of continuous assessment throughout the semester in all subjects and Major examination conducted by University at the end of the semester (November/December or April/May). The assessment of a course will be done on absolute marks basis. However, for the purpose of reporting the performance of a candidate, letter grades, each carrying certain points, will be awarded as per the range of total marks (out of 100) obtained by the candidate, as detailed below. The rounding off shall be done on the higher side.

### (a) Distribution of Marks for Theory based Subject

S.N.	Assessment Bas	sis	Duration	Marks
1	Continuous Evaluation	Minor Test	2 Hours	30
2		Tutorial/ Assignment/ Quiz/Attendance	-	20
3	Major Examinat	Major Examination		50

## (b) Distribution of Marks for Practical based Subject

S.N.	Assessment Basi	Assessment Basis		Marks
1	Continuous	Viva Voce	=	20
2	Continuous Evaluation	Practical Work	-	20
	Evaluation	Attendance / Record		10
3	Major Examination		3 Hours	50

### (c) Distribution of Marks for Theory & Practical based Subject

S.N.	Assessment Bas	sis	Duration	Marks
1		Minor Test	2 Hours	20
2	Continuous Evaluation	Tutorial/ Attendance Home Assignment/Quiz	-	10
3		Practical Work/ Record/Viva		10
		Voce		

4	Practical Examination		10
5	Major Examination	3 Hours	50

**Note**: The syllabus for Minor Test will be 50% of the total syllabus. However, the Major examination will be conducted from the entire syllabus of the subject in such a way that 20% weightage is given to Unit-I & II and 80% weightage to Unit-III & IV of the syllabus.

There is no provision of special minor test. It is compulsory for a student to appear in major examination otherwise he/she will be declared fail in that subject. If a student could not pass in a subject he/she may be allowed for re-major examination. There is no minimum marks criterion in continuous evaluation for appearing in re-major examination.

### (d) Distribution of Marks for Project Based Industrial/Practical Training

For evaluation of industrial/practical training, the respective industry shall nominate an In-charge/Supervisor from its organization under intimation to the University. For evaluation by the respective University department, Head of Department shall get it done by a panel of teachers. The three month industrial training of project based type could be under Cooperative Education Model (CO-OP Model)

### 60 to 75 days Industrial/Practical Training

There will be two parts in the evaluation process.

Part A: Marks Awarded by the respective Industrial/Practical training : 40

organization

Part B: Marks Awarded by the Department/Centre for Industrial/ : 60

Practical training

S. N.		Assessment Basis				
1.		Technical Quali	ty of the work	20		
		Internal Marks	Attendance	5		
	Part A	Discipline		5		
			Involvement	5		
			Interest of the student	5		
2.		Project Work	Project Work			
	Part B	Viva Voce & Presentation		30		
		Project Report		10		

# 30 days Industrial Training and 30 to 45 days Minor Project in University Department

There will be **three** parts in the evaluation process.

Part A:	Marks Awarded by the respective Industrial/Practical training organization	: 20
Part B:	Marks Awarded by the Department/Centre for Industrial/Practical training	: 30
Part C:	Marks Awarded for Minor Project	: 50

S. N.	Assessmen	Assessment Basis			
1.	Part A	Technical Q	Technical Quality of the work		
		Internal	Internal Attendance		
		Marks	Discipline	2	
			Involvement	3	
			Interest of the student	2	
2.	Part B	Project Wor	Project Work/Learning in Industry		
		Viva Voce &	Viva Voce & Presentation		
		Project Rep	Project Report		
3.	Part C	Relevance,	Relevance, Scope and Dimension of Project		
		Application	10		
		Analysis, Re	Analysis, Result and Report		
		Final Produ	ct	20	

# (e) Distribution of Marks for Seminar

S. N.	Assessment Basis	Marks
1.	Quality of Material	30
2.	Quality of Presentation	30
3.	Quality & Extent of Response of Questions Asked	20
4.	Participation in Other Seminars (Attendance)	20

Any student securing less than 50 marks ('AF' grade) in seminar shall have to repeat the seminar in the same semester. This will be limited to only one chance.

# (f) Distribution of Marks for Project

 $(6.1.6.2 \text{ (f) modified in } 10^{th} \text{ meeting of Academic Council and } 15^{th} \text{ meeting of BOM})$ 

In 7<sup>th</sup> Semester

S. N.	Assessment E	Assessment Basis				Marks
1.		Mid-Semester	Viva	Voce/	-	25
	Continuous	Presentation				
2.	Evaluation	Preliminary Proje	ect Report, I	Effort and	-	25
		Regularity (aware	ded by super	rvisor)		
3.	End Semester	Presentation			1 Hour	50

In 8<sup>th</sup> Semester

S. N.	Assessment B	Assessment Basis			
1.		Mid-Semester Viva Voce/	-	25	
	Continuous	Presentation			
2.	Evaluation	Final Project Report & Contribution	-	25	
		Made to Literary World			
		(awarded by supervisor)			
3.	Major Examir	ation	1Hour	50	

Students are required to begin project work after the end of B.Tech. III year Major Examination. A project grade is awarded in both the semesters on the basis of the prescribed evaluation process. The project may be related to a theoretical modeling, simulation and analysis, experimental investigation, a proto-type design, product design and development, a new correlation and analysis of data, fabrication and setup of new equipment etc. preferably useful for the society/industry.

### (g) Audit Courses

S. N.	Audit Course Status	Marks Obtained
1.	Audit Pass (AP)	50% and Above
2.	Audit Fail (AF)	Below 50%, Candidate has to repeat the course

# (h) Distribution of Marks for General Proficiency

General proficiency remark will be based on the cumulative percentages of marks scored by the student during each semester through various components as detailed below. Detailed distribution for award of marks in each component and/or their weightage may be as prescribed by the University from time to time.

S. N.	Assessment	Weightage of Marks
1.	Discipline/Behaviour of Students Inside/Outside	40%
	University campus	
2.	Games/Sports/Cultural/Literary Events	40%
3.	Academic & Research/Special Lecture/Extra-	20%
	curricular Events & Industrial Visits	

S. N.	Marks Secured	Remark
1.	80-100%	Excellent
2.	60-79%	Very Good
3.	40-59%	Good
4.	20-39%	Satisfactory
5.	<20%	Average

### 6.1.7 RE-REGISTER AND RE-MAJOR EXAMINATION

(modified in 11<sup>th</sup> meeting of Academic Council and 17<sup>th</sup> meeting of BOM)

Students with F grade in any subject. will be required either to re-register in the subject or appear in re-major as per following guidelines:

- (a) If student got F-grade before 2017-18 session (where students are required to score at least 40% of the total marks allocated for continuous evaluation in the concerned subject), he/she will be permitted to give re-major examination alongwith end semester exams or special remajor exams to be held in june. For the students who secured "F" grade before 2017-18 session and also failed in continuous evaluation (sessionals) of that subject, such students will have to reregister in that subject in the forthcoming semester or during summers if it is arranged by respective HODs.
- **(b)** For the students who secured "F" grade in any subject from session 2017-18 onwards, will have to re-register in that subject while it is run by the department. Such students will have to attend the classes of that subject on regular basis and appear in the minor and major examination to satisfy all the requirements mentioned in the ordinance for passing the subject.

### 6.1.8 EVALUATION OF PERFORMANCE

The performance of a student will be evaluated in terms of two indices, viz. the Semester Grade Point Average (SGPA) which is the Grade Point Average for a semester, and Cumulative Grade Point Average (CGPA) which is the Grade Point Average for all the completed semesters at any point in time considered cumulatively.

Points Secured in the Semester =  $\sum$  (Course Credits *x* Grade Point) for courses in which A(+) to D grade has been obtained

Total Credits Registered in the Semester Excluding Audit Courses=  $\sum$  (Course credits) for courses in which A(+) to D grade has been obtained

$$SGPA = \frac{Points\ secured\ in\ the\ semester\ in\ all\ passed\ courses\ (A(+)\ to\ D\ Grade)}{Total\ Credits\ registered\ in\ the\ semester\ excluding\ audit\ courses}$$

The CGPA is calculated on the basis of all pass grades, except audit courses and courses in which S or Z grade is awarded/secured in all completed semesters.

Cumulative Points secured in All Passed Courses =  $\sum$  (Course Credits x Grade Point) for courses in which A(+) to D grade is obtained

Cumulative Total Credits Excluding Audit Courses =  $\sum$  (Course credits) for courses in which A(+) to D grade is obtained

$$CGPA = \frac{Cumulative\ Points\ secured\ in\ all\ passed\ courses\ (A(+)\ to\ D\ Grade)}{Cumulative\ total\ credits\ excluding\ audits\ courses}$$

An example of these calculations is given below.

### **ODD Semester**

Course No.	Course	Grade	Total	Grade	Points
	Credits	Awarded	Credits	Point	Secured
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
XX101	5	В	5	7	35
XX102	4	С	4	6	24
XX103	4	A(+)	4	10	40
XX104	2	B(+)	2	8	16
XX106	4	D	4	5	20
XX107	-	S	-	-	-
XX108 (AC)	3	AP	-	-	-
Total	19		19		135

Credits registered in the semester excluding audit courses (total of column 2) = 19

Total credits in the semester excluding audit courses (total of column 4) = 19

Points secured in this semester (total of column 6 for all passed courses) = 135

$$SGPA = \frac{Points\ secured\ in\ the\ semester\ in\ all\ passed\ courses\ (A(+)\ to\ D\ Grade)}{Total\ Credits\ registered\ in\ the\ semester\ excluding\ audit\ courses} = \frac{135}{19} = 7.105$$

$$CGPA = \frac{\text{Cumulative Points secured in all passed courses (A(+) to D Grade)}}{\text{Cumulative total credits, excluding audits courses}} = \frac{135}{19} = 7.105$$

Semester performance: Total credits (E.C.) = 19 SGPA = 7.105 Cumulative performance: Total credits (E.C.) = 19 CGPA = 7.105

# **EVEN Semester**

Course No.	Course	Grade	Total	Grade	Points
	Credits	Awarded	Credits	Point	Secured
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
XX151	5	B(+)	5	8	40
XX152	4	A	4	9	36
XX153	4	F	-	0	0
XX154	2	В	2	7	14
XX155	4	С	4	6	24
XX156	4	A(+)	4	10	40
XX157	-	S	-	-	-
XX158 (AC)	3	AF	-	-	-
Total	23		19		154

Credits registered in the semester excluding audit courses (total of column 2) = 23

Total credits in the semester excluding audit courses (total of column 4) = 19

Points secured in this semester (total of column 6 for all passed courses) = 154

Cumulative points in all passed courses = 135 (past semesters) + 154 (this sem.) = 289

Cumulative total credits = 19 (past semesters) + 19 (this sem.) = 38

 $SGPA = \frac{Points\ secured\ in\ the\ semester\ in\ all\ passed\ courses\ (A(+)\ to\ D\ Grade)}{Total\ Credits\ registered\ in\ the\ semester\ excluding\ audit\ courses} = \frac{154}{19} = 8.105$ 

 $CGPA = \frac{Cumulative\ Points\ secured\ in\ all\ passed\ courses\ (A(+)\ to\ D\ Grade)}{Cumulative\ total\ credits, excluding\ audits\ courses} = \frac{135+154}{19+19} = 7.605$ 

Semester performance: Total credits (E.C.) = 19 SGPA = 8.105 Cumulative performance: Total credits (E.C.) = 38 CGPA = 7.605

### 6.1.9. ACADEMIC CRITERIA FOR CONTINUATION

**6.1.9.1** For continuation of registration at any stage, student must satisfy criteria specified in the subsequent clause 6.1.9.2. In order to qualify for the award of the degree at the end of 8<sup>th</sup> semester, it is necessary to pass all the credits offered by the department and satisfy the criteria specified in clause 6.1.5.1.

(modified in 11<sup>th</sup> meeting of Academic Council and 17<sup>th</sup> meeting of BOM)

6.1.9.2 A student must register a minimum of 18 credits in a semester which shall essentially include the pre-requisite subjects. It allows the students to progress at an optimum pace suited to individual ability and convenience, subject to fulfilling minimum requirement for continuation in stipulated duration.

### (a) For B.Tech. 1st Year Students

They must earn minimum **18 Credits** in an academic session including odd and even semester for promotion to 2<sup>nd</sup> Year in all branches failing which they have to re-register & repeat complete 1<sup>st</sup> Year.

(modified in 10<sup>th</sup> meeting of Academic Council and 15<sup>th</sup> meeting of BOM)

## (b) For B.Tech. 2<sup>nd</sup> Year Students

They must earn minimum **36 Credits** in the 1<sup>st</sup> year and minimum **18 Credits** in an academic session including odd and even semester of 2<sup>nd</sup> year for promotion to 3<sup>rd</sup> year failing which they have to re-register & repeat complete 2<sup>nd</sup> Year or earn the requisite credits through re-major examination in respective year as case may be.

(modified in 10<sup>th</sup> meeting of Academic Council and 15<sup>th</sup> meeting of BOM)

# (c) For B.Tech. 3<sup>rd</sup> Year Students

They must earn minimum **36 Credits** in the 2<sup>nd</sup> year and minimum **18 Credits** in an academic session including odd and even semester of 3<sup>rd</sup> year for promotion

to  $4^{th}$  year failing which they have to re-register & repeat complete  $3^{rd}$  Year or earn the requisite credits through re-major examination in respective year as case may be.

(modified in 10<sup>th</sup> meeting of Academic Council and 15<sup>th</sup> meeting of BOM)

6.1.9.3 A student is considered to pass in a particular subject if he/she secures A(+) to D grade in it. In case of the total marks of a subject is less than 40% in a semester then the student has to repeat the subject completely and continue as per Clause 6.1.9.2. (modified in 8<sup>th</sup> meeting of Academic Council and 13<sup>th</sup> meeting of BOM)

### 6.1.10. AWARD OF DIVISION, RANK AND MEDALS

- 6.1.10.1 A candidate who satisfies the course requirements for all semesters and who passes all the examinations prescribed for all the eight semesters (six semesters for lateral entry candidates) within a maximum period of six years (five years for lateral entry candidates) reckoned from the commencement of the first semester/third semester to which the candidate was admitted shall be declared to have qualified for the award of degree subject to the fulfillment of requirements of Clause 6.1.9.1. Award of the Division in the degree shall be governed by the provisions given below.
  - (a) A candidate who qualifies for the award of the degree securing D or above grades in all subjects pertaining to all semesters in his/her first attempt within eight consecutive semesters (four academic years)/six consecutive semesters (three academic years) as applicable, and in addition secures a CGPA of 7.5 and above for the semesters I to VIII shall be declared to have passed the examination in **FIRST DIVISION WITH HONOURS**.
  - (b) A candidate who qualifies for the award of the degree by securing D or above grades in all subjects of all the semesters after his/her commencement of study in the 1<sup>st</sup>/3<sup>rd</sup> semester and in addition secures CGPA not less than 6.5 shall be declared to have passed the examination in **FIRST DIVISION**.
  - (c) All other candidates (not covered in (a) and (b)) who qualify for the award of degree by securing D or above grades in all subjects of all semesters after his/her commencement of study in the 1<sup>st</sup>/3<sup>rd</sup> semester shall be declared to have passed the examination in **SECOND DIVISION**.
    (modified in 11<sup>th</sup> meeting of Academic Council and 17<sup>th</sup> meeting of BOM)
- 6.1.10.2 For the Award of **Ranks** for each branch of study and overall for the programme, the CGPA secured in all semesters shall be considered and it is mandatory that such candidate should have passed all the subjects by securing D or above grades in all the semesters in the first attempt in 4/3 year duration of programme as applicable. Rank certificates in the form of "Certificate of Merit" would be issued to top three students as 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup> rank in each branch of study and to one student as "University topper

of B.Tech." on the overall basis in the programme selected on the basis of CGPA in particular academic session.

- **6.1.10.3** Following **Medals** will be awarded annually by the University to the passing out students identified as prescribed in **Clause 6.1.10.2**.
  - (a) Chancellor Gold Medal-This gold medal is awarded to the "University topper of B.Tech." i.e. the passing out B.Tech. students who is adjudged to be the academically best, securing the highest CGPA at the end of the eighth semester in first attempt for B.Tech. Degree programme amongst the graduating students of all B.Tech. Courses as per the Clause 6.1.10.2.
  - (b) Vice-Chancellor Gold Medal-The Gold Medal is awarded to the student who secures the highest CGPA at the end of semester VIII in first attempt, i.e. 1<sup>st</sup> Rank holder for each branch of the B. Tech. programme.
  - (c) Vice-Chancellor Silver Medal-The Silver Medal is awarded to the student who secures the second highest CGPA at the end of semester VIII in first attempt i.e. 2<sup>nd</sup> Rank holder for each of the B.Tech. Course.

#### 6.1.11 ATTENDANCE

6.1.11.1 Every faculty member handling a course will record attendance from the scheduled date of commencement of classes upto 3 calendar days before the last instructional day in the semester as per academic calendar. The cumulative percentages of attendance will be recorded in the office of the Dean handling academic affairs of such students of the University. The attendance remark in the grade card will be shown based on the cumulative percentages of attendance calculated for the period between the date of commencement of classes and the last date for recording the attendance in all the registered subjects (credits and audit courses) in the semester as per the following table. Cumulative attendance remark shall appear in the Grade Card in each semester

S. N.	Attendance	Remark
1.	90-100%	Very Good
2.	80-89%	Good
3.	75-79%	Satisfactory
4.	<75%	Poor

**6.1.11.2** A student is expected to attend all classes, laboratory, seminar, project, tour and tutorial sessions that are formally scheduled and a formal attendance will be taken in each such session. It is recognized that due to illness and other emergent reasons there may be instances when a student is unable to join the scheduled academic activities; a leave application duly recommended and forwarded by the student's Head of Department should be submitted in such cases at the earliest to office of the

- Dean **of Student Affairs**. Such absence can not be more than 25% of the total classes held in a subject which needs to be got condoned as prescribed in **Clause 6.1.11.3**.
- **6.1.11.3** For the students who have **cumulative attendance** less than 100% but more than 75% in a semester if their medical leave is considered for condonation of attendance then they are eligible for seeking the privilege of upgradation of the attendance remark.
- 6.1.11.4 A student, who has a cumulative attendance lower than 75% in the semester whatever, may be the reason for the shortfall in attendance, may be permitted to appear in the University Major Examinations in those subjects in which total attendance (Lecture, Tutorial & Practical) is equal to or more than 75%. Such students have to repeat only those subjects in the next semester / summer term in coming academic session in which total attendance is less than 75%, and she/he shall be awarded 'U' grade in that subject.

### 6.1.12 REGISTRATION AND ENROLMENT

- **6.1.12.1** The University follows a specialized credit based semester system, therefore registration at the beginning of each semester on the prescribed dates announced in the Academic Calendar, is mandatory for every student till she/he completes her/his programme. If a student does not register in a particular semester, her/his studentship is liable to be cancelled. Without registration, any academic activity (course/seminar/project etc) undergone by a student will not be counted towards the fulfillment of requirements of her/his degree.
- 6.1.12.2 Every student admitted shall have his/her unique registration number. The registration number shall have ten digits. First four digit shall indicate year of admission; next two shall indicate his/her branch of study, next one shall indicate his/her level (Undergraduate, Postgraduate, Ph.D., etc.) and last three digits shall indicate his/her serial number/roll number or as prescribed from time to time. Every student shall be identified by this registration number through out his stay in the University.
- 6.1.12.3 Registration should be carried out by the student himself/herself on stipulated date, but not later than the first week of each semester as late registration upon payment of prescribed late fees as decided from time to time. In any case, registration must be completed before the prescribed last date for registration, failing which he/she will not be registered in that particular session. Such students will have to register in coming next academic session if it is permissible under Clause 6.1.3 else his/her studentship is liable to be cancelled except for those availing provision of Clause 6.1.13.
- **6.1.12.4** Students having any kind of outstanding dues to the University or hostel shall be permitted to register only after clearing the outstanding dues.

**6.1.12.5** In-absentia registration may be allowed only in rare cases at the discretion of the Vice-Chancellor of the University in case of serious illness/natural calamities/ unavoidable circumstances upon the recommendation of Dean.

### 6.1.13 TEMPORARY DISCONTINUATION OF COURSE

- 6.1.13.1 Discontinuation of the course will not be allowed to B.Tech. first year students. However, if a student of other years wishes to temporarily discontinue the course for valid reasons, she/he shall apply through the Head of Department in advance and obtain a written order from the University permitting discontinuance.
- 6.1.13.2 A candidate after temporary discontinuance may rejoin the course only at the commencement of the semester at which she/he discontinued, provided she/he pays the prescribed fees to the University for the discontinuation period also. The total period of completion of the course reckoned from the commencement of the first semester to which the candidate was admitted shall not in any case exceed six academic years (five academic years for lateral entry), including of the period of discontinuance.

### 6.1.14 UNFAIR MEANS

Cases of unfair means shall be dealt as per the rules of the University.

### 6.1.15 GENERAL ELIGIBILITY FOR AWARD OF B. TECH. DEGREE

A student shall be declared to be eligible for award of the B.Tech. Degree if he/she has

- registered and successfully completed all the required core/elective/audit courses and projects and other requirements of programme as prescribed in this Ordinance or as prescribed by the University from time to time;
- (b) successfully acquired the minimum required credits/audits as specified in the curriculum corresponding to the branch of his/her study within the stipulated time as prescribed in this Ordinance or as prescribed by the University from time to time;
- (c) earned the specified credits in all the categories of subjects;
- (d) completed the NCC/NSO/NSS requirements;
- (e) has no dues to the University, Hostels, Libraries, NCC/NSS/NSO etc., and
- (f) no disciplinary action is pending against him/her.

### 6.1.16 POWER TO MODIFY

Notwithstanding all that has been stated above, the Academic Council has the right to modify partly or completely the provisions of above ordinances with the approval of Board of Management. Under extreme exceptional circumstances arising out of certain inconsistency in the ordinance or otherwise, the Vice-Chancellor can take suitable decision in deference to the laid down provisions provided standard of evaluation is not compromised and the same shall be reported to ensuing Academic Council/Board of Management with suitable justification. Such actions of Vice-Chancellor shall not be treated as precedence under any circumstances.

### 6.1.17 CURRICULUM FOR B.TECH. PROGRAMMES

The curriculum for any B.Tech. Programme of study has been designed with total minimum credits of 180 and total minimum 20 credits of audit courses for those admitted in 1<sup>st</sup> year of B. Tech. Programme. The minimum credit requirement will be 130 and total minimum 16 credits of audit courses for lateral entry in II year of B.Tech. Programme. A student must register a minimum of 18 credits in each semester.

### Freshman Year, Semester I

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM			3	1	0/2	4/5
2.	BSM			3	1	0/2	4/5
3.	EF			3	1	2	5
4.	EF			3	1	0/2	4/5
5.	HSSC			3	1	0/2	4/5
6.	EF			0	0	4	2
7.	AC						-
			Total	15	5	6/14	23/27

### Freshman Year, Semester II

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM			3	1	2	5
2.	BSM			3	1	0/2	4/5
3.	BSM			3	1	0/2	4/5
4.	EF			3	1	0/2	4/5
5.	HSSE			2/3	1	0	3/4
6.	EF			0	0	4	2
7.	AC						-
			Total	14/15	5	6/12	22/26

# Sophomore Year, Semester III

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM			3	1	0/2	4/5
2.	BSM			3	1	0/2	4/5
3.	EF			3	1	0/2	4/5
4.	DC			2/3	1	0/2	3/5
5.	DC			3	1	2	5
6.	EF			0	0	4	2
7.	AC						-
			Total	14/15	5	6/14	22/27

### Sophomore Year, Semester IV

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM			3	0/1	0/2	3/5
2.	M			2/3	1	0	3/4
3.	DC			3	1	2	5

4.	DC		3	1	0/2	4/5
5.	DC		3	1	0/2	4/5
6.	EF		0	0	4	2
7.	AC					-
		Total	14/15	4/5	6/12	21/26

# Junior Year, Semester V

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	M			2/3	1	0	3/4
2.	DC			3	1	0/2	4/5
3.	DC			3	1	0/2	4/5
4.	DC			3	1	2	5
5.	DC			3	1	2	5
6.	AC						
			Total	14/15	5	4/8	21/24

# Junior Year, Semester VI

S. N.	Category	Paper Code	Subject		L	T	P	Credit
1.	DC				3	1	0/2	4/5
2.	DC				3	1	0/2	4/5
3.	DC				3	1	0/2	4/5
4.	DC				3	1	2	5
5.	DC				3	1	2	5
6.	AC		Seminar					-
				Total	15	5	4/10	22/25

# Senior Year, Semester VII

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	DC			3	1	2	5
2.	DC			3	1	0/2	4/5
3.	PE1			3	1	0/2	4/5
4.	PE2			3	1	0	4
5.	P		Project Part-I	0	0	10	5
6.	AC		Industrial/				-
			Practical Training				
			Total	12	4	12/16	22/24

# Senior Year, Semester VIII

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	DC			3	1	2	5
2.	PE3			3	1	0/2	4/5

3.	PE4		3	1	0	4
4.	OE		3	1	0	4
5.	P	Project Part-II	0	0	10	5
		Total	12	4	12/14	22/23