

# ORDINANCES 3.0

## Bachelor of Technology

(w.e.f. 2024-2025)



**MADAN MOHAN MALAVIYA UNIVERSITY OF  
TECHNOLOGY GORAKHPUR-273010 (UP), INDIA**

MMMUT, B.Tech. Ordinance 3.0

## DISCLAMER

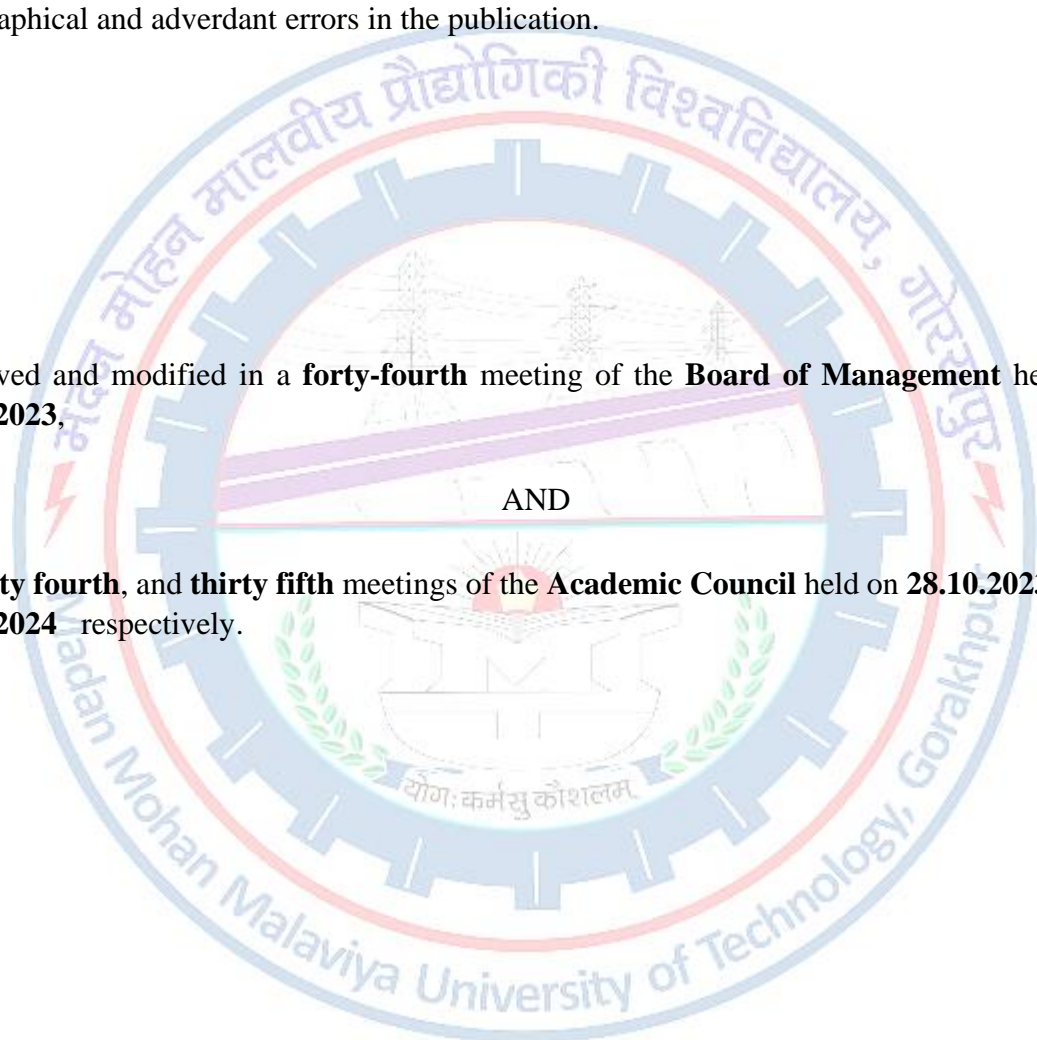
Extrema care has been taken in the compilation of ordinances, course structures, and syllabi of different B.Tech. program, in case of any dispute regarding the credits of any subjects, pre-requisite subjects given in the course structure, the pre-requisite subjects, and credits given in the syllabi of respective subjects and as available with the dean UGS office of the University will be final.

Therefore, Madan Mohan Malaviya University of Technology is not responsible for any typographical and adverdant errors in the publication.

Approved and modified in a **forty-fourth** meeting of the **Board of Management** held on **03.11.2023**,

AND

In **thirty fourth**, and **thirty fifth** meetings of the **Academic Council** held on **28.10.2023**, and **07.03.2024** respectively.



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

## Third Ordinances

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

## THIRD ORDINANCES, 2024

*Short title, commencement, and definitions Sec. 31 (1)*

1. These Ordinances may be called the Madan Mohan Malaviya University of Technology, Gorakhpur Third Ordinances, 2024.
2. They shall come into force in successive academic sessions as applicable.
3. Anything contained in ordinances, regulations, and rules made there under in violation to provisions of the Act shall be void and the provisions of the 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 expressions 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 the fees therefore, the qualifications pertaining to the award of degrees, diplomas, 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 programs 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 the 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 the Board of Management.
  - (d) Ordinances for Bachelor of Technology (B.Tech.) and Ordinances for other degree programs as started from time to time shall be as prescribed by the Academic Council and the Board of Management.

## 7 ORDINANCES FOR B.TECH. PROGRAMS FROM ACADEMIC SESSION 2024-25

### 7.1 ADMISSION

- (a) University offers full-time B.Tech. Degree Program in various disciplines of Engineering and Technology.
- (b) Admission to B.Tech. first year in Semester 1<sup>st</sup> and lateral admission in B.Tech. the second year in semester 3<sup>rd</sup> (for Lateral Entry 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. 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/Institute based on Academic credit bank of Govt. of India and guidelines issued by AICTE/UP Govt/ Govt. of India.
- (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.

### 7.2 ELIGIBILITY FOR ADMISSION

#### 7.2.1 For B.Tech. First Year

(a) The candidate should have passed 10+2 examination with at least 55% marks (50% in case of candidate belonging to SC/ST category) and with at least 60% average marks (55% in case of candidate belonging to SC/ST category) in Mathematics, Physics and one of the following subjects: Chemistry/ Technical Vocational subject/ Computer Science/ Information Technology/ Engineering Graphics/Electronics/Informatics Practices or any other eligibility criteria approved by the Board of Management(BOM) of the University.

#### 7.2.2 For B.Tech. Second Year through Lateral Entry Scheme

(a) **Diploma holders:** Passed Three years / Two years (Lateral Entry) diploma examination from an institution recognized by U.P. Board of Technical Education in any branch of engineering/technology except agriculture engineering with at least 60% marks (55% in case of candidates belonging to SC/ST category) or any other eligibility criteria approved by the Board of Management(BOM) of the University.

(b) **B.Sc graduates:** Passed three years B.Sc. degree from any recognized University of India as defined by UGC with at least 60% marks (55% in case of candidates belonging to SC/ST category) and having passed 10+2 exam with Mathematics as a subject or any other eligibility criteria approved by the Board of Management (BOM) of the University. The candidates belonging to B.Sc. stream shall be considered only after filling the seats with the candidates belonging to the diploma stream.

7.2.3 University has the power to repeal and modify the eligibility criteria for admission.

## 8 PROGRAM DURATION

- (a) The duration of the B.Tech. program for the candidates admitted in the semester I will be four academic years (eight semesters).
- (b) The duration of the B.Tech. program for the candidates admitted in semester III will be three academic years (six semesters).
- (c) 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.
- (d) The duration of each semester will generally be 90 working days or as prescribed by the University from time to time.
- (e) The maximum time allowed for completion of the program for the candidates admitted in semester 1st /semester 3rd (for Lateral Entry) shall be seven/six years respectively, beyond which the admission of the candidate shall be automatically cancelled. Further one year extension may be given in special cases, after the approval from Academic Council. The candidate will not be allowed to continue in the subsequent years of the program, if the sufficient time period is not available for its completion in stipulated maximum duration.
- (f) The student may complete the program at a slower pace by taking more time but not more than prescribed maximum duration as per the provision of Clause 20.

## 9 CHANGE OF BRANCH

**9.1** Change of branch shall be carried out against the vacant seats on the basis of respective category-wise rank of JEE(Main)/entrance examination and the fresh choices given by the student before the beginning of the second semester.

**9.2** After change of branch the number of students in that branch should not fall below the sanctioned intake by more than **twenty five 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 Non-Resident Indian (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, Prime Minister's Special Scholarship Scheme (PMSSS) etc. If fee waiver student applies for branch change and he/she is allotted new branch, then such student will have to forfeit the status of fee waiver given to him, and student will have to submit full fees from odd semester of second year onwards.

**9.3** Change of branch shall not be allowed if a student is involved in matters of indiscipline/unfair means in any examination.

**9.4** Apart from the provisions specified in **9.1** above, no change of branch shall be allowed. The student will shift to other branch with a condition that he/she will have to take extra credits of the courses of first year through MOOCs which are pre-requisite to any subject of that course on the recommendation of Head of Department (HOD).

**9.5** Those students who had been already studied the subject in his/her previous branch and same subject is offered by his/her change branch then those student are required to study the left over subject of first year of that branch through MOOCs (SWAYAM) or by department on the recommendation of HOD. The credit earned will be not considered for the computation of credit earned by **clause No 10.5 (a)**.

## **10 CURRICULUM STRUCTURE OF THE PROGRAM**

**10.1** The University follows a specialized credit-based semester system. Every program will have a specific curriculum for all semesters (semester 1<sup>st</sup> to semester 8<sup>th</sup>) 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, industrial and practical training, project, tours etc. as prescribed by the University.

The overall curriculum structure of the program consists of the following category of courses.

### **A. Core Courses (CC)**

- (i) Basic Sciences & Maths (BSM)
- (ii) Engineering Fundamentals (EF)
- (iii) Professional Skill (PS)
- (iv) Professional Core (PC)
- (v) Management (M)
- (vi) Humanities & Social Science (HSS)
- (vii) Minor Project (P)
- (viii) Industrial Practice (IP)(In Industry)/ Major Project (MP)(In University)

### **B. Electives courses (EC)**

- (i) Professional Electives(PE)/ Open Electives (OE)
- (ii) Humanities & Social Science Elective (HSSE)

### **C. Extracurricular Activities Courses (ECA)**

Two compulsory courses should be clear from the following S.No. **(ii) to (v)**.

- (i) Induction Program (compulsory)
- (ii) Skill development
- (iii) Unity and Discipline (NCC or NSS)
- (iv) Sports, Cultural and Games
- (v) Personality Development

### **D. Value Added Courses (VAC) / Audit Courses (AC)**

To inculcate the societal and moral values among the students, two of the Value-

Added Courses are compulsory. These two value added courses may run through MOOCs (Swayam). All Value Added Courses (VAC) are run by Humanities and Social Sciences (HSS) department. The course structure should have one or two credits courses content with one or two lectures per week as per the requirement of the students. The Audit Courses (AC) run by respective department.

**E. One Expert Lecture** per semester for students is mandatory as a non-credit course. The PSMD, MSCD and CESD (with mutual consent) will organize the expert lecture for 1<sup>st</sup> year students. The respective department will manage expert lecture for 2<sup>nd</sup> year students. The T&P department will organize the expert lecture for 3<sup>rd</sup> year the students.

**F. Industrial/Practical Training** during the summer break after fourth semester is mandatory as a non-credit course. The duration for industrial/practical training of project based type preferably will be of **four to six weeks duration**. The training could be done either at the industry or at University/Institute or in combination of industry and University/Institute. If the industrial training is carried out by student in the University/Institute, it must be society/ commercial/industrial problem related to minor project under the supervision of designated faculty supervisor of University/Institute.

All the student should submit a report of industrial/practical training along with proof of completing the industrial/practical training and/or minor project report to the respective HOD for evaluation through a committee of faculty members constituted by the HOD.

All those students who have short attendance and appearing in Remedial/Make-up classes are not allowed to do their training outside of the University. They have to do training inside the University in offline mode.

**G. Humanities & Social Science Elective (HSSE)**

The Humanities and Social Science Elective (HSSE) course will be managed by Humanities and Social Sciences department.

**H. One -week workshop** during the winter break after fifth semester on professional/ industry/ Social/ entrepreneurial orientation is mandatory as a non-credited course and coordinated by Dean of Extension, Field Outreach and Alumni Relations.

**I. Social work/Training** of at least 60 hours during break after first/ second semester is mandatory as a non-credit course and coordinated by Dean of Extension, Field Outreach and Alumni Relations.

**J. Minor Degree (MD) from other Department and Micro Specializations (MS) within the Department are given as follows:**

- The total number of credits for graduation will be kept to minimum 160 and additional 18-20 credits from other department are required for Minor Degree Courses.
- Micro specializations will be run by the same department in order to aligned to industry careers or higher studies.

**Minor Degree (MD) from other department and Micro specializations (MS)**

**within the department are offered as a Professional Electives (PE).**

**Each course is assigned a certain number of credits as follows:**

- (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 B.Tech. Program has been designed with total minimum credits of 160. The additional 18-20 credits for Minor Degree Courses (MDC) from other department are required for those admitted in 1<sup>st</sup> year of B.Tech. Program. For the lateral entry in 2<sup>nd</sup> year of B.Tech. program, the minimum credit requirement will be 120. The additional 18-20 credits of Minor Degree Courses (MDC) from other department are required. The Micro Specializations (MS) will be run by the department in order to aligned to industry careers or higher studies.

In addition to above, the students are required to complete Non-credits One expert lectures, Non-credits Social work/training, Non-credits Industrial/Practical training, Non-credits One-week workshop, Non-credits Value added/Audit Courses, and Non-credits Extra Curricular Activities (ECA) courses.

The University provides a facility to the students to earn credits from various government recognized online courses and programs duly approved by Academic Council, and these earned credits will help them get relaxation of credits while considering minimum credit requirement under PE/OE/VAC/AC courses as laid down in clause 10.2.

If the department is offering more than 160/120 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 subject equivalent to extra earn credit of his/her choice provided that the dropped subject is part of PE, and OE as mentioned in the Clause 10.2. However, the student will have to earn the minimum total credit requirements as mentioned above. Students are allowed to drop only extra earn credit subject in a 7<sup>th</sup> / 8<sup>th</sup> semester. A student fail/detained in a subject will not be allowed to drop that course at any time. Relaxation in credits may be given to the students for subjects falling under PE and OE category. The dropped course will not be shown in the grade sheet and transcript of the student.

The University provides a facility to the students to earn credits from various government recognized online courses and programs duly approved by Academic Council, and these earned credits will help them get relaxation of credits while considering minimum credit requirement under PE and OE courses as laid down in clause 10.2.



## 10.2 Overall Credit Structure

### CREDIT STRUCTURE FOR B.TECH. (BRANCH NAME) (SESSION 2024-2025 AND ONWARDS) OVERALL CREDIT STRUCTURE FOR B.TECH. (BRANCH NAME)

Credit Courses			
Core Courses (CC)		Electives Courses (EC)	
Category	Min. Credits	Category	Min. Credits
Basic Sciences & Maths (BSM)	20	Professional Electives (PE)/ Open Electives (OE)	36
Engineering Fundamentals (EF)	24		
Professional Skill (PS)		Humanities & Social Science Elective (HSSE)	04
Professional Core (PC)	48		
Management (M)	04		
Humanities & Social Science (HSS)	08		
Minor Project (P)	06		
Industrial Practice (IP) (In Industry)/ Major Project (MP) (In University)	10		
<b>Sub-total</b>	<b>120</b>	<b>Sub-total</b>	<b>40</b>
<b>Grand Total</b>		<b>160</b>	
Non-Credit Courses			
<b>One Expert Lecture</b> per semester for students (Mandatory). (BSM-1st year), (PC-2 <sup>nd</sup> Year), (T&P-3 <sup>rd</sup> Year)			<b>Non-Credit</b>
<b>Social work/Training</b> of at least 60 hours during break after first/ second semester (Mandatory) (Dean of Extension, Field Outreach and Alumni Relations).			<b>Non-Credit</b>
<b>Industrial/Practical Training</b> during the summer break after fourth semester (Mandatory).			<b>Non-Credit</b>
<b>One -week workshop</b> during the winter break after fifth semester on professional/ industry/ Social/ entrepreneurial orientation (Mandatory) (Dean of Extension, Field Outreach and Alumni Relations).			<b>Non-Credit</b>
<b>Value Added Courses (VAC) / Audit Courses (AC)</b> Two of the Value-Added Courses / Audit Courses are compulsory.			<b>Non-Credit</b>
<b>Extracurricular Activities Courses (ECA)</b> Two compulsory courses from the following S. No (ii) to (v) non-credit courses: (i) Induction Program (compulsory) (ii) Skill development (iii) Unity and Discipline (NCC or NSS) (iv) Sports, Cultural and Games (v) Personality Development			<b>Non-Credit</b>
<b>Minor Degree (MD) from any other Department and Micro Specializations (MS) within the Department</b>			
<ul style="list-style-type: none"> <li>• The total number of credits for graduation will be kept to minimum 160 and the additional 18-20 credits are required for Minor Degree.</li> <li>• Micro specializations will be run by the department in order to aligned to industry careers or higher studies.</li> </ul>			Offered as a Professional Electives (PE)

**Relaxation in credits may be given to the students for courses falling under OE, PE as per clause 10.2.**

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.

## **11 Extracurricular Activities Courses (ECA)**

### **(i) Induction Program (compulsory)**

The Induction program will be organized by office of the Dean of Student Affairs (DSA).

**(ii) Two compulsory non-credit courses:** Two compulsory courses from the following S.No (1) to (4) non-credit courses:

#### **1. Skill development**

The skill activities (Art, literary, painting, drama, etc.) will be carried out beyond class hours. These activities will be managed by the Chairman CSA.

#### **2. Unity and Discipline (NCC or NSS)**

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 credit and a student should satisfactorily complete the prescribed NCC/NSS program by securing 'S' grade as prescribed in **Clause 14.1**.

#### **3. Sports and Games/Cultural and Literary**

The other ECA activities will include Games/Sports/ Cultural/Literary/ Practical/Field Activities/ Industrial visit/ Extension Lectures. It will be carried out beyond class hours. These activities will be managed by the Chairman CSA.

#### **4. Personality Development**

Personality Development (PD) will be coordinated by the Training and Placement (T&P) office.

## **12 Credit transfer Policy**

### **(a) Credit considerations for Online courses**

If any student clears online courses recognized by Govt./University (like SWAYAM or courses offered by NPTEL through MOOCs mode) and that course is approved by Academic Council, then relaxation in minimum credits required for courses falling under Value added/Audit Courses (VAC/AC), Professional Electives (PE)/Open Elective(OE), Humanities & Social Science Elective (HSSE) shall be given to the students as per guideline given below:

**Four weeks course will enable students to earn 1-credit.**

**Eight weeks course will enable students to earn 2-credits.**

**Twelve weeks course will enable students to earn 3-credits.**

**Sixteen weeks (or one semester) course will enable students to earn 4-credits.**

All students are required to attain the minimum 12 to 18 credits and maximum 40% of total credits through MOOCs during entire course of B.Tech. program.

### **(b) MOOCs implementation framework**

1) As refer in Point No. 4 of AICTE GO. No.AICTE/P&AP/SWAYAM/2016 dated 17th August 2016, on 1<sup>st</sup> June, and 1<sup>st</sup> November every year, the list of the online learning courses going to be offered in the every forthcoming Semesters. Accordingly, the concerned HOD can select MOOCs courses through departmental BOS. Also, the department will notify and upload the required information for Swayam courses registration on department and University web portal for vide

circulation among the students.

- 2) In the course structure of B.Tech., there are provision to introduce Swayam portal/MOOCs courses to substitute the following category of the courses:-
  - i. In B.Tech. I/II semester for HSS courses- coordinator(s) will be nominated by Head of Humanities and Social Sciences(HSS).
  - ii. Value added courses (VAC) - coordinator(s) will be nominated by HSS department.
  - iii. Professional Electives (PE)/Open Electives from 4<sup>th</sup> to 8<sup>th</sup> Semester- Concerned HOD will nominate coordinator(s) for each pool of PE courses for 4<sup>th</sup> , 5<sup>th</sup> , 6<sup>th</sup> , 7<sup>th</sup> and 8<sup>th</sup> Semesters separately.
  - iv. Industrial Practice (IP) (in Industry)/ Major Project (MP) (In University) in 8<sup>th</sup> Semester- Concerned HOD will nominate coordinator(s) for each courses separately.
- 3) The concerned department will submit the results of the MOOCs courses to Controller of Examination (COE) for updation in student results.
- 4) The MOOCs course registration fee will be reimbursed after submitting the fee receipt / Admit Card / Proof of registration fee by the student through the concerned HOD to the Dean UGS office.
- 5) MOOCs/Swayam portal courses in which credit is not mentioned, for this credit will define as per clause No 13 of B.TECH. Ordinances.
- 6) The MOOCs courses may replace any Professional Core (PC) course if the course content of MOOCs courses matches more than 75% with the course content of PC course.
- 7) The required virtual lab which is not available in the department, may be added in the course content through BOS, and one additional credit will be given for the virtual lab by the concerned department (Subject Teacher) and its credit record/Marks should be submitted to the COE office.
- 8) The evaluation scheme for virtual lab will be same as existing scheme of practical courses.

**(c) If Student may fail to clear the registered online MOOCs courses, the following procedure will adopt:**

- 1) Regarding the students who failed in MOOC courses, the carry over system will be adopted in which the failed student will have to appear in theory Exam. The question paper will consist of 50 MCQs (following the model of MOOCs) and maximum marks will be 75 (equal to the Maximum Marks of MOOC Theory Paper). The marks from MOOCs Assignment (maximum 25) will be taken as it is and the result will be declared by adding both theory exams and assignment marks of same syllabus.
- 2) The students who scored passing marks/grade or above as per MOOCs guidelines will be treated to be "PASS". The students having scored less than passing marks/grade will be treated as "FAIL" in the MOOC courses and they will have to re-appear in Exam under Carry Over system as mentioned in point no. c(1) of this clause.
- 3) Regarding those who could not register for the MOOCs, elective subject will be assigned by the department and their exam will be conducted (Theory Paper of 75 Marks and Sessional of 25 Marks) along with the regular examination. Title of the elective subjects and Syllabus will be exactly same as the MOOC courses and examination pattern will be exactly same as mentioned in point no. c(1) of this clause.
- 4) In case of Carry Over/Not registered, the final grade will be one less than the awarded grade. For example, if a student has got 72 marks in University system of examination, then his/her grade will be B+. Then, his/her final grade will be one less than the awarded one , i.e. B. with

ceiling to D grade (i.e. if he/she gets D grades, then, his/her grade will no longer be reduced to F). This will be applicable to both students who failed in the MOOCs or could not register.

5) Regarding equivalence of MOOCs marks with our grade system, the marks from MOOCs will be taken as it is and will be awarded as per our grade system. For example, if a student gets 65 marks in MOOCs, then, as per University grade system he/she will be awarded grade 'B'.

6) Depending on whether our core subject is of 4 credits (only theory) or 4 credits (theory with lab), the one credit shall be awarded, and its equivalent marks (assignments, tutorial and labs) are included in MOOCs assignment marks (maximum 25Marks) by the concerned department.

#### **(d) Credit considerations for Swachh Bharat Abhiyaan**

If any student participates in national government sponsored Swachh Bharat Internship program of two months and achieves certificate on successful completion of it, he/she may get 2-credit relaxation in Audit course requirement.

#### **13 Minor Degree (MD) from other Department and Micro Specializations (MS) within the Department**

a) For holistic development of the students and as per NEP-2020 and AICTE guideline, the students may earn additional 18-20 credits through the minor degree courses offered by different departments of the University from Semester IV to VIII. The Micro Specialization (MS) will be run by the department in order to aligned to industry careers or higher studies. The Minor/Micro Degrees offered by different departments will be the state-of-the-art courses that make the student competent in his/her discipline to meet the additional global challenges.

b) The choice of MD/MS will be optional in the sense that if the student does not opt for MD/MS, he/she can complete his/her B.Tech. program with a minimum of 160 credits. However, if a student opts for the additional 18-20 credits through minor degree courses, he/she will get B.Tech. Degree with Minor in .... (name of the Minor Degree).

In the present credit structure, a student will have to choose an inter minor courses in totality, and additional 18-20 credits can be earned during the entire period of B.Tech. program. If student not willing to opt for minor degree, he/she may opt the intra minor courses to complete the overall 160 credits.

#### **14 GRADING SYSTEM AND ASSESSMENT PROCEDURE**

##### **14.1 Grading System**

The academic performance evaluation of a student will be according to a letter grading system based on performance of students. The letter grades and the corresponding Grade Points are as follows:

- (i) Absolute grading method
- (ii) Relative grading method

In those courses, where the total number of students is upto 30, the results in Grades shall be prepared on the basis of the actual performance of the student in the percentage scale (Absolute grading method) and not on the basis of the formula approved for computation of grades (Relative grading method).

**As per absolute grading method**, grades falling between A<sup>+</sup> to D in different courses are called pass grades, while the students securing F grade will be treated fail in the course and shall have

to carryover or re-registered the semester as per provision of **Clause 16 & 20**.

Letter Grade	Grade Points	Description
A <sup>+</sup>	10	Outstanding
A	9	Excellent
B <sup>+</sup>	8	Very Good
B	7	Good
C	6	Average
D	5	Pass
F	0	Fail
W	-	Withdrawal
I	-	Incomplete
AP/AF	-	Audit Pass/Audit Fail
S/X	-	Satisfactory Completion/Not Satisfactory Completion
Z	-	Course Continuation

#### Grade Award System

Grade	Grade Points	Marks (in %)
A <sup>+</sup>	10	90-100
A	9	80-89
B <sup>+</sup>	8	70-79
B	7	60-69
C	6	50-59
D	5	40-49
F	0	<40

**As per relative grading method, (i)** The academic performance of a student shall be graded on a 10-point scale. For the award of grades in a course, all component-wise evaluation shall be done in marks. The marks of different components shall be reduced to relative weights of each component. Marks so obtained shall be out of 100 and the same shall be converted to grades.

**(ii)** The mean ( $\bar{x}$ ) and the standard deviation ( $\sigma$ ) of marks obtained of all the students in a course

shall be calculated and used to convert the marks obtained(m) by a student into grades.

(iii) In case of any difficulty, the absolute grading method shall be used.

Letter grade	Numerical grade	Formula	Computation of the grade cut off
A <sup>+</sup>	10	$m \geq \bar{x} + 1.5\sigma$	The value of $\bar{x} + 1.5\sigma$ account for grade computation. The grade cut off will be $\bar{x} + 1.5\sigma$ or 90% whichever is lower
A	9	$\bar{x} + 1.0\sigma \leq m < \bar{x} + 1.5\sigma$	The value of $\bar{x} + 1.0\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 1.0\sigma$ or 80% whichever is lower
B <sup>+</sup>	8	$\bar{x} + 0.5\sigma \leq m < \bar{x} + 1.0\sigma$	The value of $\bar{x} + 0.5\sigma$ account for grade computation. The grade cut off will be $\bar{x} + 0.5\sigma$ or 70% whichever is lower
B	7	$\bar{x} + 0.0\sigma \leq m < \bar{x} + 0.5\sigma$	The value of $\bar{x} + 0.0\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} + 0.0\sigma$ or 60% whichever is lower
C	6	$\bar{x} - 0.5\sigma \leq m < \bar{x} + 0.0\sigma$	The value of $\bar{x} - 0.5\sigma$ to be taken into account for grade computation. The grade cut off will be $\bar{x} - 0.5\sigma$ or 50% whichever is lower
D	5	$40 \leq m < \bar{x} - 0.5\sigma$	The lower grade cut off will be 40%
F	0	$m < 40$	Less than 40%

The conversion formula for CGPA to Percentage marks is as follows:

$$\text{CGPA} * 10 = \% \text{ Marks}$$

### 15 Tests & Examinations

The theory and practical examinations shall comprise of continuous assessment throughout the semester in all courses and Major examination conducted by University at the end of the semester (November/December or April/May). The student must secure 30% marks in Major Examination. Also, overall (Continuous Evaluation + Major examination) attained percentage must be not less than 40% to clear the subject. 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. The Evaluation scheme for all categories of courses will be as follows:

S.No	L-T-P	Minor Test	Teacher assessment (TA)	Practical Work and viva	Practical Exam	Major Exam
Category 1	L-T-P	20	10	10	10 <sup>\$</sup>	50
Category 2	L-0-P	20	10	10	10 <sup>\$</sup>	50
Category 3	L-T-0	30	20	0	0	50
Category 4	L-0-0	30	20	0	0	50
Category 5	0-0-P or 0-T-P	--	10	40	50*	

#TA includes quiz, tutorials, assignments, attendance etc.

\$Internal Practical Exam (Two hours)

\*External Practical Exam (Three hours)

**Note:** The syllabus for Minor Test will be from Unit 1 & Unit 2. However, the Major examination will be conducted from the entire syllabus of the course. The duration of minor test and major theory examination are 2 hours and 3 hours, respectively.

**(a) Distribution of Marks for Theory based subjects**

S. N.	Assessment Basis	Duration	Marks	
1.	Continuous Evaluation	Minor Test	2 Hours	30
2.		Tutorial/Assignment/Quiz/Attendance (Teacher assessment)	-	20
	Major Examination	3 Hours	50	

**(b) Distribution of Marks for Theory & Practical based subjects**

S. N.	Assessment Basis	Duration	Marks	
1.	Continuous Evaluation	Minor Test	2 Hours	20
2.		Tutorial/Assignment/Quiz/Attendance (Teacher	-	10

		assessment)		
3.		Practical Work and viva	-	10
4.		Practical Exam	2 Hours	10
	Major Examination		3 Hours	50

**(c) Distribution of Marks for Practical based subjects**

S. N.	Assessment Basis	Duration	Marks
1.	Continuous Evaluation	Tutorial/Assignment/Quiz/Attendance (Teacher assessment)	-
2.		Practical Work and viva	-
3.	Practical Exam	3 Hours	50

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

For evaluation of industrial/practical training, the respective University department/HOD shall get it done by a panel of teachers in Odd semesters of third year in the following format:

S. N.	Assessment Basis	Marks
1.	Part A Technical Quality of the work, Sincerity, Attendance (certificate showing satisfactory performance and their duration of work performed), Discipline etc.	40
2.	Part B Project Work/Learning in Industry, Relevance, Scope and Dimension of Project, Project Report (Analysis, Methodology performed, Result & Discussion) Viva Voce & Presentation etc.	60



**(e) Distribution of Marks for Project**

**In 7<sup>th</sup> Semester**

S. N.	Assessment Basis	Duration	Marks	
1.	Continuous Evaluation	Mid-Semester Viva Voce/ Presentation	-	25
2.		Preliminary Project Report, Effort and Regularity (awarded by supervisor)	-	25
3.	End Semester Project Presentation	-	50	

**In 8<sup>th</sup> Semester**

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

Students are required to begin project work in sixth semester. 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.

**(f) VAC/Audit Courses**

01	Audit Pass (AP)	40% and above
02	Audit Fail (AF)	Below 40%, candidate has to repeat the course

All VAC/Audit Courses will be evaluated as per the L-T-P format and accordingly given the Audit Pass (AP) and Audit Fail (AF) status to the student.

**(g) Distribution of Marks for Industrial Practices (IP)/Major Project(inside University)**

S. No	Assessment Basis		Marks
1.	Part A	Technical Quality of the work, Sincerity, Attendance (certificate showing satisfactory performance and their duration of work performed), Discipline etc.	40
2.	Part B	Project Work/Learning in Industry, Relevance, Scope and Dimension of Project, Project Report (Analysis, Methodology performed, Result & Discussion) Viva Voce & Presentation etc.	60

**(h) ECA Courses**

01	S	Satisfactory
02	X	Not-Satisfactory

**16 CARRY OVER EXAMINATION**

- (a) Students with F grade in any course due to detainment in examination (attendance is less than 75% aggregate and less than 75% in the course) and the students who punished with UFM will be required to register for carryover examination (Major Examination) in the course and carry the sessional marks in UFM case as it is.
- (b) Students with F grade in any course (other than above in clause 16a) will be required to register for carry over examination in the course. The carry over Major examination can be conducted during the end of odd/even semesters.
- (c) The grade obtained in the carryover examination will be lowered by one grade in that course but not below the D-grade, i.e., if a student obtains B<sup>+</sup> grade in the carry over course the grade will be lowered to B for award. But if a student gets grade C or D only in carryover subject will be awarded D grade.
- (d) Students who have missed the Minor Test Examination of a course due to medical reasons or other special circumstances may be considered for a Make-up Examination on the clear cut recommendations of HOD considering the merit of his/her case. The student shall make an application to the HOD, within ten working days from the date of the examination missed, explaining the reasons for his/her absence. Applications received after this period will not be entertained. The HOD shall forward all applications with his/her recommendations to COE who in turn shall seek approval from Hon'ble VC. Further, there will be no make-up of the Make-up Examinations.

## 17 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  $\times$  Grade Point) for courses in which A+ to D grade has been obtained

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

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

The CGPA is calculated on the basis of all pass grades, except ECA/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  $\times$  Grade Point) for courses in which A+ to D grade is obtained

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

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

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	B	5	7	35
XX102	4	C	4	6	24
XX103	4	A <sup>+</sup>	4	10	40
XX104	2	B <sup>+</sup>	2	8	16

XX106	4	D	4	5	20
XX107	-	S	-	-	-
XX108(AC)	2	AP/AF	-	-	-
XX109(ECA)	-	S/X	-	-	-
<b>Total</b>	<b>19</b>		<b>19</b>		<b>135</b>

Credits registered in the semester excluding ECA/Audit courses (total of column 2) = 19

Total credits earned in the semester excluding ECA/Audit courses (total of column 4) = 19

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

SGPA = Points secured in the semester in all passed courses (A+ to D Grade)/Total Credits registered in the semester excluding ECA/Audit courses =  $135/19$   
= 7.105

CGPA = Cumulative Points secured in all passed courses (A+ to D Grade)/Cumulative total credits, excluding ECA/Audit courses =  $135/19$   
= 7.105

Semester performance: SGPA = 7.105

Cumulative performance: CGPA = 7.105

### **EVEN Semester**

Course No.	Course Credits	Grade Awarded	Total Credits	Grade Point	Points Secured
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
XX151	5	B <sup>+</sup>	5	8	40
XX152	4	A	4	9	36

XX153	4	F	-	0	0
XX154	2	B	2	7	14
XX155	4	C	4	6	24
XX156	4	A <sup>+</sup>	4	10	40
XX157	-	S	-	-	-
XX158(AC)	2	AP/AF	-	-	-
XX159(ECA)	-	S/X	-	-	-
<b>Total</b>	<b>23</b>		<b>19</b>		<b>154</b>

Credits registered in the semester excluding ECA/Audit courses (total of column 2) = 23

Total credits earned in the semester excluding ECA/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 registered = 19 (past semesters) + 23 (this sem.) = 42

SGPA\* = Points secured in the semester in all passed courses (A+ to D Grade) / Total Credits registered in the semester excluding ECA/Audit courses = (154/23) = 6.695

CGPA\* = Cumulative Points secured in all passed courses (A+ to D Grade) / Cumulative total credits, excluding ECA/Audit courses = (135 + 154) / (19 + 23) = 6.881

Semester performance: Tentative SGPA\* = 6.695

Cumulative performance: Tentative CGPA\* = 6.881

**When a student gets the grade 'F' in any course during a semester, the SGPA and the CGPA from that semester onwards will be tentatively calculated [SGPA\* and CGPA\*] taking only 'zero point' for each such 'F' grade. After the 'F' grade(s) has/have been substituted by better grades during subsequent semester, the SGPA and the CGPA of all the semesters, starting from the earliest semester in which the 'F' grade has been updated, will be recomputed and recorded to take this change of grade into account.**

If the student (as mentioned in above example) registers the failed course in the Carry over and clears it with “B” grade, its grade sheet will be :

Carry over Exam:

Course No.	Course Credits	Grade Awarded	Total Credits	Grade Point	Points Secured
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
XX153	4	B→C	4	6	24

The revised grade sheet of even semester will now be recomputed as

EVEN Semester

Course No.	Course Credits	Grade Awarded	Total Credits	Grade Point	Points Secured
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
XX151	5	B <sup>+</sup>	5	8	40
XX152	4	A	4	9	36
XX153*	4	C	4	6	24
XX154	2	B	2	7	14
XX155	4	C	4	6	24
XX156	4	A <sup>+</sup>	4	10	40
XX157	-	S	-	-	-
XX158(AC)	2	AP/AF	-	-	-
XX159(ECA)	-	S/X	-	-	-
<b>Total</b>	<b>23</b>		<b>19</b>		<b>178</b>

\* Grade awarded in Carry over

Credits registered in the semester excluding ECA/Audit courses (total of column 2) = 23

Total credits earned in the semester excluding ECA/Audit courses (total of column 4) = 19

Points secured in this semester (total of column 6 for all passed courses) = 178

Cumulative points in all passed courses = 135 (past semesters) + 178 (this sem.) =  
313

Cumulative total credits registered = 19 (past semesters) + 23 (this sem.) = 42

SGPA = Points secured in the semester in all passed courses (A<sup>+</sup> to D Grade) / Total

Credits registered in the semester excluding ECA/Audit

courses = (178/23)

= 7.739

CGPA = Cumulative Points secured in all passed courses (A<sup>+</sup> to D Grade) / Cumulative

total credits, excluding ECA/Audit courses = (135 + 178) / (19 + 23)

= 7.452

Semester performance: SGPA = 7.739

Cumulative performance: CGPA = 7.452

### **18 Repeat Semester Registration for Student**

Each academic calendar will include odd & even semester and in case of exigencies, this facility is available to all students who had registered in the courses in the regular (odd & even) semesters and could not clear any of the subjects. They can repeat the semester as per schedule of the academic calendar.

### **19 GUIDELINES FOR REVALUATION OF ANSWER COPIES**

The University proposes a facility to the student to challenge the evaluation of answer copies of his/her major examination from odd semester of 2024-25 session onwards. It will be applicable to all the undergraduate programs conducted by the University. Here, "Revaluation" means Valuation of answer copies to be done by the external examiners.

#### **19.1 CHALLENGE REVALUATION OF ANSWER SCRIPT FOR UNDERGRADUATE STUDENTS**

(a) Revaluation of answer script will be carried out only for the latest semester whose result has been declared.

(b) All the students of UG appearing for the University major examinations are eligible to apply for Revaluation of answer scripts in all theory courses.

(c) All the interested students, who wishes to apply for Challenge Evaluation of Answer Scripts must apply for Challenge Evaluation to COE by paying the requisite fee within 10 working days

from the date of declaration of results by University. The requisite fee shall be Rs.5000/- per subject from odd semester of 2021-22 session, which can be modified in future by examination committee from time to time. The remuneration to each faculty member involved in challenge evaluation will be Rs.500/- per copy. Remuneration to the faculty may be modified by examination committee from time to time.

(d) A student cannot apply Challenge Evaluation of answer scripts in the subjects other than the theory subjects.

(e) After the last day of application for challenge evaluation, the exam section shall initiate the process of challenge evaluation as per the procedure detailed hereunder:

- The COE may finalize a panel of examiner of each subject in which challenge evaluation is to be conducted, in consultation with respective HODs.
- The COE shall take approval from Hon'ble vice chancellor of two faculty members for each subject.
- Each answer script will be reevaluated by two faculty members.
- After the reevaluation of each copy, average of marks given by two evaluators shall be taken into consideration for any comparison purpose.
- The student will be informed about the outcome of challenge/re evaluation of answer copies within two months of receipt of student's request.

### 19.2 AWARD OF MARKS AFTER REVALUATION:

> If the difference in original marks from average marks are less than 10% (i.e. less than  $\pm 5$  marks for major examination of 50 Max Marks) then marks of student will not be modified and the fee submitted by student will be forfeited (FF). Student's Fee will be forfeited for all cases where average marks is less than the original marks of the student.

> If the difference in original marks from average marks is greater than or equal to 10% (i.e. greater than or equal to  $\pm 5$  marks for major examination of 50 Max Marks) then the average marks will be awarded to the student. If average marks are larger by 10% or more, then the fee submitted by student will be returned as per fee refund policy framed by examination committee time to time.

> It is proposed that the Fee Refund (FR) should be done after deducting the remuneration paid to first and second valuator. Hence FR shall be Rs. 4000/-

Cases	Original Evaluated marks (A) (out of 50)	After revaluation		Average Marks of 1 <sup>st</sup> and 2 <sup>nd</sup> valuator (B)	Difference Between A & B	Final Marks awarded after challenge	Fee status
		First Valuator	Second Valuator				
Case-1	15	20	18	19	$(19-15) < 5$	15	FF



Case-2	15	20	22	21	$(21-15) > 5$	21	FR
Case-3	15	14	08	11	$(15-11) < 5$	15	FF
Case-4	15	12	08	10	$(15-10) \leq 5$	10	FF

• In the above table, only in one case, fee of student shall be returned. It can be seen that the student fee status (FR-status) is shown for case-2 where marks awarded to the student is more than his/her original marks by 10% or more. For rest of the cases, where student's average marks are either less than the original marks or variation (A-B) is less than 10%, fee of student has been forfeited.

**NOTE:** THE CHALLENGE EVALUATION MUST BE APPLIED WITH CAUTION AS THE MARKS OBTAINED AFTER THE CHALLENGE EVALUATION SHALL BE FINAL IRRESPECTIVE OF WHETHER THOSE MARKS ARE MORE OR LESS THAN THE ORIGINAL MARKS

**19.3 ELIGIBILITY OF TEACHERS FOR REVALUATION:** The faculty members who will be evaluating the answer copies during revaluation must possess at least five years of teaching experience and must be regular faculty of reputed Institute/University (preferably IIT/NIT/IIIT or Central /State University or Govt. Engg. College).

## 20 ACADEMIC CRITERIA FOR CONTINUATION

**20.1** For continuation of registration at any stage, student must satisfy criteria specified in the subsequent clause 20.2. In order to qualify for the award of the degree at the end of 8th semester, it is necessary to pass all the credits offered by the department and satisfy the criteria specified in clause 10.2.

**20.2** A student must register a minimum of 16 credits (excluding final year) in a semester which shall essentially include the pre-requisite courses. 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. 1<sup>st</sup> Year Students

They must earn minimum 16 credits of 1<sup>st</sup> year for promotion to 2<sup>nd</sup> year, failing which they will have to appear in odd/even semester carry over examinations to clear all the left-over required credits of 1<sup>st</sup> year.

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

They must earn minimum 32 credits in the 1<sup>st</sup> year and minimum 16 credits of 2<sup>nd</sup> year for promotion to 3<sup>rd</sup> year, failing which they will have to appear in odd/even semester carry over examinations to clear all the left-over required credits of 2<sup>nd</sup> year.

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

They must earn all credits in 1<sup>st</sup> year, 32 credits in the 2<sup>nd</sup> year, and 16 credits in the 3<sup>rd</sup> year for the promotion to 4<sup>th</sup> year, failing which they will have to appear in odd/even semester

carry over examinations to clear all the left-over required credits of 3<sup>rd</sup> year.

**Note:** The special carry over examination is conducted for only final year students after the result declaration. Moreover, those students who are not promoted as per clause 20.2 (a), (b), (c) they may be allowed to appear in special carry over examination.

**20.3** A student is considered to pass in a particular course if he/she secures A<sup>+</sup> to D grade in it. In case of F grade in a course in a semester then the student has to clear that course as detailed in clause no. 16 and continue as per **Clause 20.2**.

**20.4** A student can challenge evaluation of answer copies as per **Clause 19**.

## **21 AWARD OF DIVISION, RANK AND MEDALS**

**21.1** 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 seven years (six 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 fulfilment of requirements of **Clause 20.1**. 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 courses 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, b)) who qualify for the award of degree by securing D or above grades in all courses 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**.

**21.2** For the Award of **Ranks** for each branch of study and overall for the program, the CGPA secured in all semesters shall be considered and it is mandatory that such candidate should have passed all the courses by securing D or above grades in all the semesters in the first attempt in 4/3 year duration of program 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 program selected on the basis of CGPA in particular academic session.

**21.3** Following **Medals** will be awarded annually by the University to the passing out students identified as prescribed in **Clause 21.2**.

(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 program amongst the graduating students of all B.Tech. Courses as per the **Clause 21.2**.

**(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. program.

## 22 ATTENDANCE

**22.1** 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 UGS. The attendance calculated for the period between the date of commencement of classes and the last date for recording the cumulative attendance in all the registered courses (credits courses) in the semester must not be less than 75%.

**22.2** For those students who have **cumulative attendance** less than 75% but more than 60% in a semester on medical ground, if their medical leave is considered by the competent authority of the University for condonation of attendance then they are eligible for seeking the privilege of upgradation of the attendance record.

**22.3** A student is expected to attend all classes, laboratory, project, tour and tutorial sessions that are formally scheduled and a formal attendance will be taken in each such session. Those students who has participated in national/international sports/cultural/academic event approved by competent authority of the University, there may be instances such student is unable to join the scheduled academic activities. Therefore, a leave application duly recommended and forwarded by the student's HOD should be submitted in such cases at the earliest to office of the Dean of Student Affairs (DSA). For such students who have cumulative attendance less than 75% but more than 60% in a semester, and if their leave is considered for condonation of attendance then they are eligible for seeking the privilege of upgradation of the attendance record.

**22.4** 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 courses in which total attendance (Lecture, Tutorial & Practical) is equal to or more than 75%. Such students have to attend the remedial/make-up classes (to be eligible for appearing in the carry over examination) for thirty days arranged by the respective department and he/she will appear only those subjects in Carry over examination.

**22.5** Those students who have cumulative attendance less than 75% just before the minor test, he/she has to submit undertaking of the short attendance in the respective department and allowed to appear in minor test examination.

## 23 REGISTRATION AND ENROLMENT

**23.1**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 program. If a student does not register in a particular semester, her/his studentship is liable to be cancelled. Without registration, any academic activity (course/training/project etc) undergone by a student will not be counted towards the fulfillment of requirements of her/his degree.

**23.2** 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.

**23.3** 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 8** else his/her studentship is liable to be cancelled except for those availing provision of **Clause 24**.

**23.4** Students having any kind of outstanding dues to the University or hostel shall be permitted to register only after clearing the outstanding dues subject to provisions of **clause 23.3**.

**23.5** 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.

## **24 TEMPORARY DISCONTINUATIONS OF COURSE**

**24.1** 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, he/she shall apply through the HOD in advance and obtain a written order from the University permitting discontinuance.

**24.2** A candidate after temporary discontinuance may rejoin the course only at the commencement of the semester at which he/she discontinued, provided he/she pays the prescribed fees to the University 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 seven/six academic years for B.Tech./B.Tech. (Lateral).

## **25 UNFAIR MEANS**

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

## **26 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

- (a) registered and successfully completed all the academic requirements of program as prescribed in this Ordinances or as prescribed by the University from time to time.
- (b) successfully acquired the minimum required credits as specified in the curriculum corresponding to the branch of his/her study within the stipulated time as prescribed in this Ordinances or as prescribed by the University from time to time.
- (c) earned the specified credits in all the categories of courses.
- (d) completed online course requirements prescribed by the University.

- (e) completed the ECA courses requirements.
- (f) completed the Non-credited courses requirements.
- (g) has no dues to the University, Hostels, Libraries, NCC/NSS etc.
- (h) no disciplinary action is pending against him/her.

**B.TECH. DEGREE with MINOR DEGREE COURSE (MDC)**

Minor Degree (MD) from other Department and Micro Specializations (MS) within the Department can be awarded to the students if he/she fulfills the overall credit and course requirements for the aforesaid degree.

**27 MMMUT Multiple Entry- Multiple Exit (ME-ME) Policy for Undergraduate (B.Tech.) #**

Academic Level	ENTRY QUALIFICATION §	EXIT QUALIFICATION AND CREDITS required for the level	NATIONAL CREDIT LEVEL (NCrF)
UNDER-GRADUATE 1st year (B.Tech.)	<b>Class 12 or equivalent</b> at National Credit Level 4.0	<b>UG Certificate (Engg.)</b> Minimum 40 credit-hours followed by an exit 4 to 6 credits skills-enhancement course at National Credit Level 4.5.	<b>4.5</b>
UNDER-GRADUATE 2nd year (B.Tech.)	<b>UG Certificate (Engg.) or 3 Year Diploma</b> at National Credit Level 4.5	<b>UG Diploma (Engg.)</b> Minimum of 80 credit-hours followed by an exit 4 to 6 credits skills-enhancement course at National Credit Level 5.0	<b>5.0</b>
UNDER-GRADUATE 3rd year (B.Tech.)	<b>UG Diploma (Engg.)</b> at National Credit Level 5.0 with minimum 75 % marks or equivalent	<b>B. Voc. (Engg.)</b> Minimum of 120 credit-hours followed by an exit 4 to 6 credits skills-enhancement course at National Credit Level 5.5	<b>5.5</b>
GRADUATE 4th year (B.Tech.)	<b>B. Voc. (Engg.)</b> at National Credit Level 5.5 with minimum 75 % marks or equivalent	<b>B.Tech. (Engg.)</b> Must Complete at least 160 Credits. At National Credit Level 6.0	<b>6.0</b>

# As per Multiple Entry Multiple Exit options by UGC & AICTE given in National Credit Framework (NCrF) 2023.

§ At each entry, University has to identify the educational gaps/ skill gaps and suitable bridge courses may be offered.

**SKILLS-ENHANCEMENT COURSES FOR EXIT (BRANCH NAME): (FOR REFERENCE ONLY FOR ECE)**

2-Months internship for 6-Credits **OR** Two courses mentioned below of 4 to 6 credits.

**A. After First Year: UG Certificate (Engg.).**

The candidate should pass the following two additional courses (ITI Level) **OR** any two suitable skill-based courses to qualify for **UG Certificate (Engg.)**.

1. Consumer Electronic/Radio Engineering /Digital Electronics (Any one course)
2. Electronics Servicing and Maintenance

OR

Equivalent skills-enhancement courses from MOOC/SWAYAM.

**B. After Second Year: UG Diploma (Engg.).**

The candidate should pass the following two additional courses (Diploma Level) OR any two suitable skill-based courses to qualify for **UG Diploma (Engg.)**.

1. Data Communication and Networking
2. Electronics Servicing and Maintenance

OR

Equivalent skills-enhancement courses from MOOC/SWAYAM.

**C. After Third Year: B. Voc. (Engg.).**

The candidate should pass following additional courses (Degree Level) OR any two suitable skill-based courses to qualify for **B. Voc. (Engg.)**.

1. Advanced Mobile Communication
2. Cyber Security

OR

Equivalent skills-enhancement courses from MOOC/SWAYAM.

### **28 COURSE CO-ORDINATION COMMITTEE**

The Course Co-ordination Committee (CCC) shall comprise of all the teachers teaching a course. However, where less than three teachers are teaching the course, the HOD may nominate a three-member committee. The chairperson of the CCC shall be nominated by the HOD, before the beginning of the semester. The Course Coordination Committee for project/training based courses shall comprise of five faculty members nominated and chaired by the HOD.

The CCC shall have the following functions.

- a. To lay the guidelines for teaching and evaluating the courses including the design of practical's, well in advance of the starting of the semester.
- b. To coordinate the preparation of quizzes, assignments, test papers etc. for continuous assessment. Projects and training based courses shall be dealt similarly.
- c. Chairperson CCC shall set the Major exam question paper.
- d. Minor Question Paper setters may be appointed from amongst the members of the CCC.
- e. External Practical Examiners may be from the other departments of the University as nominated by Vice Chancellor.
- f. A question paper moderation committee may be formed out of the members of CCC chaired by the Chairperson, CCC.
- g. To consider the individual representation of the students about evaluation and take remedial action, if needed.

### **29 GRADE MODERATION COMMITTEE**

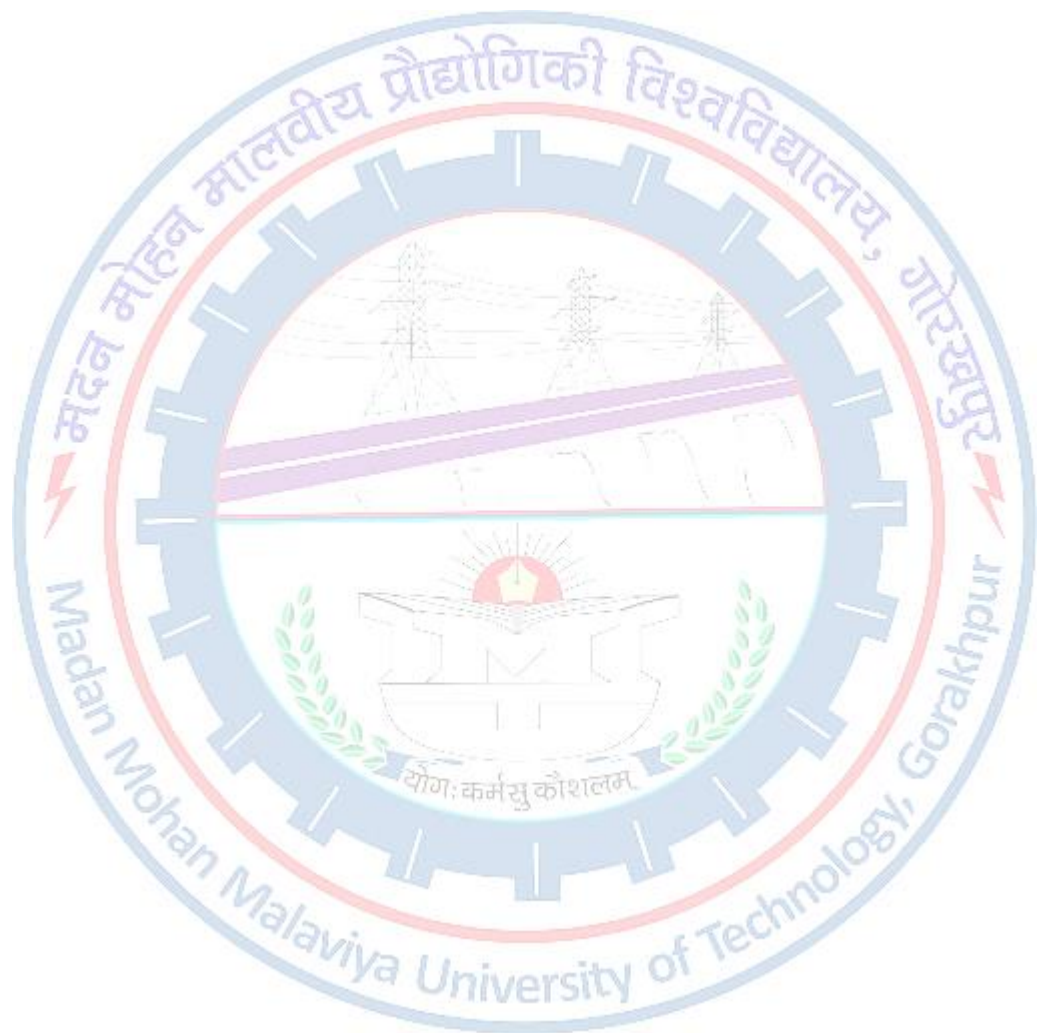
(i) The COE of the University will constitute the Grade Moderation Committee for all the Academic Courses under its purview. The COE or its nominee (Additional COE, Deputy Controller, or Joint Controller) shall be the Chairman of the committee and the concerned course coordinator chairperson along with the concerned HOD are the members of the committee. This committee shall be responsible for adherence to the guidelines for the award of grades.

(ii) The date of moderation shall be made a part of the Academic Calendar of the University.

### **30 POWER TO MODIFY**

Notwithstanding all that has been stated above, the Academic Council (AC) has the right to modify partly or completely the provisions of the above ordinances with the approval of the Board of Management(BOM). Under extreme exceptional circumstances arising out of certain

inconsistency in the ordinances 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.



### 31 CURRICULUM FOR B.Tech. PROGRAMS

There may be minor overall credit changes allowed as per the requirement of the specific branch under the fulfilment of overall minimum credit requirement as per provision of clause 10.2.

**DEPARTMENT OF (Name of department)**  
**MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY (MMMUT)**  
**GORAKHPUR-273 010, UP, INDIA**

#### SEMESTER WISE CREDIT STRUCTURE FOR B.TECH. (BRANCH NAME)

Category/Semesters	I	II	III	IV	V	VI	VII	VIII	Total
Basic Sciences & Maths (BSM)	8	8	0/4	4/0					20*
Humanities & Social Science (HSS)	4	4							08*
Humanities & Social Science Elective (HSSE)					4				04*
Management (M)						4			04*
Engineering Fundamentals (EF)	4	4	8/4	0/4					16*
Professional Skill (PS)	4	4							08*
Professional Core (PC)			12	12	12	12			48*
Professional Electives (PE)/ Open Electives (OE)				4-8		28-32			36*
Minor Project (P)						0	6		06*
Industrial Practice (IP) (in Industry)/ Major Project (MP) (In University)								10	10*
<b>Total Credit</b>	<b>20*</b>	<b>20*</b>	<b>20*</b>	<b>20- 24*</b>	<b>16*- 32*</b>	<b>16*- 32*</b>	<b>6- 30*</b>	<b>10- 30*</b>	<b>160*</b>
	<b>80-84*</b>				<b>76-80*</b>				
<b>Total Courses Offered</b>	<b>05*</b>	<b>05*</b>	<b>05*</b>	<b>05*- 06*</b>	<b>04*- 08*</b>	<b>04*- 08*</b>	<b>00- 06*</b>	<b>00- 05*</b>	<b>36*</b>

*\*Minor variation is allowed as per need of the respective disciplines.*

#### First Year, Semester I

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM		MATH-1	3	1	0	4
2.	BSM		PHY* (Group-1)/CHEM(Group-2) #	3	0	2	4
3.	EF		EF-1	3	0/1	2/0	4
4.	PS		PS-1	2	0	4	4
5.	HSS		UHV(Group-1)/ TW&PC(Group-2) #	3/2	1/0	0/2	4



			<b>Total</b>	<b>13-14</b>	<b>1-3</b>	<b>6-10</b>	<b>20</b>
6.	ECA-I		Induction Program	-	-	-	0

# Group-1: CSE, IT, CH, CE; Group-2: ECE, ECE(IOT), ME, EE.

\*The department will choose any one of the courses from the pool of the physics courses

#### First Year, Semester II

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM		MATH-2	3	1	0	4
2.	BSM		CHEM (Group-1)/PHY* (Group-2)	3	0	2	4
3.	EF		EF-2	3	1/0	0/2	4
4.	PS		PS-2	2	0	4	4
5.	HSS		TW&PC (Group-1)/UHV (Group-2)	3/2	0/1	2/0	4
			<b>Total</b>	<b>13-14</b>	<b>1-3</b>	<b>6-10</b>	<b>20</b>
6.	VAC/AC		AC-1 (Design Thinking)	0	0	2	0
7.	ECA-II			-	-	-	0

#### Second Year, Semester III

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	BSM		EF-3(Group-1)/MATH-3/Biology for Engineers (Group-2)	3	1	0	4
2.	EF		EF-4	3	1/0	0/2	4
3.	PC		PC-1	3	1/0	0/2	4
4.	PC		PC-2	3	1/0	0/2	4
5.	PC		PC-3	3	1/0	0/2	4
			<b>Total</b>	<b>15</b>	<b>1-5</b>	<b>0-8</b>	<b>20</b>
6.	VAC/AC		VAC-1 (Constitution of India) Group-1/ VAC-2: Group-2	2	0	0	0
7.	ECA-III			-	-	-	0

#### Second Year, Semester IV

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	EF		MATH-3 /Biology for Engineers (Group-1)//EF-3 (Group-2)	3	1/0	0/2	4
2.	PC		PC-4	3	1/0	0/2	4
3.	PC		PC-5	3	1/0	0/2	4
4.	PC		PC-6	3	1/0	0/2	4
Student may choose either PE-1 or PE-2 or Both PE-1 and PE-2.							

5.	PE		PE-1	3	1/0	0/2	4
6.	PE		PE-2	3	1/0	0/2	4
			<b>Total</b>	<b>15-18</b>	<b>0-6</b>	<b>0-12</b>	<b>20-24</b>
7.	VAC/AC		VAC-2 (Group-1)/ VAC-1 (Constitution of India) (Group-2)	2	0	0	0
8.	ECA-IV			-	-	-	0

### Third Year, Semester V

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	PC		PC-7	3	1/0	0/2	4
2.	PC		PC-8	3	1/0	0/2	4
3.	PC		PC-9	3	1/0	0/2	4
4.	HSSE		HSSE(Group-1)/ Management (Group-2)	3	1	0	4
Student may choose maximum up to 04 courses from the list of PE category courses (PE-1 to PE-9).							
5.	PE		PE-1	3	1/0	0/2	4
6.	PE		PE-2	3	1/0	0/2	4
7.	PE		PE-3	3	1/0	0/2	4
8.	PE		PE-4	3	1/0	0/2	4
9.	PE		PE-5	3	1/0	0/2	4
10.	PE		PE-6	3	1/0	0/2	4
11.	PE		PE-7	3	1/0	0/2	4
12.	PE		PE-8	3	1/0	0/2	4
13.	PE		PE-9	3	1/0	0/2	4
			<b>Total</b>	<b>12-24</b>	<b>1-8</b>	<b>0-16</b>	<b>16-32</b>
14.	ECA-V			-	-	-	0

### Third Year, Semester VI

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	PC		PC-10	3	1/0	0/2	4
2.	PC		PC-11	3	1/0	0/2	4
3.	PC		PC-12	3	1/0	0/2	4
4.	M		Management (Group-1)/ HSSE (Group-2)	3	1	0	4
5.	P		Minor Project-1	0	0	0	0
Student may choose maximum up to 04 courses from the list of PE category courses (PE-1 to PE-9).							
6.	PE		PE-1	3	1/0	0/2	4
7.	PE		PE-2	3	1/0	0/2	4
8.	PE		PE-3	3	1/0	0/2	4
9.	PE		PE-4	3	1/0	0/2	4

10.	PE		PE-5	3	1/0	0/2	4
11.	PE		PE-6	3	1/0	0/2	4
12.	PE		PE-7	3	1/0	0/2	4
13.	PE		PE-8	3	1/0	0/2	4
14.	PE		PE-9	3	1/0	0/2	4
			<b>Total</b>	<b>12-24</b>	<b>1-8</b>	<b>0-16</b>	<b>16-32</b>
15.	ECA-VI			-	-	-	0

#### Final Year, Semester VII

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	P		Minor Project-2	0	0	12	6
	Student may choose maximum up to 06 courses from the list of PE category courses (PE-1 to PE-9).						
2.	PE		PE-1	3	1/0	0/2	4
3.	PE		PE-2	3	1/0	0/2	4
4.	PE		PE-3	3	1/0	0/2	4
5.	PE		PE-4	3	1/0	0/2	4
6.	PE		PE-5	3	1/0	0/2	4
7.	PE		PE-6	3	1/0	0/2	4
8.	PE		PE-7	3	1/0	0/2	4
9.	PE		PE-8	3	1/0	0/2	4
10.	PE		PE-9	3	1/0	0/2	4
			<b>Total</b>	<b>0-18</b>	<b>0-6</b>	<b>12-30</b>	<b>6-30</b>
11.	ECA-VII			-	-	-	0

#### Final Year, Semester VIII

S. N.	Category	Paper Code	Subject	L	T	P	Credit
1.	IP / MP		Industrial Practice (IP) (in Industry)/ Major Project (MP) (In University)	0	0	20	10
	Student may choose maximum up to 05 courses from the list of PE category courses (PE-1 to PE-9).						
2.	PE		PE-1	3	1/0	0/2	4
3.	PE		PE-2	3	1/0	0/2	4
4.	PE		PE-3	3	1/0	0/2	4
5.	PE		PE-4	3	1/0	0/2	4
6.	PE		PE-5	3	1/0	0/2	4
7.	PE		PE-6	3	1/0	0/2	4
8.	PE		PE-7	3	1/0	0/2	4
9.	PE		PE-8	3	1/0	0/2	4
10.	PE		PE-9	3	1/0	0/2	4
			<b>Total</b>	<b>0-15</b>	<b>0-5</b>	<b>20-30</b>	<b>10-30</b>

