

Rashtrasant Tukdoji Maharaj Nagpur University

Direction No.25 of 2012

Direction issued under section 14(8) of the Maharashtra Universities Act, 1994, relating to B.E. 1st Year (Semester Pattern) for the award of Degree of Bachelor of Engineering Full Time in the Faculty of Engineering and Technology.

Whereas, the Maharashtra Universities Act No. XXXV of 1994 has come into force with effect from 22nd July, 1994.

AND

Whereas, the amendment to the said Act came to be effected from 12th September, 2006.

AND

Whereas, the Dean and the Faculty of Engineering and Technology has concurred with the recommendations of the Board of Studies in Applied Science and Humanities, Mechanical Engineering, Civil Engineering and Electrical Engineering in the Faculty of Engineering and Technology on 30th January 2012, 18th February 2012.

AND

Whereas, the Board of Studies in Applied Science and Humanities, Mechanical Engineering, Civil Engineering and Electrical Engineering in the Faculty of Engineering and Technology at its meeting held on 30th April 2012, have decided to make amendment related to First year B.E. in semester pattern for award of degree of Bachelor of Engineering of Full time in the Faculty of Engineering and Technology.

AND

Whereas, the Academic Council in its meeting held on 23rd February, 2012 vide item No. 323 and sub-committee constituted in the meeting of joint Board of Studies in Applied Science and Humanities, Mechanical Engineering, Civil Engineering and Electrical Engineering in the Faculty of Engineering and Technology at its meeting held on 30th January, 2012 and Faculty in its meeting held on 18th February, 2012 have considered and approved the scheme of examination of semester pattern with credit based system for B.E. First year in Faculty of Engineering & Technology and absorption scheme to be implemented from the academic session 2012-13.

AND

Whereas, the Management Council in its meeting held on 11th May,, 2012 vide item No. 101 has considered and approved the scheme of examination of semester pattern with credit based system for B.E. First year in Faculty of Engineering & Technology and absorption scheme to be implemented from the academic session 2012-13.

AND

Whereas, the recommendations made by the Board of Studies in Applied Science and Humanities, Mechanical Engineering, Civil Engineering and Electrical Engineering as approved by the Vice Chancellor pertains to Examination leading to the B.E. First Year (Semester-I and Semester-II) for award of degree of Bachelor of Engineering in the Faculty of Engineering and Technology.

AND

Whereas, it is expedient to provide an Ordinance for the purposes of describing examination in the semester patten leading to the First and Second Semester for award of Degree of Bachelor of Engineering in the Faculty of Engineering and Technology, indicating there in the syllabus and scheme of examination including absorption scheme and award of Grades.

AND

Whereas, an Ordinance is in existence for the award of the degree with yearly pattern scheme and the same is now changed in to semester pattern scheme and this could be done only by way of making amendment to the concerned ordinance and seems making of amendment to the concerned ordinance is time consuming process and it is not possible to make amendment in the time limit.

Now, therefore, I , Dr. V.S. Sapkal, Vice Chancellor of Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur in exercise of powers vested in me under section 14(8) of the Maharashtra Universities Act, 1994, do hereby issued the following Direction pertaining to the amendment as made for semester-I and Semester – II for award of Bachelor of Engineering, in the Faculty of Engineering and Technology.

1. This Direction shall be called "Direction regarding Semester Pattern Scheme and Examination leading to B.E. First Year(Semester I and Semester II) to the Degree of Bachelor of Engineering in the Faculty of Engineering and Technology Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur.

- Subject to the compliance with the provisions of this Direction and any other Ordinance which is in force from time to time shall be applicable
- The Scheme of Examination for Semester-I and Semester – II shall be as mentioned in the Table below –

**SCHEME OF EXAMINATION FOR
B.E. FIRST YEAR (All Branches of Engineering)
(SEMESTER – I)**

Sr. No.	Sub. Code	Subject	Work load				Credit				Marks				Total Marks
			L	P	T	Total	L	P	T	Total	Theory		Practical		
											Sessi- onal	Univ.	Sessi- onal	Univ.	
1.	BESI-1	Applied Mathematics – I	4	-	1	5	4	-	1	5	20	80	-	-	100
2.	BESI-2	Engineering Physics	2	2	1	5	2	1	1	4	10	40	25	25	100
3.	BESI-3	Engineering Chemistry	2	2	1	5	2	1	1	4	10	40	25	25	100
4.	BESI-4	Basic Electrical Engineering	2	2	1	5	2	1	1	4	10	40	25	25	100
5.	BESI-5	Basic Civil Engineering	2	-	1	3	2	-	1	3	10	40	-	-	50
6.	BESI-6	Engineering Graphics – I	2	2	1	5	2	1	1	4	10	40	25	25	100
7.	BESI-7	Communication Skills	-	2	-	2	-	2	-	2	-	-	25	25	50
8.	BESI-8	Computational Skills	-	2	-	2	-	2	-	2	-	-	25	-	25
Total			14	12	06	32	14	08	06	28	70	280	150	125	625

Note:

- Communication Skill shall be taught by a qualified and competent teaching faculty and shall be assigned to the Board of Studies of Applied Sciences and Humanities.
- Computational Skill shall be taught by a qualified and competent teaching faculty and shall be assigned to the Board of Studies of CS/CT/IT/CSE.
- The students of B.E. Second Year Direct Admission (Diploma Holder) old pattern should be exempted from Applied Mathematics – I.
- The Students of B.E. Part time (Yearly Pattern) and B.E Regular (Yearly Pattern) should also be exempted from Applied Mathematics.

**SCHEME OF EXAMINATION FOR
B.E. FIRST YEAR (All Branches of Engineering)
(SEMESTER – II)**

Sr. No.	Sub. Code	Subject	Work load				Credit				Marks				
			L	P	T	Total	L	P	T	Total	Theory		Practical		Total Marks
											Sessi-onal	Univ.	Sessi-onal	Univ.	
1.	BESII-1	Applied Mathematics – II	4	-	1	5	4	-	1	5	20	80	-	-	100
2.	BESII-2	Advanced Physics	2	2	1	5	2	1	1	4	10	40	25	25	100
3.	BESII-3	Materials Chemistry	2	2	1	5	2	1	1	4	10	40	25	25	100
4.	BESII-4	Engineering Mechanics	2	2	1	5	2	1	1	4	10	40	25	25	100
5.	BESII-5	Advanced Electrical Engineering	2	-	1	3	2	-	1	3	10	40	-	-	50
6.	BESII-6	Engineering Graphics – II	-	2	1	3	-	2	1	3	-	-	25	25	50
7.	BESII-7	Workshop	-	2	-	2	-	2	-	2	-	-	25	25	50
8.	BESII-8	Ethical Sciences	2	-	-	2	2	-	-	2	50	-	-	-	50
Total			14	10	06	30	14	07	06	27	110	240	125	125	600

Note:

1. Ethical Sciences shall be taught by a qualified and competent teaching faculty from Social Sciences and shall be assigned to the Board of Studies in Applied Sciences and Humanities.
2. The students of B.E. Second Year Direct Admission (Diploma Holder) old pattern should be exempted from Applied Mathematics - II.
3. The Students of B.E. Part time (Yearly Pattern) and B.E Regular (Yearly Pattern) should also be exempted from Applied Mathematics.
4. Absorption Scheme for yearly to semester pattern for B.E. First Year all courses shall be as mentioned in the table below :

Scheme of Absorption for Yearly to Semester Pattern of First Year B.E. Engineering

(All Courses)

As Per RTM Nagpur University Yearly Pattern Scheme				As Per RTM Nagpur University Semester Pattern Scheme			
Semester – I							
Sr. No.	Subject Code	Subject	Th / Pr		Subject Code	Subject	Th / Pr
1	CHUEMTN-1	Engineering Mathematics – I	Theory		BESI-1	Applied Mathematics – I	Theory
2	CHUEMTN-3T	Applied Physics	Theory		BESI-2T	Engineering Physics	Theory
3	CHUEMTN-3P	Applied Physics Laboratory	Practical		BESI-2P	Engineering Physics laboratory	Practical
4	CHUEMTN-4T	Applied Chemistry	Theory		BESI-3T	Engineering Chemistry	Theory
5	CHUEMTN-4P	Applied Chemistry Laboratory	Practical		BESI-3P	Engineering Chemistry laboratory	Practical
6	CHUEMTN-9T	Electrical Engineering	Theory		BESI-4T	Basic Electrical Engineering	Theory
7	CHUEMTN-9P	Electrical Engineering Laboratory	Practical		BESI-4P	Basic Electrical Engineering laboratory	Practical
8	CHUEMTN-5	English	Theory		BESI-7	Communication Skill Laboratory	Practical
9					BESI-8	Computational skill	Practical
10					BESI-5	Basics of Civil Engineering	Theory
11	CHUEMTN-8T	Engineering Drawing	Theory		BESI-6T	Engineering Graphics-I	Theory
12	CHUEMTN-8P	Engineering Drawing Laboratory	Practical		BESI-6P	Engineering Graphics-I	Practical
Semester - II							
Sr. No.	Subject Code	Subject	Th / Pr		Subject Code	Subject	Th / Pr
1	CHUEMTN-2	Engineering Mathematics – II	Theory		BESII-1	Applied Mathematics – II	Theory
2	CHUEMTN-3T	Applied Physics	Theory		BESII-2T	Advanced Physics	Theory
3	CHUEMTN-3P	Applied Physics Laboratory	Practical		BESII-2P	Advanced Physics Laboratory	Practical
4	CHUEMTN-4T	Applied Chemistry	Theory		BESII-3T	Materials Chemistry	Theory
5	CHUEMTN-4P	Applied Chemistry Laboratory	Practical		BESII-3P	Materials Chemistry Laboratory	Practical
6	CHUEMTN-7T	Engineering Mechanics	Theory		BESII-4T	Engineering Mechanics	Theory
7	CHUEMTN-7P	Engineering Mechanics Laboratory	Practical		BESII-4P	Engineering Mechanics Laboratory	Practical
8	CHUEMTN-6	Social Science	Theory			Ethical Sciences	Theory
9					BESII-8	Advanced Electrical Engineering	Theory
10	CHUEMTN-10	Workshop	Practical		BESII-7	Workshop	Practical
11	CHUEMTN-8P	Engineering Drawing Laboratory	Practical		BESI-6P	Engineering Graphics-I	Practical

The following note will be applicable after implementation of semester pattern.

Note-a) The students of B.E.II year direct admission (Diploma Holder) of old pattern should be exempted from Applied Mathematics - I and II.

1. **b)** The Students of B.E. Part time (Yearly Pattern) and B.E Regular(Yearly Pattern) should also be exempted from Applied Mathematics.

4. The A.T.K.T. Rules shall be same as per the existing provisions in which First Year B.E. shall be read as First and Second Semester.

5. (i) The Scope of subject shall be as indicated in the syllabus
(ii) The medium of instruction and examination shall be English

6. The provisions of Ordinance no. 7(a) relating to "condonation of deficiency of marks" for passing an examination and of Ordinance no. 10 as amended up-to-date relating to "exemptions and compartments" shall apply to the examination under this Ordinance.

7. An Examinee who does not pass or who fails to present himself/ herself for the examination shall be eligible for readmission to the same examination, on payment of a fresh fee and such other fees as may be prescribed from time to time. However, readmission to semester should be allowed only when a regular sessions is running for a particular semester.

8. The computation of Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) of an examinee shall be implemented progressively as from the academic session 2012-13 onwards.

The marks will be allotted in all examinations which will include college assessment marks and the total marks for each Theory / Practical shall be converted into Grades as per Table II.

SGPA shall be calculated based on Grade Points corresponding to percentage of marks as given in Table II and the Credits allotted to respective Theory / Practical shown in the scheme for respective semester.

9. SGPA shall be computed for every semester and CGPA shall be computed only in VIII semester. The CGPA of VIII semester shall be calculated based on SGPA of VII and SGPA of VIII semester as per following computation :-

$$SGPA = \frac{C1 \times G1 + C2 \times G2 + \dots + Cn \times Gn}{C1 + C2 + \dots + Cn}$$

Where C1 = Credit of individual Theory / Practical

G1 = Corresponding Grade Point obtained in the respective Theory / Practical.

$$CGPA = \frac{(SGPA)_{VII} \times (Cr)_{VII} + (SGPA)_{VIII} \times (Cr)_{VIII}}{(Cr)_{VII} + (Cr)_{VIII}}$$

Where (SGPA)_{VII} = SGPA of VII Semester

(Cr)_{VII} = Total Credits for VII Semester

(SGPA)_{VIII} = SGPA of VIII Semester

(Cr)_{VIII} = Total Credits for VIII Semester

CGPA equal to 6.00 and above shall be considered as equivalent to First Class which shall be mentioned on Grade Card of VIII Semester as a foot note.

TABLE II

THEORY

Grade	Percentage of Marks	Grade Points
AA	80 ≤ Marks ≤ 100	10
AB	70 ≤ Marks < 80	9
BB	60 ≤ Marks < 70	8
BC	55 ≤ Marks < 60	7
CC	50 ≤ Marks < 55	6
CD	45 ≤ Marks < 50	5
DD	40 ≤ Marks < 45	4
FF	00 ≤ Marks < 40	0
ZZ	Absent in Examination	—

PRACTICAL

Grade	Percentage of Marks	Grade Points
AA	85 ≤ Marks ≤ 100	10
AB	80 ≤ Marks < 85	9
BB	75 ≤ Marks < 80	8
BC	70 ≤ Marks < 75	7
CC	65 ≤ Marks < 70	6
CD	60 ≤ Marks < 65	5
DD	50 ≤ Marks < 60	4
FF	00 ≤ Marks < 50	0
ZZ	Absent in Examination	—

10. As soon as possible, after the examination the Board of Examinations shall publish a list of successful examinees.
11. I, further direct that the aforesaid Direction shall come into force from the date of issuance and shall remain in force till the relevant Ordinance comes into being in accordance with the provisions of Maharashtra Universities Act, 1994 and the relevant provisions published by this Direction shall be physically repealed from the existing Ordinance.

Nagpur

Date: 22/6/2012

Sd/-
(Dr.V.S. Sapkal)
Vice Chancellor

