

# SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR – 440013

An Autonomous College affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, Maharashtra (INDIA)

# POST GRADUATE ORDINANCES / REGULATIONS

# 2023 - 2024



Shri Ramdeobaba College of Engineering and Management, Nagpur

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### 1. Introduction

#### 1.1. Preamble

Shri Ramdeobaba College of Engineering and Management (RCOEM), situated in the heart of Nagpur city, was established in 1984 by Shri Ramdeobaba Sarvajanik Samiti, a trust which has been involved in community service for over four decades. RCOEM has established a strong foundation in technical education in Central India. Journey of a student in this institute has always involved comprehensive knowledge building through practical skills, technical knowledge and personality development, which gives them a head start in their career. The institute on an average annually admits around 870 candidates for UG programmes, around 336 candidates for PG programmes and 60 candidates for Integrated Programme in Management.

The curriculum provides broad knowledge, builds a thorough, professional, life long process of learning and exploring. At undergraduate level, a student needs to do compulsory foundation courses in the areas of basic sciences, humanities, social sciences and engineering apart from departmental requirements. Departmental courses (core and electives) constitute minimum 50% of the total curriculum. Further, students have to undertake electives including interdisciplinary ones to develop broad specialized and inter-disciplinary knowledge. At the PG level, students are encouraged to look beyond their area of specialization to broaden their horizons through a wide variety of courses and electives.

The Institute follows a credit based semester system for its academic programmes with English as the medium of instruction. An academic year runs from July through June next year and is comprised of two semesters. Typically, the 1st semester (Odd Semester) starts in July and ends in December; the 2nd Semester (Even Semester) starts in January and ends in June.



# 1.2. Departments

The various Departments, Board of Studies and their two-letter codes are given below;

S.No.	Name of Department / Board of studies	Department Code
1	Civil Engineering	CE
2	Computer Science and Engineering	CS
3	Electrical Engineering	EE
4	Electronics and Communication Engineering	EC
5	Electronics Design Technology	ED
6	Electronics Engineering	EN
7	Industrial Engineering	IN
8	Information Technology	IT
9	Mechanical Engineering	ME
10	Management Technology	MB
11	Computer Applications	MC
12	Mathematics	MA
13	Physics	PH
14	Chemistry	СН
15	Humanities	HU
16	Physical Education	PE
17	Board of Interdisciplinary Studies	ID
18	Computer Science and Engineering (Data Science)	CD
19	Computer Science and Engineering (A I & M L)	CA
20	Computer Science and Engineering (Cyber Security)	СС
21	Biomedical Engineering	ВМ
22	Electronics and Computer Science	ES

#### 1.3. Programmes Offered

RCOEM Nagpur offers academic programmes namely Engineering at UG and PG levels, MBA, MCA, and MBA (Integrated). In undergraduate programmes and in MBA (Integrated), students are admitted after 10+2 schooling while for all postgraduate programmes, students are admitted after they have obtained at least a college level Bachelor's degree. Admission to all these programmes are based on the eligibility criteria laid down by the competent authority.



#### **1.3.1. Under Graduate Programmes:**

#### A. Bachelor of Technology : (B. Tech.)

Sr. No.	Department	Programme Title	Programme Code	Eligibility for admission
1	Civil Engineering	B. Tech. ( Civil Engineering )	CEU	
2	Computer Science and Engineering	B. Tech. (Computer Science and Engineering)	CSU	Eligibility
3	Electrical Engineering	B. Tech. (Electrical Engineering)	EEU	Criteria as
4	Electronics and Communication Engineering	B. Tech. (Electronics and Communication Engg.)	ECU	laid down by the
5	Electronics Design Technology	B. Tech. (Electronics Design Technology)	EDU	competent
6	Electronics Engineering	B. Tech. (Electronics Engineering)	ENU	authority from time
7	Industrial Engineering	B. Tech. (Industrial Engineering)	INU	to time
8	Information Technology	B. Tech. (Information Technology)	ITU	
9	Mechanical Engineering	B. Tech. (Mechanical Engineering)	MEU	
10	Computer Science and Engineering (Data Science)	B. Tech. Computer Science and Engineering (Data Science)	CDU	
11	Computer Science and Engineering (A I & M L)	B. Tech. Computer Science and Engineering (A I & M L)	CAU	
12	Computer Science and Engineering (Cyber Security)	B. Tech. Computer Science and Engineering (Cyber Security)	CCU	
13	Biomedical Engineering	B. Tech. Biomedical Engineering (Electronics Engineering)	BMU	
14	Electronics and Computer Science	B. Tech. (Electronics and Computer Science)	ECS	

#### **1.3.2. Post Graduate Programmes**

#### A. Masters:

S. No.	Department	Programme Title	Programme Code	Eligibility for admission
1	Civil Engineering	M. Tech.(Geotechnical Engineering) (Part time)	CEG	
2	Civil Engineering	M. Tech. (Structural Engineering)	CES	Eligibility
3	Electronics Engineering	M. Tech.(Very Large Scale Integration Design)	env	Criteria as laid down
4	Industrial Engineering	M. Tech.(Industrial Engineering)	IND	by the
5	Electrical Engineering	M. Tech (Power Electronics & Power System)	EEP	competent
6	Computer Science and Engineering	M. Tech (Computer Science & Engineering)	CSE	authority from time
7	Mechanical Engineering	M. Tech (Robotics & Automation)	RAA	to time
8	Computer Applications	MCA	MCA	
9	Management Technology	MBA	MBA	

#### **1.3.3. Integrated Programme in Management**

Sr. No.	Department	Programme Title	Programme Code	Eligibility for admission				
1	Management Technology	MBA (Integrated)	MBI	Eligibility Criteria as laid down by the competent authority from time to time				



#### 2. ORDINANCES FOR THE U. G. PROGRAMMES 2021

The Board of Management of the Institute prescribes the following ordinances in respect of the different academic undergraduate programmes at Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur- 440013 on the recommendation of the Academic Council. The details in respect of the ordinances issued for UG Programmes are as follows.

Short Title and Commencement	(i)	These ordinances shall be hereafter called as the Ordinances for the Undergraduate (UG) Programmes of RCOEM.
	(ii)	These ordinances shall come into force with effect from the date of its approval by the Board of Management.
Definitions		Unless the context requires otherwise;
	(i)	<b>"Government"</b> shall mean the Government of Maharashtra/ Government of India as may be applicable.
	(ii)	"DTE" shall mean Director of Technical Education, Government of Maharashtra.
	(iii)	"University" shall mean Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
	(iv)	<b>"Regulating Authority"</b> shall mean any regulatory or controlling body for the Technical Education in India.
	(v)	"UGC" shall mean University Grants Commission, Government of India, New Delhi.
	(vi)	"AICTE" shall mean the All India Council for Technical Education, New Delhi.
	(vii)	<b>"Institute"</b> shall mean Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur 440013.
	(viii)	<b>"Board"</b> shall mean the Board of Management of the Institute constituted as per the XI plan guidelines of UGC for autonomous colleges read with Direction no. 4/1999 of the University.
	(ix)	"Principal" shall mean the Principal of the Institute.
	(x)	"Vice-Chancellor" shall mean the Vice-Chancellor of the University.
	(xi)	<b>"APEC"</b> shall mean the Institute level Academic Programme Evaluation Committee formed by the Principal as and when required. If any academic program is to be evaluated based on factors like importance, academic content, industrial significance, financial viability, sustainability etc., the decision of this body must be taken into consideration.
	(xii)	<b>"Finance Committee"</b> shall mean the Finance committee of the Institute constituted as per the guidelines of UGC for autonomous colleges.
	(xiii)	<b>"BOS"</b> shall mean the Board of Studies of the department, constituted as per the Guidelines of UGC for autonomous colleges.
	(xiv)	<b>"Degree"</b> shall mean the Bachelor of Engineering (B. E.) or Master of Technology (M. Tech.) Master of Business Administration (MBA), Master of Computer Applications (MCA) and other degrees of the Institute as may be approved by the Board/University/UGC/Government.
	(xv)	"Applicant" shall mean an individual who applies for admission to any PG programme of the Institute.



# Post Graduate Ordinance / Regulations 2023-2024

(xvi)	<b>"Student"</b> shall mean a student registered for PG programme for studies leading to any degree course offered by the Institute and sought final admission to the degree programme.
(xvii	<b>"Direct Admission Student"</b> shall mean a student who is admitted directly to second year of the B.E. degree program after completion of the appropriate Diploma Course and registered for undergraduate program for full time study leading to the respective B.E. degree.
(xvii	"Course" shall mean a curricular component identified by a designated number and title.
(xix)	"Programme" Programme shall mean the stream in which the degree is awarded.
(xx)	<b>"Scheme of Teaching and Examination"</b> shall mean the scheme of teaching and examination for a programme of study as approved by the Academic Council.
(xxi)	<b>"Course Coordinator"</b> shall mean a faculty member who shall have full responsibility for the course, coordinating the work of other faculty member(s) involved in that course, including examinations and the award of grades.
(xxii	<b>"Departmental Faculty Board (DFB)"</b> shall mean the committee of the faculty members involved in teaching a course or a group of courses of technically relevant subjects.
(xxii	<b>"Grade Moderation Committee"</b> shall mean the committee appointed by the Academic Council to moderate grades awarded by the examiner, if required.
(xxiv	<b>"SGPA"</b> shall mean the Semester Grade Point Average.
(xxv	"CGPA" shall mean the Cumulative Grade Point Average.
(xxvi	"Academic Council" shall mean the Academic Council constituted as per the XI plan guidelines of UGC for autonomous colleges read with Direction no. 4/1999 of the University.
(xxvi	<b>"EXC"</b> shall mean Examination committee constituted as per the Direction No. 4/1999 of the University for autonomous colleges.
(xxvii	<b>"COE"</b> shall mean the Controller of Examinations appointed as per the Guidelines of UGC for autonomous colleges.
(xxix	"ISV" shall mean In-charge of Spot Valuation, appointed by the Principal.
(xxx	"OIC" shall mean Officer In-charge of the End Semester Examination.
(xxx)	"DEC" shall mean the Departmental Examination Committee.
(xxxi	) <b>"Guide"</b> shall mean a person who is qualified to supervise a project / dissertation work of students and is approved by the Academic Council.
(xxxi	i) "RCC" shall mean Departmental Research Coordination Committee.
(xxxi	"GRC" shall mean Grievance Redressal Committee formed by the Academic Council.
(xxxv	) <b>"Competent Authority"</b> shall mean the Board of Management / Academic Council of the Institute/ University/Government/UGC/Regulating Authority as the case may be.
(xxxv	i) <b>"Equivalence Committee"</b> shall mean the Equivalence Committee appointed by the Academic Council.
(xxxv	i) <b>"APAC"</b> shall mean Academic Performance Evaluation Committee.

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	(xxxviii)	"DAPAC" shall mean Departmental Academic Performance Advisory Committee'.
Ordinances	(1)	The Institute shall offer UG programmes as the Board / University / Government may approve on the recommendation of the Academic Council either on its own or on the initiative of a Department and / or on the direction of the Board / Government.
		<i>Provided</i> that an interdisciplinary programme may be proposed by a Department or by a committee appointed by the Principal for the consideration of the Academic Council and the Board / Government.
	(2)	The procedure for starting a new programme / temporarily suspending a programme / phasing out a programme shall be as per the guidelines laid down by the competent authority.
	(3)	The minimum qualifications and procedure for admission to the first year UG programmes as well as direct second year admission to UG programme shall be as per the norms prescribed.
	(4)	A student shall be required to earn minimum credits through various academic courses of a curriculum as provided in the regulations and scheme given in Annexure-I
	(5)	The award of the UG degree to an eligible candidate shall be made in accordance with the procedure laid down in the regulations. A student shall have to complete all the requirements for the award of the degree within such period as may be specified in the regulations, including those credits earned at such other institutions as have been recognized by the Institute for this purpose.
	(6)	The date of initial registration for the programme shall normally be the date, on which the student formally registers i.e. takes final admission for the first time. This date shall be considered as the date of joining the programme for all intents and purposes.
	(7)	A student shall be required to attend every lecture, tutorial and practical class. However, for late registration, sickness or other such exigencies, absence may be allowed as provided in the regulations.
	(8)	A student may be granted such scholarship / assistantship / stipend, etc. and awarded medals as may be specified in the regulations or in accordance with the directions of the Government and / or the decision of the Board from time to time. The overall topper(s) amongst all branches shall not be declared however on the basis of CGPA branch toppers may be declared as per norms.
	(9)	The procedure for the withdrawal from an UG programme, rejoining the programme, award of grades and SGPA / CGPA, the examination and all such matters as may be connected with the running of UG programmes shall be as specified in the regulations.



(10)	A student admitted to the UG programme shall abide by the code of conduct for students issued by the Institute from time to time. This code of conduct shall deal with the discipline of the students in the hostels, departments, the Institute premises and outside. It may also deal with such other matters as are considered necessary for the general conduct of the students, co-curricular and extra-curricular activities. It shall be approved by the Academic Council on the recommendations of the Dean Students Affairs.
(11)	The minimum duration of UG programmes shall be of four years (Organized in 8 semesters of six months each including vacation period).
(12)	The tuition fees structure will be governed by the rules and regulations as prescribed by the competent authority.
(13)	The fees other than the tuition fees will be governed by the rules and regulations framed and recommended by the Finance Committee and duly approved by the Board.
(14)	Notwithstanding anything contained in the above Ordinances, no regulations shall be made in contradiction of the decision of the Board and/or the direction of the Government, in regard to the duration of the UG programme, the amount and number of scholarship/assistantships and the number of free ships and the procedure thereof.



## Scheme of Examination of Master of Technology M. Tech. (Geotechnical Engineering) (Semester - I)

		Course Name		Р	า อา	Maxin	num m	_	<u>ح</u>	
Sr. No.	Category		L			Continuous Assessment	-	Total	Exam Duration	Category
1.	CET781	Advanced Soil Mechanics	4	-	4	50	50	100	3 Hours	PC
2.	CEP781	Advanced Soil Mechanics (P)	-	2	1	50	-	50		PC
3.	CET782	Geotechnical Investigation & Exploration	4	-	4	50	50	100	3 Hours	PC
4.	CEP782	Geotechnical Investigation & Exploration (P)	-	2	1	50		50		PC
5.	CET783	Engineering Rock Mechanics	4	-	4	50	50	100	3 Hours	FC
		TOTAL	12	4	14					

## Scheme of Examination of Master of Technology M. Tech. (Geotechnical Engineering) (Semester - II)

					s	Maxin	num m	arks		4
Sr. No.	Code	Course Name		Р	Credits	Continuous Assessment			Exam Duration	Category
1.	CET784	Applied Soil Engineering	4	-	4	50	50	100	3 Hours	PC
2.	CEP784	Applied Soil Engineering Lab (P)	-	2	1	50		50		PC
3.	CET796	Research Methodology	3	-	3	50	50	100	3 Hours	PC
4.	CET797	Group Elective - I	4	-	4	50	50	100	3 Hours	PC
5.	CEP797	Group Elective - I (P)	-	2	1	50		50		PC
6.	CET799	Open Elective	3	-	3	50	50	100	3 Hours	PC
		TOTAL	14	4	16					



# Post Graduate Ordinance / Regulations 2023-2024

Course Code	Group Elective I (T + P)
CET / CEP797-1	Instrumentation and Design of supports
CET / CEP797-2	Finite Element Method
CET / CEP797-3	Instrumentation & Material Science
CET / CEP797-4	Soil Dynamics
CET / CEP797-5	Engineering Computational Techniques
Course Code	Open Elective
CET799-1	Advanced Construction Materials & Techniques
CET799-2	Geoscience
CET799-3	Prestressed Concrete Structure
CET799-4	Watershed Management
CET799-5	Introduction to Numerical Modeling
CET799-6	Rock Excavation Engineering

# Scheme of Examination of Master of Technology M. Tech. (Geotechnical Engineering) (Semester - III)

		Course Name		Р	ופו	Maxin	num m		4	
Sr. No.	Code		L			Continuous Assessment		Total	Exam Duration	Category
1.	CET898	Group Elective - II	4	-	4	50	50	100	3 Hours	GE
2.	CET881	Ground Improvement	4	-	4	50	50	100	3 Hours	PC
3.	CEP881	Ground Improvement	-	2	1	50		50	-	PC
4.	CET882	Earth and Rockfill Dams and Design of Slopes	4	-	4	50	50	100	3 Hours	PC
5.	CET883	Tunnel Engineering	4	-	4	50	50	100	3 Hours	PC
		TOTAL	16	2	17					

Course Code	Group Elective II			
CET898-1	Design of Bridges			
CET898-2 Design of Environmental Structures				
CET898-3	Geo-Environmental Engineering			
CET898-4	Soil Structure Interaction			
CET898-5	Advance Foundation Engineering			

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# Scheme of Examination of Master of Technology M. Tech. (Geotechnical Engineering) (Semester - IV)

					edits	Maxin	num m	arks	_	Ŷ
Sr. No.	Category	Course Name	L	LP		Continuous Assessment	Sem	Total	Exam Duration	Category
1.	CET884	Program Elective I	4	-	4	50	50	100	3 Hours	PE
2.	CET885	Program Elective II	4	-	4	50	50	100	3 Hours	PE
3.	CEP886	Project Phase I	-	12	6	50	50	100	-	PC
		TOTAL	8	12	14					

Course Code	Program Elective I (T)					
CET 884-1	Special Geotechnical Construction					
CET 884-2	Geotechnical Earthquake Engineering					
CET 884-3	Design of Underground Structures					
Course Code Program Elective II (T)						
CET885-1	Pavement Analysis and Design					

# Scheme of Examination of Master of Technology M. Tech. (Geotechnical Engineering) (Semester - V)

CET885-2

Advanced Methods of Working

			Course Name L P S		s	Maxim	um ma	rks		2													
Sr. No.	Category	Course Name L			L	Р	Credit	Continuous Assessment	End Sem Exam	Total	Exam Duration	Category											
1.	CEP981	Project	Phase I	I				-	24	12	100	100	200	_	PC								
						ТО	ΓAL		24	12													
											Maxim	um Ma	rks										
	Seme	ester	L	Т	Р	Credits	Internal Assessment				End Semester Examination												
Firs	t Semeste	r	12	0	4	14		2	250			150		400									
Sec	ond Seme	ester	14	0	4	16		3	300		200			500									
Thi	rd Semest	er	16	0	2	17		250			200			250 200 4		450							
Fou	rth Seme	ster	8	0	3	14	150			150		150 150		150 150		150		150		150		300	
Fift	n Semeste	er	0	0	6	12	1		100		100			200									
Tota	al		50	0	19	73	1050			800		1850											



# Scheme of Examination of Master of Technology M. Tech. (Structural Engineering) First Year (Semester - I)

					s	Maxin	num m	arks	ЕСЕ	4
Sr. No.	Category	gory Course Name		т	Credits	Internal Assessment	End Sem Exam	Total	ESE Duration (Hrs)	Category
1.	CET795	Engineering Computational Techniques	4	0	4	50	50	100	3 Hours	FC
2.	CET751	Matrix Method	4	0	4	50	50	100	3 Hours	PC
3.	CEP751	Matrix Method (P)		2	1	50	-	50	-	PC
4.	CET752	Structural Dynamics	4	0	4	50	50	100	3 Hours	PC
5.	CEP752	Structural Dynamics (P)	0	2	1	50	-	50	-	PC
6.	CET753	Advanced Steel Structures	4	0	4	50	50	100	3	PC
7.	CEP753	53 Advanced Steel Structures (P)		2	1	50	-	50	-	PC
8.	CET754	Programme Elective I		0	4	50	50	100	3	PE
		TOTAL	20	6	23	400	250	650	15	

Course code	Program Elective-I
CET754-1	Theory of Elasticity & Elastic Stability
CET754-2	Composite Structures



# Scheme of Examination of Master of Technology M. Tech. (Structural Engineering) First Year (Semester - II)

					s	Maxin	num m	arks	ЕСЕ	~
Sr. No.	Category	ategory Course Name		Р	Credits	Internal Assessment	End Sem Exam	Total	ESE Duration (Hrs)	Category
1.	CET755	Foundation Design	4	0	4	50	50	100	3	PC
2.	CET756	Advanced Concrete Structures	4	0	4	50	50	100	3 Hours	РС
3.	CEP757	Computer aided analysis and design (P)	0	2	1	50	-	50	-	PC
4.	CET758	Design of Earthquake Resistance RCC Structures	4	0	4	50	50	100	3 Hours	PC
5.	CET796	Research Methodology	3	0	3	50	50	100	3 Hours	FC
6.	CET797	Group Elective I	4	0	4	50	50	100	3 Hours	GE
7.	CEP797	Group Elective I (P)	0	2	1	50	-	50		GE
8.	CET799	Open Elective		0	3	50	50	100	3 Hours	OE
		TOTAL		4	24	400	300	700	18	

Course Code	Program Elective-I (T + P)
CET/ CEP 797-1	Instrumentation and Design of Supports
CET/ CEP 797-2	Finite Element Method
CET/ CEP 797-3	Instrumentation & Material Science
CET/ CEP 797-4	Soil Dynamics

Course Code	Open Elective
CET799-1	Advanced Construction Material & Techniques
CET799-2	Geocience
CET799-3	Prestressed Concrete Structures
CET799-4	Watershed Management
CET799-5	Introduction to Mechanical Moddling
CET799-6	Rock Excavation Engineering



# Scheme of Examination of Master of Technology M. Tech. (Structural Engineering) First Year (Semester - III)

					ts	Maxin	num m	arks	ESE	Y
Sr. No.	Code	Course Name	L	Р	edi	Internal Assessment	End Sem Exam	Total	Duration (Hrs)	Category
1.	CET898	Group Elective II	4	0	4	50	50	100	3 Hours	GE
2.	CET851	Programme Elective II	4	0	4	50	50	100	3 Hours	PE
3.	CEP852	Project Phase I (D)	0	3	6	50	50	100		PC
		TOTAL	8	3	14	150	150	300	6	

Course Code	Group Elective - II
CET898-1	Design of Bridges
CET898-2	Design of Environmental Structures
CET898-3	Geo-Environmental Engineering
CET898-4	Soil Structure Interaction
CET898-5	Advanced Foundation Engineering

Course Code	Programme Elective - II
CET851-1	Design of High Rise Structures
CET851-2	Theory of Plates & Shells
CET851-3	Design of Earthquake Resistance Steel Structures



# Scheme of Examination of Master of Technology M. Tech. (Structural Engineering) First Year (Semester - IV)

					s	Maxin	num m	arks	гег	4
Sr. No.	Course Code	Course Name	L	т	Credits	Internal Assessment	End Sem Exam	Total	ESE Duration (Hrs)	Category
1.	CEP853	Project Phase II (D)	0	6	12	100	100	200	-	PC
		TOTAL	0	6	12	100	100	200		

				Maximur	n marks	
Semester	L	Р	Credits	Internal Assessment	<b>External</b> Assessment 250 300 150 100	Total
First Semester	20	6	23	400	250	650
Second Semester	22	4	24	400	300	700
Third Semester	8	3	14	150	150	300
Fourth Semester	0	6	12	100	100	200
TOTAL	50	19	73	73 1050 800		1850



# Scheme of Examination of Master of Technology M. Tech. (VLSI Design)

# Semester - I

					s	Maxin	num Marl	<b>(S</b>	Exam	
Sr. No.	Code	Course	L	Р	Credits	Continuous Assessment	End Semester Exam	Total	Duration (Hrs)	Category
1	ENT701	CMOS Digital Circuit Design	3	0	3	50	50	100	3 Hrs.	PC
2	ENT702	Digital System Design	3	0	3	50	50	100	3 Hrs.	PC
3	ENT703	Semiconductor Devices	3	0	3	50	50	100	3 Hrs.	FC
4	ENT704	Embedded System and RTOS	3	0	3	50	50	100	3 Hrs.	PC
5	ENT705	Programme Elective-1	3	0	3	50	50	100	3 Hrs	PE
6	ENP701	CMOS Digital Circuit Design Lab	0	2	1	50	-	50		PC
7	ENP702	Digital System Design Lab	0	2	1	50	-	50		PC
8	ENP706	Lab Practice - I	0	2	1	50	-	50		РС
9	ENP704	Embedded System and RTOS Lab	0	2	1	50	-	50		РС
10	ENT707	Audit course: I	2	0	0	50	-	50		AC
		Total	17	8	19					

Sr No	Course Code	Programme Elective-1
1	ENT705-1	MEMS Design and Fabrication
2	ENT705-2	Advanced Computer Architecture
3	ENT705-3	Advanced Digital Signal Processing
4	ENT705-4	Hardware Assisted Security
5	ENT705-5	Machine Learning



# Scheme of Examination of Master of Technology M. Tech. (VLSI Design)

# Semester - II

					S	Maxin	num Marl	KS	Exam	
Sr. No.	Code	Course	L	Р	Credits	Continuous Assessment	End Semester Exam	Total	Duration (Hrs)	Category
1	ENT751	Analog IC Design	3	0	3	50	50	100	3 Hrs.	PC
2	ENT752	System Verilog for Verification	3	0	3	50	50	100	3 Hrs.	PC
3	ENT753	Programme Elective-II	3	0	3	50	50	100	3 Hrs.	PE
4	ENT754	Programme Elective-III	3	0	3	50	50	100	3 Hrs.	GE
5	ENP751	Analog IC Design Lab	0	2	1	50	-	50		PC
6	ENP752	System Verilog for Verification Lab	0	2	1	50	-	50		PC
7	ENP755	Lab Practice - II	0	2	1	50	-	50	3 Hrs.	PC
8	ENP756	Seminar	0	2	1	50	-	50		PC
9	ENT757	Audit course: II	2	0	0	50	-	50		AC
10		Open Elective-I	3	0	3	50	50	100	3 Hrs.	OE
		Total	17	8	19					

Course Code	Programme Elective - II / III
ENT753-1/ENT754-1	VLSI Signal Processing
ENT753-2/ENT754-2	RF Circuit Design
ENT753-3/ENT754-3	Memory Technologies
ENT753-4/ENT754-4	Flexible Electronics and Sensors
ENT753-5/ENT754-5	Embedded Machine Learning
ENT753-6/ENT754-6	VLSI Physical Design
ENT753-7/ENT754-7	Industry Elective

Course Code	Open Elective - I
ENT758	Digital System Design with FPGA

Course Code	Audit Course - I / II
ENT707-1 / ENT757-1	Technical Communication
ENT707-2 / ENT757-2	Innovation and Entrepreneurship
ENT707-3 / ENT757-3	Personality Development



# Scheme of Examination of Master of Technology M. Tech. (VLSI Design) Semester - III

					S	Maxin	num Marl	(5	Exam Duration (Hrs)	Category
Sr. No.	Code	Course		Р	Credits	Continuous Assessment	End Semester Exam	Total		
1	ENT801	Research Methodology & IPR	2	0	2	50	50	100	3 Hrs.	PC
2	ENT802	Programme Elective-IV	3	0	3	50	50	100	3 Hrs.	PE
3	ENT803	Programme Elective-V	3	0	3	50	50	100	3 Hrs.	PE
4	ENP804	Project Phase I	0	16	8	50	50	100		PC
		Total	8	16	16					

6	Code				s	Maxin	num Marl	<b>KS</b>	Exam	
Sr. No.		Course	L	Р	Credits	Continuous Assessment	End Semester Exam	Total	Duration (Hrs)	Category
1	ENT801	Research Methodology & IPR	2	0	2	50	50	50	3 Hrs.	PC
	OR									
	ENT805	Research Methodology (MOOC/Any								
		online platform			2			100		
2	ENT806	Industry Internship / Research Internship			14	100	100	200		PC
		Total			16					

Course Code	Programme Elective - IV / V
ENT802-1 / 803-1	Design for testability
ENT802-2 / 803-2	SoC Design
ENT802-3 / 803-3	Nano materials and Nanotechnology
ENT802-4 / 803-4	Low Power VLSI Design
ENT802-5 / 803-5	Mixed Signal Processing
ENT802-6 / 803-6	MOOC -I
ENT802-7 / 803-7	MOOC -II

17 (

#### OR



# Scheme of Examination of Master of Technology M. Tech. (VLSI Design) Semester - IV

						Maximum Marks			Exam	
Sr. No.	Code	Course	L	Р	Credits	Continuous Assessment	End Semester Exam	Total	Duration	Category
1	ENP851	Project Phase II	0	28	14	150	150	300		PC
		Total	0	28	14					

### OR

					its	Maxin	num Marl	KS	Exam	
Sr. No.	Code	Course	L	Р	Credit	Continuous Assessment	End Semester Exam	Total	Duration (Hrs)	Category
1	ENP852	Industry Internship / Research Internship	0	0	14	150	150	300		PC
		Total	0	0	14					



# Scheme of Examination of Master of Technology M. Tech. (Power Electronics and Power System) (Semester - I)

					s	Maxin	num m	arks	ЕСЕ	~
Sr. No.	Category	ry Course Name		Р	Credits	Continuous Assessment		Total	ESE Duration (Hrs)	Category
1.	EET701	Advanced Power Electronics	4	0	4	50	50	100	3 Hrs.	PC
2.	EEP701	Advanced Power Electronics Lab.		2	1	25	25	50		РС
3.	EET702	Programming Applications in Power Electronics and	3	0	3	50	50	100	3 Hrs.	PC
		Power System								
4.	EET703	Research Methodology	3	0	3	50	50	100	3 Hrs.	FC
5.	EET704	Microcontroller : Programming and System Design	4	0	4	50	50	100		PC
6.	EEP704	Microcontroller : Programming Lab.	0	2	1	25	25	50	3 Hrs.	PC
7.	EEP706	Simulation Tools and Programming Lab		4	2	25	25	50		PC
8.	EET705	FACTS & HVDC Transmission		0	4	50	50	100	3 Hrs.	РС
9.	HUP702	Professional Communication and Employability Skills		2	1	50	0	50		
		TOTAL	18	10	23			700		

# Scheme of Examination of Master of Technology M. Tech. (Power Electronics and Power System) (Semester - II)

					s	Maxin	num m	arks	гсг	4
Sr. No.	Category	Category Course Name L		Р	Credits	Continuous Assessment	-	Total	ESE Duration (Hrs)	Category
1.	EET707	Advanced Drives	4	0	4	50	50	100	3 Hrs.	PC
2.	EEP707	Advanced Drives Lab.	0	2	1	25	25	50		PC
3.	EET708	Advanced Power System Protection	4	0	4	50	50	100	3 Hrs.	PC
4.	EEP709	Energy Audit Lab	0	2	1	25	25	50	3 Hrs.	PC
5.	EET710-X	Program Elective - I	4	0	4	50	50	100	3 Hrs.	PE
6.	EET711	Group Elective		0	4	50	50	100	3 Hrs.	GE
7.	EET712-X	Open Elective		0	3	50	50	100	3 Hrs.	OE
		TOTAL	19	4	21			600		

PC = Program Core, PE = Program Elective, FC = Foundation Course,

GE = Group Elective, OE = Open Elective

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	Program Elective - I	Group Elective					
EET710-1	Power Quality	EET711	Micro controller Applications in Power Converters and Power System				
EET710-2	Digital Signal Processing	ENT753	VLSI Design Automation				
EET710-3	IoT and It's Applications in Energy Sector	CST710-1	Optimization Techniques in Artificial Intelligence				
		CST710-2	Social Network Analysis				

Open ElectiveEET712-1Energy Management SystemEET712-2Hydrogen and Fuel Cell Technology

# Scheme of Examination of Master of Technology M. Tech. (Power Electronics and Power System) (Semester - III)

					s	Maxin	num m	arks		4
Sr. No.	Category	Course Name	L	Р	Credits	Continuous Assessment		Total	Exam Duration	Category
1.	EET801-X	Program Elective II	4	0	4	50	60	100	3 Hours	PE
2.	EET802-X	Program Elective III	4	0	4	50	60	100	3 Hours	PE
3.	EEP803	Circuit Simulation and Hardware Implementation Lab.	0	4	2	25	25	50	-	PC
4.	EEP804	Project Phase - I	-	3	6	100	100	200		Project
		TOTAL	8	7	16			450		

PC = Program Core, PE = Program Elective, FC = Foundation Course, GE = Group Elective, OE = Open Elective

	Program Elective - II	Program Elective - III				
EET801-2	Electric Vehicles	EET802-1 Power System Dynamics & Contro				
EET801-3	Renewable Power Generation Sources	EET802-2	Digital and Optimal Control System			
EET801-4	Electrical Power Distribution and Smart Grid	EET802-3	Industry offered elective			
EET801-5	Industry Offered Elective	EET802-4	Power System Modeling and Analysis			

# Scheme of Examination of Master of Technology M. Tech. (Power Electronics and Power System) (Semester - IV)

					its	Maximum marks			Exam	Y
Sr. No.	Category	Course Name		Р	eq	Continuous Assessment		Total	Duration	Category
1.	EEP805	Project Phase - II	-	6	12	200	200	400	-	Proeject
		TOTAL	-	6	12	-	-	400	-	

Total credits = 72; Total Marks = 2150

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# Scheme of Examination of Master of Technology M. Tech. (Computer Science and Engineering) First Year (Semester - I)

					Credits	Maxin	num m	arks	ESE	~
Sr. No.	Category Course Name L		LT		Internal Assessment	End Sem Exam	Total	Duration (Hrs)	Category	
1.	CST701	Advanced Computer Architecture	4	0	4	50	50	100	3 Hours	PC
2.	CST702	Advance Data Structures	4	0	4	50	50	100	3 Hours	PC
3.	CSP702	Advance Data Structures Lab		2	1	50		50	-	PC
4.	HUT701	Technical Communication		0	3	50	50	100	3 Hours	FC
5.	CST703	Advanced Techniques in Data Management	4	0	4	50	50	100	3 Hours	PC
6.	CSP703	Advanced Techniques in Data Management Lab	0	2	1	50		50	_	PC
7.	CST704	Pattern Recognition	4	0	4	50	50	100	3 Hours	PC
8.	CSP705	Advanced Programming Lab - I		2	1	50		50	_	PC
9.	CSP706	Software Lab - I		2	1	50		50		PC
		TOTAL	19	8	23	450	250	700		

# **Category Details**

Course code	Program Elective-I
РС	Programme Core
PE	Programme Elective
GE	Group Elective
OE	Open Elective
FC	Foundation Course

# Scheme of Examination of Master of Technology M. Tech. (Computer Science and Engineering) First Year (Semester - II)

					s	Maxin	num m	arks	гег	ج ج
Sr. No.	Code	Code Course Name L P		Credits	Internal Assessment	End Sem Exam	Total	ESE Duration (Hrs)	Category	
1.	CST707	Analysis of Algorithm	4	0	4	50	50	100	3 Hours	PC
2.	CST708	Research Methodology	3	0	3	50	50	100	3 Hours	FC
3.	CST709	Program Elective - I		0	4	50	50	100	3 Hours	PE
4.	CST710	0 Group Elective - I		0	4	50	50	100	3 Hours	GE
5.	CST711	Open Elective - I	3	0	3	50	50	100	3 Hours	OE
6.	CSP712	Advanced Programming Lab - II	0	2	1	50		50	_	PC
7.	CSP713	Software Lab - II		2	1	50		50	-	PC
8.	CSP714	4 Seminar		2	1	50	50	100		PC
		TOTAL	18	6	21	400	300	700		

Course Code	Program Elective - I
CST709-1	Network Security
CST709-2	Deep Learning
CST709-3	Cloud Computing and Virtualization

Course Code	Group Elective - I
EET561	Electrical Power Distribution and Smart Grid
ENT560	VLSI Design Automation
CST710-1	Optimization Techniques in Artificial Intelligence
CST710-2	Social Network Analysis

Course Code	Open Elective - I
CST711-1	Advanced Programming Techniques



# Scheme of Examination of Master of Technology M. Tech. (Computer Science and Engineering) Second Year (Semester - III)

					s	Maximu	m marl	ks	ESE	4
Sr. No.	Course Code	Course Name	L	т	Credits	Internal Assessment	End Sem Exam	Total	Duration	Category
1.	CST801	Program Elective -II	4	0	4	50	50	100	3 Hours	PE
2.	CST802	Program Elective - III	4	0	4	50	50	100	3 Hours	PE
3.	CSP803	Project Phase-I	0	3	6	50	50	100	-	PC
		TOTAL	8	3	14	150	150	300		

Course code	Program Elective-II
CST801 - 1	Advanced Natural Language Processing
CST801 - 2	Advanced Digital Image Processing
CST801 - 3	Big Data Analysis
CST801 - 4	Industry Offered Elective

Course code	Program Elective-III
CST802-1	Information Retrieval
CST802-2	Advanced Machine Learning
CST802-3	Data Visualization Techniques

# Scheme of Examination of Master of Technology M. Tech. (Computer Science and Engineering) Second Year (Semester - IV)

					s	Maximum marks			ESE	4
Sr. No.	Course Code	Course Name	L	т	Credit	Internal Assessment	End Sem Exam	Total	Duration (Hrs)	Category
1.	CSP804	Project Phase-II	0	6	12	200	200	400	_	PC
		TOTAL	0	6	12	200	200	400		



# Scheme of Examination of Master of Technology M. Tech. (Robotics & Automation)

Semester - I

Sr. No.	Subject Code	Subject Name	L	Р	Total	Credits	Internal Assess- ment	Semester Exam	Total
1	RAT701	Robot Kinematics and Dynamics	3	-	3	3	50	50	100
2	RAT702	Robotic sensors and actuators	3	-	3	3	50	50	100
3	RAT703	Mobile Robotics	3	-	3	3	50	50	100
4	RAT704	Control System theory	3		3	3	50	50	100
5	RAT705	Program Elective-1	3	-	3	3	50	50	100
6	RAP706	Robotics and IoT Lab		4	4	2	25	25	50
7	RAP707	Product Life-cycle Management Lab	-	4	4	2	25	25	50
8	RAP708	Design thinking, Innovation and Entrepreneurship		4	4	2	25	25	50
9	RAT709	Professional Practices and Ethics	1	-	1	1	50	0	50
		Total	16	12	28	22	375	325	700

Course Code	Program Elective-1
RAT705-1	Field and Service Robot
RAT705-2	Industrial Internet of Things (IIoT)

#### Scheme of Examination of Master of Technology M. Tech. (Robotics & Automation) Semester - II

Sr. No.	Subject Code	Subject Name	L	Р	Total	Credits	Internal Assess- ment	Semester Exam	Total
1	RAT721	Advanced Industrial Automation	3	-	3	3	50	50	100
2	RAT722	Artificial Intelligence and Machine Learning in Robotics	3	-	3	3	50	50	100
3	RAT723	Research Methodology	3	-	3	3	50	50	100
4	RAT724	Program Elective -2	3	-	3	3	50	50	100
5	RAT725	PG Group Elective	3	-	3	3	50	50	100
6	RAT799	Open Elective-1	3	-	3	3	50	50	100
7	RAP726	Integrated Advance Manufacturing Lab		4	4	2	25	25	50
8	RAP727	Industrial Automation Lab	-	4	4	2	25	25	50
9	RAP728	Project Based Learning	-	4	4	2	25	25	50
		Total	18	12	30	24	375	375	750



Course Code	Program Elective - 2
RAT724-1	<b>Bio-inspired Robotics</b>
RAT724-2	Supply Chain Management

Course Code	PG Group Elective
RAT725-1	Robotic Process Automation
RAT725-2	Product life cycle Management (PLM)

Course Code	Open Elective
RAT799-1	Industrial robotics
RAT799-2	Mechatronics
RAT799-3	Electric and Hybrid Vehicle Technology

# Scheme of Examination of Master of Technology M. Tech. (Robotics & Automation) Semester - III

Sr. No.	Subject Code	Subject Name	L	Р	Total	Credits	Internal Assess- ment	Semester Exam	Total
1	RAT801	Program Elective -3	3	-	3	3	50	50	100
2	RAT802	Program Elective -4	3	-	3	3	50	50	100
3	RAP803	Dessertation Phase - I	-	3	3	6	100	100	200
		Total	6	3	9	12	180	220	400

OR

4	RAP804	Industry Internship-Phase-I / Research Internship-		12	200	200	400
		Phase-I /TBI Internship-Phase-I					



Course Code	Program Elective - 3
RAT801-1	Smart Manufacturing and Digital Twins
RAT801-2	Economics and financial management

Course Code Program Elective - 4				
RAT802-1	Strategic Project Management			
RAT802-2	Digital Manufacturing			

# Scheme of Examination of Master of Technology M. Tech. (Robotics & Automation) Semester - IV

Sr. No.		Subject Name	L	Р	Total	Credits	Internal Assess- ment	Semester Exam	Total
1	RAP821	Dessertation Phase-II Industry Internship- Phase-II / Research Internship-Phase-II / TBI Internship- Phase-II	-	6	6	12	200	200	400

OR

1	RAP822	Industry Internship-Phase-II / Research Internship- Phase- II/TBI Internship-Phase-II				12	200	200	400	
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Total Credits: 22 + 24 + 12 + 12 = 70



# Scheme of Examination of Master in Computer Application Semester Pattern Master of Computer Applications

Sr.	Course		Но	urs/w	/eek	its	Maximum marks			ESE
No.	code	Course Name	L	Т	Р	Credits	Continuous Assessment	End Sem Exam	Total	Duration (Hrs)
1	MCT540	Introduction to Operating Systems	3	1	0	4	40	60	100	3 Hrs.
2	MCP540	Elective Lab-I	0	0	2	1	25	25	50	-
3	MCT541	Object Oriented Programming	3	0	0	3	40	60	100	3 Hrs.
4	MCP541	Object Oriented Programming Lab	0	0	2	1	25	25	50	-
5	MCT542	Principles of Programming Languages	3	0	0	3	40	60	100	3 Hrs.
6	MCP542	Principles of Programming Languages Lab	0	0	2	1	25	25	50	-
7	MCT543	Concepts in Software Engineering	3	0	0	3	40	60	100	3 Hrs.
8	MCP543	Concepts in Software Engineering Lab	0	0	2	1	25	25	50	-
9	MCT544	Theory of Automata and Formal Languages	3	1	0	4	40	60	100	3 Hrs.
10	MCP544	Elective Lab-II	0	0	2	1	25	25	50	-
11	HUT503	Elective Humanities-I	2	0	0	0	-	-	-	-
		TOTAL	17	2	10	22				
			2	9 Hr	s.					

### Semester - I

Elective Humanities - I					
Course Code Course Name					
HUT503-1	Soft Skills				
HUT503-2	Professional Practice & Ethics				

Elective Lab - I						
Course Code	Course Name					
MCP540-1	Operating Systems Lab with Linux System Administration					
MCP540-2	Multimedia and Its Applications					

Elective Lab - II						
Course Code Course Name						
MCP544-2	Applied Mathematics and Statistical Lab					
MCP544-3	Problem Solving with Python Lab					



# Scheme of Examination of Master in Computer Application Semester Pattern Master of Computer Applications

Sr.	Course		Но	urs/w	/eek	lits	Maximum marks			ESE
No.	code	Course Name	L	т	Р	Credits	Continuous Assessment	End Sem Exam	Total	Duration (Hrs)
1	MCT545	Database Management Systems	3	0	0	3	40	60	100	3 Hrs.
2	MCP545	Database Management Systems Lab	0	0	2	1	25	25	50	-
3	MCT546	Design and Analysis of Algorithms	3	0	0	3	40	60	100	3 Hrs.
4	MCP546	Design and Analysis of Algorithms lab	0	0	2	1	25	25	50	-
5	MCT547	Computer Networks	3	0	0	3	40	60	100	3 Hrs.
6	MCP547	Computer Networks Lab	0	0	2	1	25	25	50	-
7	MCP548	Full Stack Web Development using MEAN	0	0	4	2	25	25	50	-
8	MCP549	Elective Lab-III	0	0	2	1	25	25	50	-
9	MCT627	Open Elective (Offered by other departments)	4	0	0	4	40	60	100	3 Hrs.
10	MCT553	Software Documentation	2	0	0	0	-	-	-	-
		TOTAL	15	0	12	19				
			2	7 Hr	s.					

### Semester - II

Elective Lab - III						
Course Code Course Name						
MCP549-1	Foundations of Data Analytics Lab					
MCP549-2	Design Patterns Lab					

Open Elective (Offered by other Departments)*						
Course Code Course Name						
MBT699	Entrepreneurship Development					
ENT699	Arduino Playground					
HUT599-1	Psychology for Professional Growth					
CST699-1	Foundation of Business Intelligence					
CST699-2	Mobile Technology					
ECT599-1	Evolution in Communication Technologies					
ENT599-3	Designing with Raspberry Pi					



# Scheme of Examination of Master in Computer Application **Semester Pattern** Master of Computer Applications

Semester - III

Sr.	Course		Hours/week		its	<u>,</u> Maximum marks		s	ESE	
No.	code	Course Name	L	Т	Р	Credits	Continuous Assessment	End Sem Exam	Total	Duration (Hrs)
1	MCT640	Artificial Intelligence	3	0	0	3	40	60	100	3 Hrs.
2	MCP640	Artificial Intelligence Lab	0	0	2	1	25	25	50	-
3	MCT641	Data Mining	3	0	0	3	40	60	100	3 Hrs.
4	MCP641	Data Mining Lab	0	0	2	1	25	25	50	-
5	MCT642	Cloud Computing	3	0	0	3	40	60	100	3 Hrs.
6	MCP642	Cloud Computing Lab	0	0	2	1	25	25	50	-
7	MCT644	Elective-I	3	0	0	3	40	60	100	3 Hrs.
8	MCT643	Elective-II	3	0	0	3	40	60	100	3 Hrs.
9	MCP644	Elective Lab-IV	0	0	4	2	25	25	50	-
10	MCP645	Elective Lab-V	0	0	4	2	25	25	50	-
		TOTAL	15	0	14	22				
			29 Hrs.		j					

Elective Lab - IV							
Course Code	Course Name						
MCP644-1	Mobile Application Development Lab						
MCP644-2	Web Programming Lab						

Elective - II						
Course Code	Course Name					
MCT643-1	Information Security					
MCT643-2	Graph Theory					

	Elective Lab - V							
	Cours	e Code	Course Name					
	MCP	645-1	Information Security Lab					
	MCP	645-3	DevOps Lab					
	Elective - I							
Course	e Code		Course Name					
MCT644-1 Imag			e Processing					
MCT644-2 Introd		Introdu	uction to Real Time Operating Systems					
MCT	644-3	Pattern	Recognition					

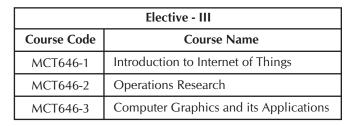
**Distributed Systems** 

#### Semester - IV

MCT644-4

Sr.	Course		Ho	urs/w	/eek	its	Maxim	um mark	ESE	
No.	code	Course Name	L	Т	Р	Credits	Continuous Assessment	End Sem Exam	Total	Duration (Hrs)
1	MCT646	Elective-III	3	0	0	3	40	60	100	3 Hrs.
2	MCP646	Elective Lab-VI	0	0	2	1	25	25	50	-
3	MCT647	Elective-IV	3	0	0	3	40	60	100	3 Hrs.
4	MCP647	Elective Lab-VII	0	0	2	1	25	25	50	-
5	MCT648	Elective-V	3	0	0	3	40	60	100	3 Hrs.
6	MCP649	Elective Lab-VIII	0	0	2	1	25	25	50	-
7	MCP650	Project Work	0	0	8	4	75	75	150	-
		TOTAL	9	0	14	16				
			23 Hrs.		'S.					

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Elective - IV						
Course Code	Course Name					
MCT647-1	Compiler Construction					
MCT647-2	Soft Computing					
MCT647-3	Social Networks					
MCT647-4	Wireless and Mobile Network					
MCT647-5	Advanced Computer Architecture					

Elective - V						
Course Code	Course Name					
MCT648-1	Advanced Databases					
MCT648-2	Information Retrieval					
MCT648-4	Introduction to Deep Learning					

Elective Lab - VI							
Course Code	Course Name						
MCP646-1	Introduction to Internet of Things Lab						
MCP646-2	Computer Graphics and its Applications Lab						
MCP646-3	Operations Research Lab						

Elective Lab - VII						
Course Code	Course Name					
MCP647-1	Big Data and Analytics Lab					
MCP647-2	Software Architecture Lab					
MCP647-3	Compiler Construction Lab					
MCP647-4	API Level Programming Lab					
MCP647-5	R Programming Lab					

Elective - VIII						
Course Code Course Name						
MCP649-4	Information Retrieval Lab					
MCP649-5	Introduction to Deep Learning Lab					
MCP649-6	Advanced Databases Lab					





# Scheme of Examination of Master in Computer Application Semester Pattern

# One Year Internship (Semester III and IV) Master of Computer Applications

Sr.		Course			Hours/sem			Maxi	ESE		
	No.		Course Name	L	Т	Р	Cred	Continuous evaluation	End Sem Exam	Total	duration (Hrs)
	1	MCP651	Project Work - Full Time (Phase-I)	0	0	36	22	350	300	650	-

Elective								
Course Code	Course Name							
MCP651-1	Project Work-Full Time (Phase - I)							

Sr.	. Course		Hours/sem 2		Maxi	ESE				
No.		Course Name	L	Т	Р	Cred	Continuous evaluation	End Sem Exam	Total	duration (Hrs)
1	MCP652	Project Work - Full Time (Phase-II)	0	0	32	16	300	300	600	-

Elective								
Course Code	Course Name							
MCP652-1	Project Work-Full Time (Phase - II)							

**Note :** 1 year internship students will take MCP651-1 and MCP652-1. Six months internship students will take MCP652-1. MCP652-1 will be applicable for students pursuing 1 year internship as well as those pursuing 6 months internship.

# **Bridge Program**

Sr.	Course		Hours/week 🔮			lits	Maxi	mum mark	ESE	
No.	code	Course Name	L T P		Cred	Continuous evaluation	End Sem Exam Total		duration (Hrs)	
1	MCT550	Computer Architecture and Organization	3	1	0	0	-	-	-	-
2	MCT551	Data Structures	3	1	0	0	-	-	-	-
3	MCT552	Discrete Structures and Digital Logic	3	1	0	0	-	-	-	-

# **Credits Distribution Semester-wise:**

SEM - I	SEM - II	SEM - III	SEM - IV	Total Credits
22	19	22	16	79



# Master of Business Administration Semester - I

Sr.	Course			_	lits	Exami	ination	Details	Exam
No.	code	Course Name	L	Р	Credits	CE	ESE	Total	Duration
1.	MBT521	Applied Statistics & Quantitative Techniques	3		3	40	60	100	3 Hrs.
2.	MBT522	Organization Behaviour	3	-	3	40	60	100	3 Hrs.
3.	MBT523	Financial Accounting	3		3	40	60	100	3 Hrs.
4.	MBT524	Financial Management	3	-	3	40	60	100	3 Hrs.
5.	MBT525	Marketing Management	3	-	3	40	60	100	3 Hrs.
6.	MBT526	Entrepreneurial Skills	3	-	3	40	60	100	3 Hrs.
7.	MBT527	Project Management	3	-	3	40	60	100	3 Hrs.
8.	MBT528	Principles of Management (MOOCS)	2	-	2	40	60	100	3 Hrs.
9.	MBT529	Research Methodology	2	-	2	40	60	100	3 Hrs.
10.	MBP521	Management Lab Course - 1 (Behavioral Skill Lab)	-	2	1	50	50	100	
11.	MBP522	Management Lab Course - 2 (Business Communication Skills Lab)	-	2	1	50	50	100	
12.	MBT530	Environment Management (Audit)	2						
		TOTAL	27	4	27				

#### Semester - II

Sr.	Course		_	_	lits	Exam	ination	Details	Exam
No.	code	Course Name	L	Р	Credits	CE	ESE	Total	Duration
1.	MBT531	Cost and Management Accounting	3	-	3	40	60	100	3 Hrs.
2.	MBT532	Operations Management	3	-	3	40	60	100	3 Hrs.
3.	MBT533	Managerial Economics	3	-	3	40	60	100	3 Hrs.
4.	MBT534	Human Resource Management	3	-	3	40	60	100	3 Hrs.
5.	MBT535	Strategic Management	3	-	3	40	60	100	3 Hrs.
6.	MBT536	Blockchain and its Application	2	-	2	40	60	100	3 Hrs.
7.	MBT537	Business Legislation	2	-	2	40	60	100	3 Hrs.
8.	MBT538	MEC-1	2	-	2	40	60	100	3 Hrs.
9.	MBP523	MLC-3 (Rural Community Engagement)	-	2	1	50	50	100	
10.	MBP524	MLC-4		2	1	50	50	100	
11.	MBT539	Ethics and Corporate Social Responsibility(MOOCS)		-	3	40	60	100	3 Hrs.
		TOTAL	21	4	26				

М	MEC-1 (Select any One Course)								
MBT538-1 Introduction to Fintech									
MBT538-2	R-Studio								
MBT538-3	Agile Project Management								
MBT538-4	Business and Industrial Automation								
MBT538-5	Positive Psychology								

MEC-4 (Select any One Course)							
MBP524-1	Corporate Grooming Lab						
MBP524-2	Marketing Lab						
MBP524-3	Financial Modeling Lab						
MBP524-4	Quality Control Lab						
MBP524-5	Spreadsheet Lab						

# Master of Business Administration

Semester - III

				lits	Exami	ination	Details	
Course Name	Name of the Course	L	Р	Credits	CE	ESE	Total	Duration
Specializa	Specialization 1 ( 4 Papers)							
	Elective 1	3	-	3	40	60	100	3 Hrs.
Four Electives from the Specialization groups offered	Elective 2	3	-	3	40	60	100	3 Hrs.
(Please refer list of electives)	Elective 3	3	-	3	40	60	100	3 Hrs.
	Elective 4 (MOOCs)	3	-	3	40	60	100	3 Hrs.
Specializa	tion 2 ( 4 Papers)							
	Elective 1	3	-	3	40	60	100	3 Hrs.
Four Electives from the	Elective 2	3	-	3	40	60	100	3 Hrs.
Specialization groups offered (Please refer list of electives)	Elective 3	3	-	3	40	60	100	3 Hrs.
	Elective 4(MOOCs)	3	-	3	40	60	100	3 Hrs.
	Field Immersion Programme-1 (4 to 6 weeks)	-	-	6	40	60	100	
	(to be undertaken between 2nd and 3rd semester)			-				
Term Paper		-	4	3	50	50	100	
	TOTAL	24	4	33				



# Master of Business Administration

#### Semester - III

#### Winter Term

	Types of	_		lits	Examination Details			Exam
Course Name	Course	L	P	Credits	CE	ESE	Total	Duration
Specialization 2 (2 papers)								
1)Two Elective Subjects from General Management Basket	Elective 7	3	-	3	40	60	100	3 Hrs
Specialization (Please refer list of electives)	Elective 8 (MOOCs)	3	-	3	40	60	100	3 Hrs
	TOTAL	6	0	6				

Note: Students may avail the Winter Term under Industry Internship Scheme between Sem III and Sem IV. The scheme of examination for Winter Term shall be same as the scheme of examination for Sem IV of Master of Business Administration.

#### Industry Internship Scheme

Note-Students who wish to avail this scheme need to complete the following requirements-

- 1) To opt for winter term, students should have passed all the courses of Ist and IInd Semester.
- 2) To avail full semester internship, following are the requirementsa)
- a) He/She should have successfully completed winter term.
- b) The application should be accepted and approved by the technical screening committee constituted by the department for approval of the internship.

The student who has successfully completed winter term but did not opt for industry internship scheme or his / her application for industry internship scheme is not accepted by the technical screening committee shall have to opt for Two Elective courses the Specializations selected in Semester III.



	Types of			lits	Examination Details		Exam	
Course Name	Course	L	P	Credits	CE	ESE	Total	Duration
Specialization 2 (2 papers)								
One Elective Course from one of the Specialization selected in Semester III. (Please refer list of electives)	Elective 5	3	-	3	40	60	100	3 Hrs
<ol> <li>1) One more Elective Course from specialization I. Or</li> <li>2) One Elective Course from specialization II. Or</li> <li>3) One open Elective Course from any other specialization/s apart from specialization I &amp; II.</li> </ol>	Elective 6	3	-	3	40	60	100	3 Hrs
Project		6		6	50	50	100	
	TOTAL	6	0	12				

### Semester - IV

### \*Project Assessment

	Total Marks	
Viva-Voce	50	
Project defense through Presentation	50	Assessment by External Examiner
Overall Project Valuation	100	
Total Marks	200	Assessment by Internal Examiner

### **List of Electives**

Students have to select any two Specializations. In Semester III students will be taught four Elective Courses from specialization I & II each. In Semester IV students shall exercise one of the three options:

- 1. Student can select 2 Elective Courses from specialization I.
- 2. Student can select 1 Elective Course from specialization I & II.
- 3. Student can select 1 Elective Course from specialization I and 1 more Open Elective Course from any other specialization/s apart from specialization I & II.

Course Code	Elective		
Marketing Management			
MBT621-1	Integrated Marketing Communication		
MBT621-2	Brand Management		
MBT621-3	Retail Management		
MBT621-4	Sales and Distribution Management		
MBT621-5	Services Marketing		
MBT621-6	Rural Marketing		
MBT621-7	Customer Relationship Management		
MBT621-8	Industrial Marketing		
MBT621-9	International Marketing		
MBT621-10	Marketing Analytics		

MBT621-11	Social Marketing
MBT621-12	Digital Marketing
MBT621-13	Consumer Behaviour
MBT621-14	Marketing Research
MBT621-15	Green Marketing
MBT621-16	Marketing of Banking & Financial Services
Finance	
MBT622-1	Corporate Taxation
MBT622-2	Security Analysis
MBT622-3	International Finance and Trade
MBT622-4	Derivatives & Risk Management
MBT622-5	Project Planning & Financing



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MBT622-6	Commercial Banking in India	
MBT622-7	Financial Services & Merchant Banking	
MBT622-8	Management Control System	
MBT622-9	Portfolio Management	
MBT622-10	Mergers & Acquisition and Corporate	
	Restructuring	
MBT622-11	Wealth Management	
MBT622-12	Insurance Management	
MBT622-13	Behavioural Finance	
MBT622-14	Portfolio and Risk Management	
Human Reso	urce Management	
MBT623-1	Advanced Organizational Behavior	
MBT623-2	HR Audit & Analytics	
MBT623-3	Human Resource planning	
MBT623-4	International HRM	
MBT623-5	Organization Theory: Structures and Design	
MBT623-6	Performance and Compensation Management	
MBT623-7	Recent Trends in HRM	
MBT623-8	Training & Development	
MBT623-9	Organization Development	
MBT623-10	Competency Mapping	
MBT623-11	Employer Branding	
MBT623-12	Industrial Relations	
MBT623-13	Labour Laws	
MBT623-14	Strategic HRM	
MBT623-15	Managerial Competencies for HR Professional	
Operations Management		
MBT624-1	Operations Planning and Control	
MBT624-2	Supply Chain Management	
MBT624-3	Services Operation	
MBT624-4	Quality Management	
MBT624-5	World Class Manufacturing	

MBT624-6	ERP
MBT624-7	Advanced Operation research
MBT624-8	Contract Management Practices
MBT624-9	Ergonomics in industrial Health &
	Safety Management
MBT624-10	Sourcing Management
MBT624-11	Productivity through Design and
	Measurement of Work
MBT624-12	Design and Analysis of Lean
	Production Systems.
Internationa	l Business
MBT625-1	International Financial Markets
MBT625-2	Foreign Exchange Management
MBT625-3	International Marketing
MBT625-4	Export Import Procedures
MBT625-5	International Economic Organizations
	0
MBT625-6	India's Foreign Trade Policy
	-
MBT625-6	India's Foreign Trade Policy
MBT625-6	India's Foreign Trade Policy Managing International Business
MBT625-6 MBT625-7 MBT625-8	India's Foreign Trade Policy Managing International Business Organizations
MBT625-6 MBT625-7 MBT625-8	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management
MBT625-6 MBT625-7 MBT625-8 Entrepreneu	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management rship and Family Business
MBT625-6 MBT625-7 MBT625-8 <b>Entrepreneu</b> MBT626-1	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management <b>rship and Family Business</b> Managing Human Capital
MBT625-6 MBT625-7 MBT625-8 <b>Entrepreneu</b> MBT626-1 MBT626-2	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management <b>rship and Family Business</b> Managing Human Capital Product and Brand Management
MBT625-6 MBT625-7 MBT625-8 <b>Entrepreneu</b> MBT626-1 MBT626-2 MBT626-3	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management <b>rship and Family Business</b> Managing Human Capital Product and Brand Management Purchase and Material Management
MBT625-6 MBT625-7 MBT625-8 <b>Entrepreneu</b> MBT626-1 MBT626-2 MBT626-3 MBT626-4	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management <b>rship and Family Business</b> Managing Human Capital Product and Brand Management Purchase and Material Management Advanced Management Accounting
MBT625-6 MBT625-7 MBT625-8 <b>Entrepreneu</b> MBT626-1 MBT626-2 MBT626-3 MBT626-4 MBT626-5	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management <b>rship and Family Business</b> Managing Human Capital Product and Brand Management Purchase and Material Management Advanced Management Accounting International Business
MBT625-6 MBT625-7 MBT625-8 <b>Entrepreneu</b> MBT626-1 MBT626-2 MBT626-3 MBT626-4 MBT626-5 MBT626-6	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management <b>rship and Family Business</b> Managing Human Capital Product and Brand Management Purchase and Material Management Advanced Management Accounting International Business Launching and Managing an Enterprise
MBT625-6 MBT625-7 MBT625-8 <b>Entrepreneu</b> MBT626-1 MBT626-2 MBT626-3 MBT626-4 MBT626-5 MBT626-6 MBT626-7	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management <b>rship and Family Business</b> Managing Human Capital Product and Brand Management Purchase and Material Management Advanced Management Accounting International Business Launching and Managing an Enterprise Buying an Existing Business
MBT625-6 MBT625-7 MBT625-8 <b>Entrepreneu</b> MBT626-1 MBT626-2 MBT626-3 MBT626-4 MBT626-5 MBT626-6 MBT626-7 MBT626-8	India's Foreign Trade Policy Managing International Business Organizations International Logistics Management <b>rship and Family Business</b> Managing Human Capital Product and Brand Management Purchase and Material Management Advanced Management Accounting International Business Launching and Managing an Enterprise Buying an Existing Business Knowledge Entrepreneur



### Post Graduate Ordinance / Regulations 2023-2024

MBT626-12Logistics ManagementMBT626-13Social EntrepreneurshipMBT626-14Technology Appreciation and Intellectual Property RightsMBT626-15Entrepreneurial MarketingMBT626-16Innovation Technology ManagementManagementManagementMBT 627-1Creativity and InnovationMBT 627-2Leadership SkillsMBT 627-4SociologyMBT 627-5CSR & SustainabilityMBT 627-6CSR & SustainabilityMBT 627-7Indian EthosBusiness & Data AnalyticsMBT628-1Analytics For BusinessMBT628-2Technical Analysis & Report WritingMBT628-3Data Visualization for ManagersMBT628-4Business Data miningMBT628-5Data AnalyticsMBT628-6Applied EconometricsMBT628-7Customer AnalyticsMBT628-8Statistics Using RMBT628-9Data Mining Using OrangeMBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-14Text Mining and Modelling		
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Intellectual Property RightsMBT626-15Entrepreneurial MarketingMBT626-16Innovation Technology ManagementManagementMBT 627-1MBT 627-1Creativity and InnovationMBT 627-2Leadership SkillsMBT 627-4SociologyMBT 627-6CSR & SustainabilityMBT 627-7Indian EthosBusiness & Data AnalyticsMBT628-1Analytics For BusinessMBT628-2Technical Analysis & Report WritingMBT628-3Data Visualization for ManagersMBT628-5Data AnalyticsMBT628-6Applied EconometricsMBT628-7Customer AnalyticsMBT628-8Statistics Using RMBT628-9Data Mining Using OrangeMBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python	MBT626-13	Social Entrepreneurship
MBT626-15Entrepreneurial MarketingMBT626-16Innovation Technology ManagementManagementMBT 627-1Creativity and InnovationMBT 627-2Leadership SkillsMBT 627-4SociologyMBT 627-6CSR & SustainabilityMBT 627-7Indian EthosBusiness & Data AnalyticsMBT628-1Analytics For BusinessMBT628-2Technical Analysis & Report WritingMBT628-3Data Visualization for ManagersMBT628-4Business Data miningMBT628-5Data AnalyticsMBT628-6Applied EconometricsMBT628-7Customer AnalyticsMBT628-8Statistics Using RMBT628-9Data Mining Using OrangeMBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python	MBT626-14	Technology Appreciation and
MBT626-16Innovation Technology ManagementManagementMBT 627-1Creativity and InnovationMBT 627-2Leadership SkillsMBT 627-4SociologyMBT 627-6CSR & SustainabilityMBT 627-7Indian EthosBusiness & Data AnalyticsMBT628-1Analytics For BusinessMBT628-2Technical Analysis & Report WritingMBT628-3Data Visualization for ManagersMBT628-4Business Data miningMBT628-5Data AnalyticsMBT628-6Applied EconometricsMBT628-7Customer AnalyticsMBT628-8Statistics Using RMBT628-9Data Mining Using OrangeMBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python		Intellectual Property Rights
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MBT 627-6CSR & SustainabilityMBT 627-7Indian EthosBusiness & Data AnalyticsMBT628-1Analytics For BusinessMBT628-2Technical Analysis & Report WritingMBT628-3Data Visualization for ManagersMBT628-4Business Data miningMBT628-5Data AnalyticsMBT628-6Applied EconometricsMBT628-7Customer AnalyticsMBT628-8Statistics Using RMBT628-9Data Mining Using OrangeMBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python	MBT 627-2	Leadership Skills
MBT 627-7Indian EthosBusiness & Data AnalyticsMBT628-1Analytics For BusinessMBT628-2Technical Analysis & Report WritingMBT628-3Data Visualization for ManagersMBT628-3Data Visualization for ManagersMBT628-4Business Data miningMBT628-5Data AnalyticsMBT628-6Applied EconometricsMBT628-7Customer AnalyticsMBT628-8Statistics Using RMBT628-9Data Mining Using OrangeMBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python	MBT 627-4	Sociology
Business & Data AnalyticsMBT628-1Analytics For BusinessMBT628-2Technical Analysis & Report WritingMBT628-3Data Visualization for ManagersMBT628-4Business Data miningMBT628-5Data AnalyticsMBT628-6Applied EconometricsMBT628-7Customer AnalyticsMBT628-8Statistics Using RMBT628-9Data Mining Using OrangeMBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python	MBT 627-6	CSR & Sustainability
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MBT628-9Data Mining Using OrangeMBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python	MBT628-7	Customer Analytics
MBT628-10Web AnalyticsMBT628-11Power BI For ManagersMBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python	MBT628-8	Statistics Using R
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MBT628-12Power BI and SQLMBT628-13Decision Analytics Using Python	MBT628-10	Web Analytics
MBT628-13 Decision Analytics Using Python	MBT628-11	Power BI For Managers
	MBT628-12	Power BI and SQL
MBT628-14 Text Mining and Modelling	MBT628-13	Decision Analytics Using Python
	MBT628-14	Text Mining and Modelling

Information Technology		
MBT 629-1	Synthesizing and analysing data	
MBT 629-2	IT Organisation and Structure Design	
MBT 629-3	Critical reasoning and system thinking	
MBT 629-4	Costing Products and services	
MBT 629-5	Strategic management	
MBT 629-6	Bringing Ideas to Market	
MBT 629-7	Software Project Management	
MBT 629-8	Spreadsheet Essentials	
MBT 629-9	Data presentation and visualization	
MBT 629-10	Data Management and IT infrastructures	
MBT 629-11	Legal aspects of IT Organisations	



Regulation No.	Description
R 1. General	
R 1.1	These regulations shall be called as the Regulations for the PG programmes of the Institute.
R 1.2	These regulations shall come into force with effect from the date of its approval by the Academic Council.
R 2. Undergrad	uate Programmes
R 2.1	The Institute shall offer Post Graduate programmes as shown in Table 1.
R 2.2	The minimum duration of PG programmes leading to M.Tech. & MBA degree is of four semesters (spread over two years) and MCA degree is of fourth semesters (spread over two years). M. Tech (Part-time) degree is of five semesters (spread over two and half years). The duration for the PG programme may be altered in accordance with the decision of the Competent Authority.
R 2.3	Reservation of seats for admission to PG programmes shall be as per the norms of the Government for Minority Institutions.
R 2.4	Direct admission to second year MCA (lateral entry) shall be made as per norms and procedures of Government for Minority Institutions.
R 2.5	The candidate shall be provisionally admitted to PG programme subject to fulfillment of eligibility criterion as prescribed by the Competent Authority.
R 2.6	In the matter of admissions to the PG programmes, the decision of the Competent Authority shall be final.
R 2.7	A student should have obtained the eligibility certificate from the University in the first semester at the time of admission.
R 3. Semester S	ystem
R 3.1	The academic programmes in the Institute shall be based on semester system; two semesters (July - December and January - June) in a year with winter and summer vacations.
R 3.2	The curriculum may consist of credit course, audit course as recommended by the respective Board of Studies.
R 3.3	Each credit course shall have a certain number of credits assigned to it depending upon the academic load of the course, which would be assessed on the basis of weekly contact hours of theory lecture, laboratory classes and field study if required.
R 3.4	The courses, practicals, seminars and projects offered in a semester shall be continuously assessed and evaluated to judge the performance of a student.
R 4. Curriculum	Structure
R 4.1	Each PG programme will have a curriculum and course contents (syllabi) for the courses designed by the BOS and approved by Academic Council.
R 4.2	The curriculum for award of degree in various PG programmes is designed to have credits as under:M. Tech: 65-75 creditsMBA: 93 creditsMCA: 78 credits(Modified in Academic Council Meeting dated 28/08/2020)



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R 4.3	The total contact hours for PG programmes shall be as per norms prescribed by the Competent Authority.
R 4.4	The medium of instruction, examination and project reports will be English.
R 4.5	Every PG student will have to earn the credits by passing all the credit courses as specified in R6.
R 5. Course and	Department Codes
R 5.1	Each course offered shall have an alphanumeric course code consisting of a string of six characters. The first two characters in a course code shall be capital letters identifying the respective department offering the course, Third letter will indicate nature of the course i.e. Theory (T) or Practical (P) and next digit will indicate the (year of the course) 5-7 for PG Programme. viz.: PG-CET5XX: CE-Civil Engineering, T-Theory, 5-First Year and XX-Course Number.
R 6. Course Cre	edits
R 6.1	<ul> <li>Each credit course shall have an integer number of credits, which reflects its weight. The student earns credits by passing corresponding courses in minimum 'CC' grade. The number of credits of a course in a semester shall normally be calculated as under (however there may be some exceptions);</li> <li>(a) Lectures/Tutorial: One lecture/tutorial hour per week shall be assigned one credits.</li> <li>(b) Practical: One laboratory hour per week shall be assigned half credit. Not more than two credits may be assigned to a practical course having only laboratory component.</li> <li>(c) Projects and seminars in the PG programme shall be assigned credits as reflected in the respective schemes approved by the BOS and Academic Council.</li> <li>(Modified in Academic Council Meeting dated 25/04/2016)</li> </ul>
	o the Students for Achievement/ Participation in R&D, SRC, Sports, NSS, NCC, TBI, T&P, t Internship, Co-curricular/Extra-curricular Activities and GATE Examination
R 7.1	The achievement / participation of any undergraduate or postgraduate student (admitted to any UG or PG programme), in various co-curricular/ extra-curricular activities will be treated as additional course and shall be awarded incentive marks and grade points as follows from the academic year 2018-19. For award of incentive marks, student shall be required to submit an application with required proofs/certificates/endorsement received from respective Professor Incharge to the HoD of parent department. Evaluation of student for SRC, NCC/NSS/Sports, TBI, T&P, Swachch Bharat Internship shall be done by Dean-Student Affairs, HoD (Physical Education), Professor Incharge-III Cell, Dean- T&P and Nodal Officer-Swachch Bharat Internship respectively. Evaluation for achievement/participation in remaining activities, compilation of all incentive marks and submission of final incentive marks to CoE shall be done by parent department of the student. Summation of all incentive marks put together for different achievements/activities should not go above 100 marks in a semester. Students will not be eligible for incentive if any of the parameter for which the incentive marks are claimed by student, is a part of curriculum.



The award of grade points based on absolute marks out of 100 shall be made as follows :

For 362 credit schemes of UG programmes,			
Grade Points Range of Marks			
10	91-100		
9	81-90		
8	71-80		
7	61-70		
6	51-60		
5	41-50		
4	31-40		
0	Less than 31		

The guidelines for award of incentive marks for all above activities are detailed as under:



A) **R** and **D** activities : The student participating in Co-curricular Learning, Research and Consultancy is eligible for award of incentives as per the following table:

Sr. No.	*Particulars	Incentive Marks
Α	Co-curricular Learning :	
**1	Offline or online certificate course of minimum 30 Hrs duration offered by IITs / IIMs / IIITs / NITs / Department of Ministries, Govt. of India / MOOCs / Premier organizations / Professional bodies (Course Passed/Course Attended).	80 / 60
**2	Offline or online certificate course of minimum 20 Hrs duration offered by IITs / IIMs / IIITs / NITs / Department of Ministries, Govt. of India / MOOCs / Premier organizations / Professional bodies (Course Passed/Course Attended).	60 / 40
В	Research/Consultancy Projects:	
1	Winner in research/innovation competitions of repute, organized by IITs/IIMs/IIITs/NITs/ other institutes having NIRF rank / Departments of Ministries, Govt. of India / Premier organizations/Professional bodies.	80
2	Participation in research/innovation competitions of repute, organized by IITs/ IIMs/ IIITs/ NITs/other institutes having NIRF rank/Departments of Ministries, Govt. of India/ Premier organizations/Professional bodies.	60
3	Participation in Research/Consultancy projects of the college.	60
4	Patent filed jointly with RCOEM.	100
С	Research Publications:	
1	Research Paper accepted for publication in journal indexed in Science Citation Index (SCI)/ Scopus / Emerging Sources of Citation Index (ESCI)	100
2	Research Paper accepted for publication in Indexed journal other than SCI, SCOPUS, ESCI.	80
3	Research Paper accepted and presented in conference organized by IITs/ IIMs/ IIITs/NITs/other institutes having NIRF rank/Premier organizations/ Professional bodies.	60

• Student will not be eligible for incentive in case, if any of the above stated parameters is a part of curriculum.

- If more than one student is involved, the marks awarded will be divided equally amongst the students.
- \*\*Incentives shallbe awarded subject to approvalof the online/ offline MOOCs by the concerned department / passing of the examination conducted for that course in the environment created by that department.
- (B) Extra-curricular and T&P activities : A student participating in extra-curricular activity is eligible for the award of incentives as per the following table:

Extra-Curricular Activities : Cultural Activities (For 362 Credit scheme and 160 credit scheme)



Sr.No.	Activity	Incentive Marks
1	All office bearers of Departmental societies	40
2	Participation in Inter collegiate competitions (University)	60
3	Winners in Inter collegiate competitions (University)	80
4	SRC team	80
5	Participation in Inter University/National level competitions	100
6	Branch wise student placement coordinators (excluding central student placement committee)	40
7	Central student placement committee members	80

(C) **Sports/NSS/NCC activities:** The student participating in Sports/NSS/NCC related activity etc. is eligible for the award of incentives as per the following :

Sr. No.	Parameter	Incentive Marks
1	Participation in Inter collegiate activities/NSS Regular Volunteer/NCC	51-60
2	Securing III/II/I Place in University, Sport - NSS Joint Secretary, Sports - NSS Secretary	71-80
3	West Zone/National level Participation (Sports/NSS/NCC)	100
4	Completion of Swachcha Bharat Summer Internship (Allowed once per year)	100

(D) **TBI related activities :** The students participating in TBI related activities are eligible for the award of incentives as per the following.

Sr. No.	Parameter	Incentive Marks
A	Incubation Stages :	
	i) Idea Pre-incubation Stage	40
	ii) Incubation Stage	60
	iii) Start-up Phase	80
В	Participation in Inter collegiate BP Competitions organised by IIMs/IITs	60
	and any other nationally renowned TBI/ Organization / Professional Bodies	
	Participation and securing top 3 positions held at IIMs/IITs and any other	80
	nationally renowned TBI/Organization/Professional Bodies	
С	i) RCOEM TBI Foundation core Committee	60
	ii) RCOEM TBI Foundation President/Vice President / Secretary/ Jt. Secretary	80
D	Seed Funding Support Received for start-ups in Lakhs :	
	i) 2 to 5 Lakhs	60
	ii) 5 to 10 Lakhs	80
	iii) 10 to 25 Lakhs	100
E	Selection for Incubation/acceleration phase at IIM/IITs/ Nationally	100
	Renowned TBI / acquisition by VC	



Note : Incentives for start-up related activities shall be offered subject to fulfilment of the criteria and guidelines decided and revised by RCOEM TBI Foundation from time to time and after due scrutiny by Team TBI on case to case basis.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					(Academic Council Mee	eting dt. 14th July 20
R 7.2 Incentive	es to th	e studen	ts partic	cipating in Industrial/ Co	porate Training	
R 7.2.1	traii	ning in l	isted / I	nitted to the PG prog reputed companies / or igible for award of add	ganizations having m	inimum duration of
	Cor	porate 7	Training	centive credits to the g. Award of grades bas le is converted to grade	ed on absolute mark s	system out of 100
		Grade F	Point	Rang of Marks	Grade Point	Rang of Marks
		10		90 - 100	5	40 - 49
		9		80 - 89	4	30 - 39
		8		70 - 79	3	20 - 29
		7		60 - 69	0	Below 20
		6		50 - 59		
		Sr. No.		Industrial & Con Training undert		Marks
		1	MNC	/ Public Sector / Large Sc	ale Industry	30
		2	Small	and Medium Enterprise		20
	und		training	ust produce a certificat g, produce a report and g		
R 8. Academic	Counc	il				
Academic Cour plan 11of para 8		all be con	stituted	as per the guidelines for a	utonomous colleges pres	scribed by UGC unde
R 8.1	Aca	demic C	Council	shall consist of		
	1.	Princip	oal (Cha	iirman)		
	2.	All He:	ads of th	- Demonstration to the theorem		
		/ 111100		ne Departments in the In	stitute.	



	T
	4. Not less than four experts from outside the Institute representing such areas as Industry, Commerce, Law, Education, Medicine, Engineering etc. to be nominated by the Board.
	5. Three nominees of the university.
	A Faculty member nominated by the Principal (Member Secretary).
R 8.2	Without prejudice to the generality of functions mentioned the Academic Council will have powers to:
	a) Scrutinize and approve the proposals with or without modifications of the Board of Studies with regard to course of study, academic regulations, curricula, syllabi and modifications. There of, instructional and evaluation arrangements, methods, procedures relevant thereto etc.
	provided that where the Academic Council differs on any proposal, it will have to return the right to any matter for reconsideration to the Board of Studies concerned or reject it, after giving reasons to do so.
	b) Make regulations regarding the admission of students to different programmes of study in the college.
	c) Make regulations for sports, extra-curricular activities, and proper maintenance and functioning of the playgrounds and hostels.
	d) Recommend to the Board proposals for institution of new programmes of study.
	e) Recommend to the Board regarding scholarships, studentship, fellowships, prizes and medals, and to frame regulations for the award of the same.
	f) Advise to the Board on suggestion(s) pertaining to academic affairs made by it.
	g) Perform such other functions as may be assigned by the Board.
	h) Any other matters from time to time thought necessary by the Principal and the Board.
R 9. Course Coo	ordination Committees
R 9.1	Every Head of the Department will appoint a coordination committee for each course/course group, which shall contain the senior departmental faculty related to the course/course group and invited members from other departments, institutes and industry, if required.
R 10. Board of S	Studies (BOS)
R 10.1	Every department shall have its own Board of Studies (BOS) to look after all matters pertaining to the programme offered by that department. Composition :
	a) Head of the department concerned (Chairman)
	b) The entire faculty of each specialization
	c) Two experts in the subject from outside the Institute to be nominated by the Academic Council.
	d) One expert to be nominated by the Vice Chancellor from a panel of six, recommended by the Principal.



	<ul> <li>e) One representative from the industry / corporate sector/allied area relating to placement.</li> <li>f) One post graduate meritorious alumnus to be nominated by the Principal. The Chairman BOS, may with the approval of the Principal, co-opt</li> <li>i. Expert from outside the college whenever sufficient courses of studies are to be formulated.</li> <li>ii. Other members of staff of the same faculty.</li> <li>Provided that in case of Applied Sciences the Chairman of the Board will be Head of the Department of Physics, Chemistry, Mathematics and Humanities by rotation. Remaining composition of the Board will be the same.</li> </ul>
R 10.2	<ul> <li>Functions:</li> <li>BOS of a department in the Institute shall:</li> <li>a) Prepare syllabi for various courses keeping in view the objectives of the Institute, interest of the stakeholders and national requirement for consideration and approval of the Academic Council;</li> <li>b) Suggest methodologies for innovative teaching and evaluation techniques;</li> <li>c) Suggest panel of names to the Academic Council for appointment of examiners; and</li> <li>d) Coordinate research, teaching, extension &amp; other academic activities in the department / institute.</li> </ul>
R 10.3	The Principal of the Institute shall appoint the BOS in consultation with the respective Head of the Department. In case of vacancies in BOS replacement shall be done by Chairman, BOS with the approval of the Principal. For an interdisciplinary programme, an ad-hoc BOS shall be constituted by Dean Academics. A Programme Coordinator shall be appointed by the Principal in consultation with the Dean Academics and the Heads of the concerned Departments to look after all the administrative and academic matters related to the interdisciplinary programme. The Programme/Course Coordinator shall exercise the functions of the Chairman, of such ad-hoc BOS.
R 11. Courses o	of Special Nature
R 11.1	<ul> <li>(a) Project</li> <li>A curriculum shall contain project/ mini project/ seminar, offered in the respective semesters of the concerned (M. Tech/MBA/MCA) PG programme. Credit component shall be assigned as per the availability of total credits for the respective semester of PG programme. Allotment of guide to the individual student shall be carried out by concerned department.</li> <li>(b) Offering an Elective</li> <li>An elective course in a department shall run only if minimum of 30% students register for it in a regular semester. However, under special circumstances, a course may run with fewer students with prior permission of the Chairman, Board of studies. If additional full time faculty is required, approval of the Principal is necessary.</li> </ul>
	New Programme
R 12.1	<ul> <li>(a) The Institute is free to start diploma (UG and PG) or certificate courses without the prior approval of the university. Diplomas and certificates shall be issued under the seal of the college.</li> <li>(b) The Institute is free to start a new degree or postgraduate programme with the approval of the Academic Council. Such programmes shall fulfill the minimum standards prescribed by the University/UGC in terms of number of hours, curricular content and</li> </ul>



	the univ	versity shall be duly	informed of such pro	grammes.	
		-	÷. •		g/ redesigning it with
					ersity should be duly
		-		rd new degrees in pla sed by a Department	in consultation with
		. ,	, , ,	<i>,</i> .	, or by a Committee
		ted by the Principal.	, , ,		/ - /
	Acader				ore the APEC and the vernment /AICTE for
R 13. Registratio	on				
R 13.1	consist of al Indicates pro Example, 15I shift, 001- branch is c 15EEU10010	oha-numerals nnPP gramme, S: Indicate EEU1001EEU1; 15 his serial number hanged to, let us CSU2. Advantage of	PSmmmPPPS where s shift and mmm: Inc - year of admission, E , EEU programme say CS in second	dent ID. The Student e, nn: Indicates year licates serial number EU programme in in which admitted d shift, then his I na-numerals remain s s coding.	of admission, PPP: in a programme. which admitted, 1 and 1 shift. If his D will change as;
R 13.2	time, by payr	ment of the stipulate		ly filled in admission	punced from time to form is compulsory
R 13.3	Registration, according to rules, should be carried out on the first four days of each year. Late registration may be permitted only for valid reasons and on payment of a late registration fee. In any case, registration must be completed before the prescribed last date for registration, failing which his/her studentship is liable to be cancelled. Students having outstanding dues to the Institute or hostel shall be permitted to register only after clearing the dues. In addition to registration at the beginning each year, a student shall, at the beginning of each semester (excluding the first semester), register for the courses opted by him/her within one week of the beginning of the session. (Regulation introduced as approved in Academic Council in its meeting dated 25th April 2016).				
R 13.4			allowed only in ra ces beyond the contr	are cases at the disc rol of students.	cretion of the Dean
R 13.5	The number of attempts and promotion rules for all postgraduate programs for existing and incoming batches to be implemented from academic year 2018-19 and onwards shall be as follows. The attempts pattern tabulated below shall be implemented from 2018-19 followed by the implementation of promotion rules from 2019-20. (i) M. Tech (Two Year Programme):				
	Semester	<b>Regular Winter</b>	Makeup Winter	Regular Summer	Makeup Summer
	I	Yes	Yes		
	II			Yes	Yes
		Yes	Yes	Yes	
	IV	Yes*		Yes	Yes



	the tot. togethe <b>Note :</b> Odd Semester co 2019 except	ng eligible to registe al credits (rounded er). Semester course o	off to nearest lowe examinations will k will be conducted i semester.	udent must have sec er integer) in first ye be conducted in od n even semester wit	ear (Semester I & II d semester & Even
	Semester	<b>Regular Winter</b>	Makeup Winter	Regular Summer	Makeup Summer
	I	Yes	Yes		
	II			Yes	Yes
		Yes	Yes		
	IV	Yes*		Yes	Yes
	V	Yes	Yes	Yes*	
		-	least 60% of the to nester III & IV togethe	tal credits (rounded er).	off to nearest lower
	Semester	Regular Winter	Makeup Winter	Regular Summer	Makeup Summer
	I	Yes	Yes		
	I II	Yes	Yes	 Yes	 Yes
	    			 Yes Yes	 Yes 
					 Yes  Yes
	III IV <b>* As ex-stud</b> ● For bei	 Yes Yes* ent ng eligible to regist al credits (rounded	 Yes  er for Semester III, st off to nearest low	Yes Yes tudent must have sec er integer) in first y	
R 13.6	III IV * As ex-stude • For beithe tot togethe The student any univers	 Yes Yes* ent ng eligible to regist al credits (rounded er). admitted for regular, ity/college/institutio	 Yes  er for Semester III, st I off to nearest low (Acade /part time PG course on. The student add	Yes Yes tudent must have sec er integer) in first y mic Council Meeting shall not undertake a	 Yes cured at least 60% of ear (Semester 1 & 11
R 13.6 R 13.7	III IV * As ex-stude • For beithe tothe together The student any universion undertake are any universion of the tothe to	 Yes Yes* ent ng eligible to regist al credits (rounded er). admitted for regular, ity/college/institution by full time employn n M. Tech. semester o take up additiona	 Yes  er for Semester III, si l off to nearest low (Acade /part time PG course on. The student adment during the period on. The student adment during the period and MBA semester l course(s) or drop of	Yes Yes tudent must have sec er integer) in first y mic Council Meeting shall not undertake a mitted for regular F od of the programme.	 Yes cured at least 60% of ear (Semester I & II g dt. 14th July 2018) iny course of study in PG course shall not y ( a student shall not ng the first semester)

	<ul> <li>He/she shall complete the course work of theory and laboratory courses in the summer term along-with continuous assessment. However, such students will take the End Term or Make-up/Improvement Grade Examination along with other regular students (who have not done summer term), as and when it is conducted by the office of Controller of Examinations. The students undergoing summer term shall have to maintain minimum 75% attendance in the summer term failing which they may be detained and shall have to repeat the semester along-with other regular students. Students successfully completing the summer term shall have an option to undertake one year internship in industry or in reputed research organization or at IITs/IIITs or IISc, Bangalore subject to grant of permission by industry / organization where he/she intends to undertake internship and the approval from Chairman, Board of Studies of the respective board at RCOEM.</li> </ul>
	Summer term shall be offered subject to availability of faculty and any other constraints. (Modified in Academic Council Meeting Dt. 16th Sept. 2017)
R 13.9	A student who with a maximum CGPA of 6.5 (termed as slow learner) in M. Tech. programme shall have an option to drop maximum one compulsory course offered in the second semester. He/she shall have to take up this course in the forth semester. In case of M. Tech (Geotech), this option can also be exercised in the third semester; he/ she shall have to take up this course in the fifth semester.
	(Modified in Academic Council Meeting dated 25/04/2016)
R 14. Equivale	ence and Absorption of Students from University Pattern
	The students, from University pattern or non CBCS pattern, desirous of seeking admission to II semester and onwards wherever applicable in autonomous CBCS pattern, has to fulfill the prevailing ATKT norms of the University to become eligible for admission. However, such students have to clear backlog subjects (courses) if any, by appearing for the respective examinations of the college as per the absorption and equivalence scheme. In addition the student also has to register and pass new courses, if any, introduced in earlier semesters of the autonomous CBCS pattern. The norms of absorption/equivalence shall be decided by the Academic Council on the recommendations of the Equivalence Committee from time to time. (Modified in Academic Council Meeting dated 25/04/2016)
R 14.2	While switching from University pattern/ Non CBCS pattern to autonomous pattern the CGPA of such student shall be calculated as per the table below.
	CGPA 4.0 5.0 6.0 7.0 8.0
	Percentage 40 50 60 70 80
	The intermittent percentages should be calculated based upon the extrapolation of the values in the table. (Modified in Academic Council Meeting dated 25/04/2016)
R 14.3	When a student switches from a University/ Non CBCS pattern to the CBCS pattern, the additional courses offered in previous semester of that programme in CBCS pattern of the institute and not covered in the corresponding University/ NON CBCS curriculum, such additional courses shall be treated as audit courses and he/ she will have to earn 'Satisfactory Grade' in those courses.Provided that he/ she clears all the equivalent courses in lieu of the backlog subjects in university pattern and earns 'Satisfactory' grade for the additional courses in autonomous pattern, which are not covered in university pattern, prior to switch over. 



R 14.4	For direct admission to second year MCA as well as transfer (lateral entry) for PG courses, the calculation of CGPA and award of credits shall be governed by R 14.2 and R 14.3. Provided, in case of MCA, the percentage of diploma certificate shall be considered for the absolute grading system instead of the first year.
R 14.5	The students from any University/ NON CBCS Autonomous college desirous of seeking admission to III/V semester is eligible to take admission as per norms laid down by the Equivalence Committee of the college after obtaining the permission from the competent authority. (Modified in Academic Council Meeting dated 25/04/2016)
R 15. Discipline	-
R 15.1	Every student is required to observe discipline and decorous behavior both inside and outside the campus and not to indulge in any activity, which will tend to bring down the prestige of the Institute.
R 15.2	<ul> <li>The following acts of omission and/or commission by the students within or outside the college campus shall constitute gross violation of 'Code of Conduct' punishable as indiscipline.</li> <li>a) Lack of courtesy and decorum, as well as indecent behavior;</li> <li>b) Willful damage of property of Institute/ Hostel or of fellow students;</li> <li>c) Possession/ Consumption/ Distribution of alcoholic drink and banned drugs;</li> <li>d) Mutilation or unauthorized possession of library materials like books, journals etc.</li> <li>e) Noisy and Unseemly behavior disturbing peace in Institute and Hostel;</li> <li>f) Hacking in Computer system, either hardware or software or both;</li> <li>g) Any other act considered by the Institute as a gross indiscipline.</li> </ul>
R 15.3	Any act of student's indiscipline will be addressed by Discipline Committee duly constituted and notified by the Principal. The Committee will enquire into the charges of indiscipline and recommend appropriate measures/punitive action to the Principal. The Discipline committee may inform the recommendations to the students. Decision of the Principal would be final.
R 15.4	If the student while studying in the Institute is found indulging in anti-national activities contrary to the provisions of acts and laws enforced by Government he/she will be liable to be expelled from the Institute without any notice.
R 15.5	If a student is involved in any kind of ragging, the student shall be liable for strict action as per Maharashtra Anti-Ragging act 1999, which is in effect from 15th May 1999.
R 15.6	If any statement/information supplied by the student in connection with his/her admission is found to be false/ incorrect at any time, his/ her admission shall be cancelled and he/she shall be expelled from the Institute and fees paid shall be forfeited.
R 15.7	Student once admitted in the Institute has to follow dress code, if any, as well as other instructions issued by the administration from time to time, failing which disciplinary action shall be initiated against such student.
R 15.8	If a student is found guilty of overall misconduct during his/her stay in the Institute, he/she will be punished as per the recommendations of the Dean Student Affairs. The maximum punishment may be expulsion from the Institute.

R 15.9	If a student is found guilty of malpractice in examination he/she will be punished as per the recommendations of the COE in consultation with EXC.				
R 16. Attendance, Absence, Leave Rules and Dismissals					
R 16.1	All the students are expected to be present in every lecture, practical, NCC/NSS/CSP/Games & Sports/Yoga scheduled for them. Attendance will be closely monitored during a semester as per the guidelines.				
R 16.2	If a student is continuously absent from the classes for more than four weeks without informing the Course Coordinator, the Coordinator shall immediately bring it to the notice of the Head of the concerned department as the case may be and they in turn will inform the same to the Office of Dean Academics.				
R 16.3	The names of the students who have remained absent, for more than 25% of the actual classes held in a course will be intimated by the Course Coordinator himself on the last teaching day of each month of the respective semester, to the students in the class with written intimation to the Head of the Department who will arrange to consolidate the list for all such students for all the courses and display it on the notice board of the department with an intimation to Dean Academics.				
R 16.4	The names of the students who have remained absent, for more than 25% of the actual classes held in a course will be intimated by the Course Coordinator himself on the last teaching day of each month of the respective semester, to the students in the class with written intimation to the Head of the Department who will arrange to consolidate the list for all such students for all the courses and display it on the notice board of the department with an intimation to Dean Academics.				
R 16.5	Condonation of Attendance: Condonation of attendance can only be considered in case the overall attendance of the student is minimum 60%. A deficiency of overall attendance to the extent of 15% may be condoned by the Principal on the recommendation of Head of the Department/ First Year Incharge on being satisfied that the same deficiency in attendance was due to circumstances beyond the control of the student. For availing such condonation, a student will have to apply to the Head of concerned department along with requisite documents. However the decision in this matter will be finally taken by the Principal. (Modified regulation as approved by Academic Council in its meeting dated 25th April 2015).				
R 16.6	In case the overall attendance is below 60 %, his/her attendance in individual courses shall be considered. If in any course his/her attendance is minimum 60%, he/she shall be eligible to appear in end semester examination of that course. However the decision in this matter will be finally taken by the Principal. (Modified regulation as approved by Academic Council in its meeting dated 25th April 2015).				
R 16.7	Student who is not permitted to appear for the end semester examinations due to shortfall in attendance in a course shall be awarded 'Z' grade in that course. This grade shall appear on the Grade Card till the successful completion of course requirements in that course.				
R 17. Withdraw	als				
R 17.1	A student who wants to withdraw from a semester shall apply through the Head of the Department to the Principal, on a prescribed form within one week from the end of the Test I Examination and it will be recorded in the registration record of the student. The student will be awarded a withdrawal grade 'W' at the end of the semester.				



R 17.2	In case, a student is unable to attend classes for more than four weeks in a semester, he/she may apply to the Principal through Head of the Department for withdrawal from the semester. However, such application shall be made as early as possible and latest before the start of the End Semester Examination.
R 17.3	In case the period of absence on medical grounds is more than fourteen working days during the semester, a student may apply for withdrawal from the semester, if he/she so desires. But such an application must be made to the Principal through Head of the Department, as early as possible and latest before the beginning of End Semester Examination.
R 17.4	<ul> <li>The Maximum duration for completion of a PG degree programme will be of five years for M.Tech / MBA / MCA and M.Tech (Part Time). Final decision will be taken by the competent authority.</li> <li>In case, a student is absorbed in autonomy from university, the maximum duration for completion of PG degree programme will be twice the remaining duration of the programme. In case, the student is unable to complete a programme as per the duration mentioned above, the student may be declared as not fit for Post Graduate technical education on the recommendation of Academic council.</li> </ul>
R 18. Examin	nation Schmen
1) Examina	ation Scheme (For All UG Programs, M. Tech, MCA and MBA (Integrated):
through cont	a student shall be evaluated for his / her academic performance in a theory (Lecture / Tutorial) course inuous Evaluation and End Semester Examination. All the examinations shall be conducted as per rescribed by the respective BOS and approved by the Academic Council.
a)	For Theory courses, out of total 100% weightage, 40% shall be based on continuous evaluation of which 30% evaluation shall be through Tests and 10% shall be by Teachers' assessment of students' performance. Remaining 60% evaluation shall be based on End

a)	For Theory courses, out of total 100% weightage, 40% shall be based on continuous evaluation of which 30% evaluation shall be through Tests and 10% shall be by Teachers' assessment of students' performance. Remaining 60% evaluation shall be based on End Semester Examination.
b)	For Laboratory courses, out of total 100% weightage, 50% shall be based on continuous evaluation and 50% evaluation shallbe based on End Semester Examination or as per scheme.
c)	Teachers' assessment of students' performance covering 10% evaluation shall be done on the basis of any two heads such as home assignment, tutorials, open-book test, seminars, group discussion, project, quizzes etc. The Course Coordinator shall declare the two heads chosen for each course, within the date prescribed by the Dean Academics.
d)	The marks on attendance if awarded as a part of Teachers' assessment, shall be given to those students having attendance more than or equal to 75% in that course. This will be applicable for existing and forthcoming batches with effect from 2018-19.
e)	End Semester examination shall be conducted as per schedule in academic calendar. End Semester examination will be of three-hour duration. The duration of examination may vary as per the need of the theory course. Valued answer books shall be shown to the students within six working days after the last day of theory examination. Grievances, if any, shall be addressed by the HoD on application of the students within next two days. Correction in marks, if any, should be communicated to the office of COE in the format prescribed within ten working days after the day of examination.

#### 2) Examination Scheme (For MBA Programme):

In a semester a student shall be evaluated for his / her academic performance in a theory (Lecture / Tutorial) course through continuous Evaluation and End Semester Examination. All the examinations shall be conducted as per they syllabi prescribed by the respective BOS and approved by the Academic Council.

a)	For Theory courses, out of total 100% weightage, 40% shall be based on continuous evaluation which will be carried out by conducting two internal tests of weightage 20% each and Teachers' assessment of weightage 20%. Best one out of these two tests and Teachers' assessment of 20% weightage shall contribute towards total 40% of continuous assessment. Remaining 60% evaluation shall be based on End Semester Examination.
b)	For Laboratory courses, out of total 100% weightage, 50% shall be based on continuous evaluation and 50% evaluation shallbe based on End Semester Examination or asper scheme.
c)	Teachers' assessment of students' shall be done on the basis of any two heads such as home assignment, tutorials, open-book test, seminars, group discussion, project, quizzes etc. The Course Coordinator shall declare the two heads chosen for each course, within the date prescribed by the Dean Academics.
d)	The marks on attendance if awarded as a part of Teachers' assessment, shall be given to those students having attendance more than or equal to 75% in that course. This will be applicable for existing and forthcoming batches with effect from 2018-19.
e)	End Semester examination shall be conducted as per schedule in academic calendar. End Semester examination will be of three-hour duration. The duration of examination may vary as per the need of the theory course. Valued answer books shall be shown to the students within six working days after the last day of theory examination. Grievances, if any, shall be addressed by the HoD on application of the students within next two days. Correction in marks, if any, should be communicated to the office of COE in the format prescribed within ten working days after the day of examination.
R 18.2	A student who skips teachers' assessment or a part thereof shall be awarded zero marks under the respective head.
R 18.3	A student who remains absent for End Semester examination, shall be awarded 'I garde' in end semester examination. A student eligible for 'FF' or 'I' grade shall be allowed to appear for the make-up examination. The make-up examination shall be conducted within one month from the declaration of results of the end semester examination. Make- up examination shall be held for the regular End Semester Examination only. However, in exceptional cases, a student who is in the final year of a programme and has cleared semester III and Semester IV (ie He/She has earned all the credits offered in Semester III
	and Semester IV as well as has secured 'SF' grade in the audit courses offered in these semesters as per the scheme of examination) of M.Tech MCA / MBA programme, but has secured 'FF' or 'I' grade in the preceding semesters, then such student shall be eligible to appear for the Make- up examination conducted for such courses. (Modified in Academic Council Meeting dated 21/08/2019)
R 18.4	A student shall be evaluated for his / her academic performance in a practical course on the basis of continuous evaluation and end semester practical examination or as per scheme.
a)	Continuous assessment covering 50% evaluation on the basis of his / her performance in each practical examination, journal completion & viva-voce / objective examination.



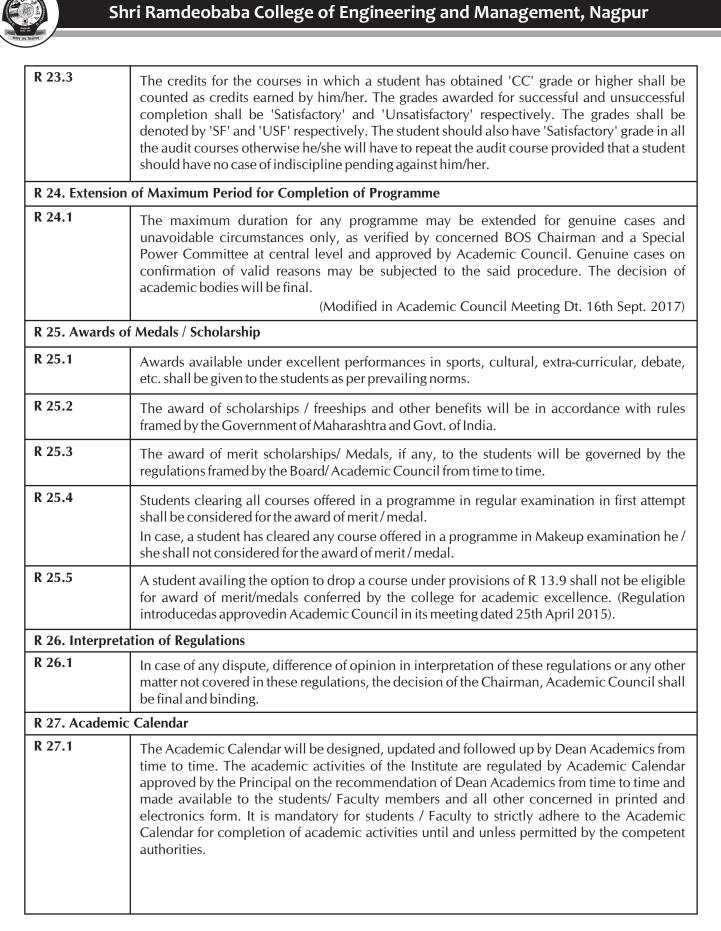
b)	There shall be one end semester practical examination covering 50% evaluation. In case of performance oriented practical, the evaluation shall be done on the basis of performance in practical examination and viva-voce/objective test. Mode of examination for non-performance type of practical shall be declared by the course coordinator in the beginning of the session. Type of practical course i.e. performance type or non performance type shall be decided by the respective BOS.				
R 18.5	The seminar/ open defense wherever applicable, shall be evaluated through the quality of work carried out, the report submission and presentation(s) as per the guidelines prescribed by the respective BOS from time to time.				
R 18.6	Project work shall be evaluated by mid-term seminar(s), the quality of work carried out, project report submission and the viva-voce examination.				
R 18.7	Notwithstanding contained in above, any specific norms in respect of examination, criterion of passing, results, valuation, grading, discipline, award of degree, attendance will be prepared by the respective departmental faculty board, approved by BOS and Academic Council, if required.				
R 18.8	An examinee securing 'FF' or 'Z' grade in any course of an examination of a programme shall have an option to forego his/her continuous assessment marks in a course or courses. In such cases he/she shall be examined for a total marks comprising theory/practical end semester examination and continuous assessment together, at his/her successive attempt at the examination Such an option can be availed by an examinee incase he/she is appearing for the successive attempts at the examination as an ex-student for that particular course. The option of forego cannot be availed by examinee in an examination incase he/she is appearing for the examination as regular student for that particular course. A student who is detained from appearing in an examination in a course(s) for lack of attendance can exercise the option of forego in successive attempts at the examination. To avail this, the examinee would indicate the same in his or her 'Application for the examination' and the option once exercised, shall be 'Final and Binding' on the examinee concerned for all the subsequent examinations in that course. It cannot be reverted. (Modified regulation as approvedby Academic Council in its meeting dated 15th April 2014). For the examinee opting for forego, his/her marks in continuous assessment shall be ascertained proportionately on the basis of his/her marks in the end semester examination of that course. a. For example, in case of a theory course wherein out of a total of 100 marks, 60 marks and 40 marks are allotted to end semester examination and continuous assessment respectively, the proportion would be 1:1 i.e. for every 1.5 marks scored in end semester examination, 1 mark would be assigned to continuous assessment. b. For example, in case of a practical course wherein out of a total of 50 marks, 25 marks each are allotted to end semester practical examination and continuous assessment respectively, the proportion would be 1:1 i.e. for every 1 mark scored in end semester practical examination, 1 mark would be assigned				

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R 18.9For Non-CBCS courses (compulsory/ elective/any other course) of PG program were closed before academic year 2017-18, the students will be allowed may consecutive available attempts starting from Regular Winter 2017 examination ( conducted) to pass the backlog non-CBCS courses whereas for the non-CBCS co from academic year 2017-18 onwards, maximum four consecutive available attempts immediately after the closure of the course (as and when the examination is condu provided. There after, the end semester evaluation pattern / conduction method decided by the respective board of Studies for such courses only. On successful c the course as per the evaluation method decided by BOS, the student shall be av not higher than 'BC' based on his/her performance.For the courses (compulsory/ elective/any other course) of all PG and UG progra are closed by the respective available attempts will be provided starting from Re 2017 examination (as and when the examination is conducted) to pass these co after, the end semester evaluation pattern / conduction method shall be ded respective Board of Studies for such courses only. On successful completion of the per the evaluation method decided by BOS, the student shall be awarded grad than 'BC' based on his/her performance.For the courses (compulsory/ elective/any other course) of all PG and UG progra are closed by the respective department in a semester from 2017-18 academic than 'BC' based on his/her performance.For the courses (compulsory/ elective/any other course) of all PG and UG progra are closed by the respective department in a semester from 2017-18 academic onwards, after the immediate make-up examination, maximum four consecut attempts will be provided (as and when the examination is conducted) to pass the there after, the end semester evaluation pattern / conduction method shall be ded than 'BC' based	
	There after, the end semester evaluation pattern / conduction method shall be decided by the respective Board of Studies for such courses only. On successful completion of the course as per the evaluation method decided by BOS, the student shall be awarded grade not higher than 'BC' based on his / her performance. (Academic Council Meeting Dt. 16th Sept. 2017 & 14th July 2018)
R 19. The Grad	
R 19.1	For every course taken by a student he/she is assigned a grade based on his/her combined performance in all components of evaluation scheme of a course/practical. The grade indicates a qualitative assessment of the student's performance and is associated with equivalent number called a grade point.
R 19.2	The academic performance of a student shall be graded on a ten-point scale following guidelines in Table 2.
R 19.3	The letter Grades (up to 'CC' only) awarded to a student in all the courses shall be converted into a SGPA and CGPA, to be calculated as given in R 28.
R 19.4	For computation of Standard Relative Grades, for the evaluation of the academic performance of an examinee in a course, in Makeup Examination, the Mean and the Standard Deviation would be the same as the Mean and Standard Deviation in the End Semester Examination for which the Makeup Examination was conducted.
R 19.5	A student passing a course in Makeup examination shall be treated as having cleared the course in First Attempt.
R 19.6	In case the ex-student appears for examination of the course along with regular students appearing in that course then the cut-off marks of the regular examination shall be applicable. In all other cases the cut-off marks of the previous regular examination shall be applicable.



R 20. Grade M	oderation Committee			
R 20.1	The Grade Moderation Committee for the programmes shall be appointed semester wise by the Chairman, BOS. This committee shall be responsible for adherence to the guidelines for the award of grades and shall include all the concerned Course Coordinators. The Chairman, Grade Moderation Committee shall be responsible for the display of grades in the department and for forwarding the final grades to the COE.			
R 21. Award of	Degree			
R 21.1	The Grade Moderation Committee for the programmes shall be appointed semester wise by the Chairman, BOS. Chairman BOS shall be the Chairman of Grade Moderation Committee. This committee shall be responsible for adherence to the guidelines for the award of grades and shall include all Professors in the Department, Programme Coordinators/ Departmental Examination Committee (DEC) in-charge and all the concerned Course Coordinators. The Chairman, Grade Moderation Committee shall be responsible for the display of grades in the department and for forwarding the final grades to the COE. (Modified in Academic Council Meeting dated 25/04/2016) The degree shall be awarded by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur along with the name of the college, on the recommendations of Academic Council of RCOEM, Nagpur.			
R 22. Grade Ca	ard			
R 22.1	<ul> <li>The grade card shall be issued at the end of the semester to each student and will contain the following:</li> <li>a) The credits for each course registered for that semester.</li> <li>b) The grade points and letter grades obtained in each course.</li> <li>c) The total number of credits earned by the student up to the end of that semester in each of the course.</li> <li>d) The SGPA and the CGPA.</li> </ul>			
R 22.2	Grade card will not indicate class or division or rank.			
R 22.3	Wherever required the conversion of CGPA to percentage of marks will be done using following table.CGPA4.05.06.07.08.09.010.0Percentage405060708090100			
	The intermittent percentages should be calculated based upon the extrapolation of the values in the table.			
	Requirements for the Award of the Degree			
R 23.1	The student should have taken and passed all the prescribed courses including seminar/ open defense and projects under the general institutional and departmental requirements.			
R 23.2	A student who fails to obtain the minimum specified CGPA (as per teaching and Examination scheme of respective programme) required for the award of degree as per norms, he/she shall take additional courses or repeat the courses mentioned in program till the minimum CGPA is attained, subject to maximum duration of program as specified in R 17.4 and R 24.1.			





### R 28. Calculations of SGPA and CGPA Calculation of Semester Grade Point Average (SGPA) (i) The performance of a student in a semester is indicated by a number called SGPA. The SGPA is the weighted average of the grade points obtained in all the courses registered by the student during the semester. The Grades as specified in R 20.3 will be used for calculating the CGPA and SGPA. $\text{SGPA} = \frac{\sum_{i=1}^{n} C_i P_i + C_a P_a}{\sum C_i}$ Where, Ci = The number of credits offered in the ith course of a semester for which SGPA is to be calculated Pi = Grade Point earned in the i course $i = 1, 2, \dots, n$ represent the number of courses in which a student is registered in the concerned semester Ca = 1; Incentive credit per activity Pa = Grade point for participating in activities NCC/NSS/Games & sports/Cultural Activities/ACEES. SGPA is rounded up to two decimal places and SGPA shall not exceed 10. Calculation of Cumulative Grade Point Average (CGPA) (ii) Up-to-date assessment of the overall performance of a student from the time of his first registration is obtained by calculating a number called CGPA, which is weighted average of the grade points obtained in all the courses registered by the student since he/she entered the Institute. $CGPA = \frac{\sum_{j=1}^{m} C_j P_j + \sum_{l=0}^{k} C_{al} P_{al} + \sum_{r=0}^{q} C_{br} P_{br}}{C_i}$ Where, Ci = The number of credits offered in the jth course up to the semester for which CGPA is to be calculated $P_{i} = Grade point earned in the j course.$ $j = 1, 2, \dots, m$ represent the number of courses in which a student is registered up to the semester for which the CGPA is to be calculated Cal: Incentive credit in semester Pal = Grade point for participating in activities NCC/NSS/Games & Sports/Cultural Activities/ACEES in the semester. I = number of semester of participation Cbr ; Incentive credit in semester Pbr = Grade point for participating in industrial/corporate training. r = number of semester of participation CGPA is rounded up to two decimal places and shall not exceed 10.



R 29. Guidelines	s for the Aw	ard of Grad	es		
	Following (i) In ge (ii) For absolute n (iii) The - points sc (iv) The shall be fin (v) The semester of grades and the final working d (vi) The group disc (vii) In ca i. Satis ii. Unsa The grade of examin the audit of	are the general each studen narks conside marks of vari ale. The rour provisional nalized withi grades so aw of the depart d display a co grades shall ays from the procedures cussion shall use of audit co factory atisfactory s shall be aw ations. The courses withi	eral guidelines for the a rd relative grading sys t, evaluation in diffe ering the weightage ir ous components shall nding off shall be done grades shall be award in fifteen working days varded shall be mode ment within next thre opy of the grades awa be communicated t date of display of grad for evaluation and av be decided by the resp ourses the students wo varded by the course of course coordinator shall n the date prescribed	tem will be followed. rent components of a course shall scheme. be added to get total marks secured of on the higher side. ded by the Examination Committee. safter the End Semester Examination. rated by a Grade Moderation commi e working days. This committee will rded on the Notice board of the Dep o the Controller of Examinations w les. ward of grades for project, training, s	n a 100 The grades Ittee for that finalize the artment. All vithin three eminar and e controller
R 29.1. Standard	d Relative G	rading Syste	em		
	The Mean obtained b	and Standa	ard Relative Grades rd Deviation would be ats in that course $X = \frac{\sum_{i=1}^{n} X_{i}}{n}$	e calculated for the course based upo	n the marks
	Formula f	or Standard	Deviation(s) s	$= \sqrt{\frac{\sum_{i=1}^{N} (x_i - \bar{x})^2}{N-1}}$	
	For PG Courses having 30 or more students				
	Grades Grade Points Range for Grade Calculation				
		AA	10	≥x +1.5 s	
		AB	9	$<$ AA and $\ge$ x + 1.0 s	1
		BB	8	$<$ AB and $\ge$ x +0.25 s	
		BC	7	<bb -0.5="" and≥="" s<="" td="" x=""><td>1</td></bb>	1
		СС	6	$<$ BC and $\ge$ x - 1.0 s	1
		FF	0	<x-1.0 s<="" td=""><td></td></x-1.0>	
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R 30. Guidelines for Project Evaluation				
R 30.1	M. Tech. :			
	• Every student has to undertake a project of professional interest. The project may be related to a theoretical analysis, an experimental investigation, a proto-type design, a new correlation and analysis of data, software design, fabrication and setup of new equipment.			
	• The PG Coordinator appointed by the department normally assigns the project towards the end of the II semester full time M. Tech course/III semester part time			
	M. Tech. course and the work is done uniformly during the last two semesters of the programme.			
	• The first phase of project work to be carried out in III semester in case of full time			
	M. Tech. which will be assessed at the end of the semester under the project phase-I.			
	The report of the project work should be submitted by the prescribed date. A panel of examiners will evaluate the report and the presentation of the work carried out at the end of the semester.			
	• The first phase of project work to be carried out in IV semester in case of part time			
	M. Tech. which will be assessed at the end of the semester under the project phase-I.			
	The report of the project work should be submitted by the prescribed date. A panel of examiners will evaluate the report and the presentation of the work carried out at the end of the semester.			
	• The assessment of the project phase-II work is evaluated on the following basis;			
	- The 1st stage of progressive project work carries 30% of the total weightage,			
	- The 2nd stage of progressive project work carries 30% of the total weightage,			
	- The final stage of project work carries 40% weightage,			
	<ul> <li>At each stage of progressive project work, a report should be submitted and the work should be presented which will be assessed by the panel of examiners as an internal assessment.</li> </ul>			
	• The final project report should be submitted by the prescribed date. The final project report and the work should be presented, which will be assessed by the examiner at the End Semester Examination.			
	• Submission of the final project report cannot be postponed beyond the date specified in the calendar. If the final project work cannot be completed due to valid reasons, the course can be dropped in consultation with the Head of the Department, PG coordinator and the guide on or before the last date for dropping of courses. Reregistration for the same is required in the following semester in which it should be completed.			
	• Student who does not submit the final project report for assessment by the due date, due to unavoidable circumstances beyond his/her control, will be temporarily awarded 'I' grade at the time of finalization of grades.			
	The 'I' grade will be converted to a performance grade when he/she submits the final project report and undergo the examination as per syllabi notified by PG coordinator in consultation with Head of the Department. In case of non-compliance of these provisions, 'I' grade shall automatically be converted into 'F' grade.			



R 30.2. MBA	
R 30.2. MBA	<ul> <li>Project Evaluation Guidelines</li> <li>Every student has to undertake a project of professional interest. The project has to be related to study and analysis related to the working in the business organizations in the area of Operation Management, Financial Management, Marketing Management, Human Resource Management and other Management related areas. The student is expected to apply appropriate research tools to analyze the data to draw meaningful conclusions and suggestion</li> <li>The first phase of project work will be carried out in 3rd semester by a project defining seminar, where student will define title, scope and objective of the project. The final project report should be submitted by the prescribed date. A panel of examiners will evaluate the report and project defense seminar and viva-voce which will be conducted after the End Semester Examination. The project assessment will be carried out by internal and external examiners. The 50% weightage will be assigned to internal assessment done by Project Guide. The remaining 50% weightage will be assigned to external assessment towe by external examiner.</li> <li>Internal Assessment 50%</li> <li>This internal assessment will be carried out by Project Guide based on student's demonstration of initiative, interest, efforts, regularity, research work, data collection, data analysis, statistical tools used and result obtained.</li> <li>External Assessment 50%</li> <li>The external assessment will be done by external examiner for 50% weightage based on project work presentation, defence seminar and oral examination.</li> <li>Submission of the project cannot be postponed beyond the date specified in the calendar. If the project could not be completed due to valid reasons, the course can be dropped in consultation with the Head of the Department and the guide on or before the last date for dropping of courses. Re-registration for the same is required in the following semester in which it should be completed.</li> <li>Student who does not submit the pro</li></ul>
	grade.
R 30.3. MCA	
	<ul> <li>Every student has to undertake a minor project in III semester and a full time industrial project in III semester of professional interest. The project may be related to a theoretical analysis, an experimental investigation, a proto-type design, a new correlation and analysis of data, fabrication and setup of new equipment, software design. The Project Coordinator appointed by the department normally assists in getting industrial project and assigns the project towards the end of the previous semester.</li> <li>The final project report for both III and III semesters should be submitted (along with the certificate from the industry, in case of industrial project) by the prescribed date. A panel of examiners evaluates the report and an oral examination is conducted after the End Semester Examination.</li> </ul>



	• The assessment of the project work is done on the following basis.		
	- The preliminary presentation carries 25% of the total weightage.		
	- Another 25% weightage is given for the initiative, interest, effort and regularity shown by the student.		
	The remaining 50% weightage is assigned to the oral examination conducted by Panel of Examiners.		
	• Submission of the project cannot be postponed beyond the date specified in the calendar. If the project cannot be completed due to valid reasons, the course can be dropped in consultation with the Head of the Department, project co-coordinator and the guide on or before the last date for dropping of courses. Re-registration for the same is required in the following semester in which it should be completed.		
	• Student who does not submit the project report for assessment by the prescribed date due to unavoidable circumstances beyond his control, will be temporarily awarded 'I' grade.		
	At the time of finalization of grades. The 'I' grade will be converted to a performance grade when he/she submits the report and undergo the examination as per syllabi notified by project coordinator in consultation with Head of the Department. In case of non-compliance of these provisions, 'I' grade shall automatically be converted into 'FF' grade.		
R 32. Indication	hs of attempt on grade card		
	The following characters will be displayed in the Grade Card to indicate the attempts. The Degree will not have any such indication. Single Grade Card will be provided for the regular and Makeup examinations. The Grade Cards of successive attempts will be separately provided. However a single Grade Card for a semester may be provided after all the subjects of that semester are passed in more than one attempt. But it will be marked 'N'. The student will have to separately apply to the Controller of Examination for the single semester Grade Card with copies of all the intermediate semester Grade Card along with a fees decided by the Finance Committee.		
	M - With Makeup Examination N - Not in the First Attempt IG - Improvement Grade		
R 33 (a). Improv	vement of Grade / CGPA while undertaking a Programme		
	Student shall be permitted to improve their grade under the following conditions.		
	1. The examination for improvement of grades shall hereafter be termed as 'Improvement Examination'.		
	2. A candidate admitted to the institute prior to the commencement of this ordinance, shall also be allowed to avail provisions as per this ordinance.		
	3. The facility for improvement of grades will be available to the students having CGPA below 6.00 (Modified regulation as approved by Academic Council in its meeting dated 15th April 2014).		
	4. The improvement is possible only in theory papers. No improvement is permissible in practicals/lab courses, projects, workshops and assignments.		
	5. The improvement examination shall be conducted along with the Makeup Examination.		
	6. The Improvement Examination can be undertaken only for the courses in which a candidate had appeared as a regular student in the end term examination for which the Makeup is being conducted.		
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## Shri Ramdeobaba College of Engineering and Management, Nagpur

	7.	Additional examination fees will be paid by the student for appearing in the examination for improvement in the grade. The fee payable shall be as prescribed by the Finance Committee.
	8.	After the improvement examination result of the course taken for improvement of grade, better of the two grades, that is grade already awarded and the grade secured in the improvement examination will be considered.
	9.	A candidate who has reappeared for the above examinations under the provision of this ordinance and fails to improve his/her grade, his/her performance at such reappearance shall be ignored.
	10.	Student having undertaken Improvement Examination will not be eligible for the award of any medal/merit position.
	11.	The student shall be issued a fresh replacement grade card indicating the new grade with a mark which shall be explained as 'Improved Grade' only if he/she has improved the grades.
	12.	For calculation of standard relative grade for evaluation of the academic performance of an examinee in a course in improvement examination, the mean and standard deviation of that course in the regular examination shall be applicable.
R 32 (b). Improv	vemen <sup>*</sup>	t of Grade / CGPA after successful completion of a programme
	1.	The facility of improving CGPA at Bachelors' Degree Level through re-appearance shall be available only to the candidates who have earned all credits offered in the programme and have secured not less than 5 CGPA similarly at Masters' Degree Level through re-appearance shall be available only to the candidates who have earned all credits offered in the programme and secured not less than 6 CGPA.
	2.	A Candidate who desires to improve the CGPA will be permitted at his / her option to reappear again for the courses of his/ her choice.
	3.	A candidate will be allowed to reappear for the examination for improvement of CGPA within a period of two years from the date of his/her passing Bachelor's/Master's degree examination.
	4.	A candidate shall have to reappear for any number of theory courses offered in the programme as per the scheme prevalent at the time of his/her appearance.
	5.	A candidate appearing for the improvement of CGPA shall not be entitled to get any prize/medal/scholarship/award etc.
	6.	A candidate who desires to apply for improvement of CGPA should submit his/her examination application form prescribed for improvement of CGPA from the College along with the prescribed fee for improvement and relevant documents.
	7.	A person eligible to take the examination under the provisions of this Ordinance shall pass the entire examination in maximum three attempts within two years from the date he/she first applies for improvement of CGPA.
	8.	Candidate will not be allowed to change any paper or papers which he/she had opted for improvement at subsequent reappearances. Further, all the papers of reappearance shall have to be cleared at one and the same sitting.
	9.	If an applicant fails in any of the papers opted for improvement, he/she will have to appear again for all those papers he/she had applied for improvement including the papers in which he/she had already passed during re-appearance.



10.       Each examination for which candidate appears for improvement shall be considered as one attempt.         11.       The result of the candidate appearing for improvement of CGPA shall be declared and communicated to him/her even if he/she does not obtain the required CGPA higher than the CGPA he/she already possesses.         12.       A candidate who has reappeared for the examination under the provision of this Ordinance for improvement of his/her CCPA and improves his CCPA by such reappearance, he/she shall have to return the original grade cards to the COllege.         13.       A candidate shall be issued revised grade card only after he/she surrenders his /her original grade cards to the College.         14.       In the revised grade card, mention will be made of the fact that he/she has improved his/her CCPA under this Ordinance.         15.       On award of a fresh grade card under this scheme, his/her previous grade card shall be treated as cancelled.         16.       A candidate who has pre-appeared for the above examination/s under the provision of this Ordinance and fails to improve his / her CGPA, his / her performance at such reappearance shall be ignored.         17.       Candidate, who has passed his/her degree examination under the old course/syllabus or scheme of examination which is not in existence, shall have to seek absorption/equivalence of old courses with the existing ones from the respective Board of Studies. (Regulation introduced as directed by Academic Council in its meeting dated 15th April 2014). <b>R 34.1</b> Notwithstanding anything contained in the above regulations, the Chairman of the Academic Council as he thinks necessary and shall at the		-		
R 34. Emergent Cases         R 35. Power of Modify         R 36. Swachha Bharat Summer Internship for UG and PG Students         R 37. One Semeter, RCOEM Technology Business Incubation (TB) Startup Internship Scheme of India (as communicated through the ability of High Education, Government of India (as communicated through the ability of High Education, Startup Internship Scheme Academic Council A startup of Startup Internship Scheme Academic Council A startup of Startup Internship Scheme Academic Council In Its meeting adata the ability of Startup Internship Scheme Academic Council In Its meeting adata 15th April 2014).         R 35. 1       Notwithstanding anything contained in the above regulations, the Chairman of the Academic Council May, in emergent situations, take action on behalf of the Academic Council as he thinks necessary and shall a the earliest opportunity: report it in the next meeting of the Academic Council.         R 36. Swachha Bharat Summer Internship for UG and PG Students         Student who completes the Swachha Bharat Summer Internship Action, Government of India (as communicated through the websites of UGC, New Delhi and AlCTE, New Delhi and submits a copy of Swachha Bharat Summer Internship Scheme         R 36. Commu				
R 34.1       Ordinance for improvement of his/her CGPA and improves his CGPA by such reappearance, he/she shall have to return the original grade cards to the College, within one month from the date of declaration of result.         13. A candidate shall be issued revised grade card only after he/she surrenders his /her original grade cards to the College.         14. In the revised grade card, mention will be made of the fact that he/she has improved his/her CGPA under this Ordinance.         15. On award of a fresh grade card under this scheme, his/her previous grade card shall be treated as cancelled.         16. A candidate who has re-appeared for the above examination/s under the provision of this Ordinance and fails to improve his / her CGPA, his / her performance at such re-appearance shall be ignored.         17. Candidate, who has passed his/her degree examination under the old course/syllabus or scheme of examination which is not in existence, shall have to seek absorption/equivalence certificate regarding the absorption/equivalence of old courses with the existing ones from the respective Board of Studies. (Regulation introduced as directed by Academic Council in its meeting dated 15th April 2014).         R 34.1       Notwithstanding anything contained in the above regulations, the Chairman of the Academic Council as he thinks necessary and shall at the earliest opportunity; report it in the next meeting of the Academic Council.         R 35.1       Notwithstanding all that has been stated above, the Board has the right to modify any of the above regulations from time to time.         R 36. Swachha Bharat Summer Internship for UC and PG Students       Student who completes the Swachha Bharat Summer Internship as per the guideline		communicated to him/her even if he/she does not obtain the required CGPA higher		
response       original grade cards to the College.         14.       In the revised grade card, mention will be made of the fact that he/she has improved his/her CGPA under this Ordinance.         15.       On award of a fresh grade card under this scheme, his/her previous grade card shall be treated as cancelled.         16.       A candidate who has re-appeared for the above examination/s under the provision of this Ordinance and fails to improve his / her CGPA, his / her performance at such re-appearance shall be ignored.         17.       Candidate, who has passed his/her degree examination under the old course/syllabus or scheme of examination which is not in existence, shall have to seek absorption/equivalence certificate regarding the absorption/equivalence of old courses with the existing ones from the respective Board of Studies. (Regulation introduced as directed by Academic Council in its meeting dated 15th April 2014). <b>R 34.1</b> Notwithstanding anything contained in the above regulations, the Chairman of the Academic Council may, in emergent situations, take action on behalf of the Academic Council as he thinks necessary and shall at the earliest opportunity; report it in the next meeting of the Academic Council. <b>R 35.1</b> Notwithstanding all that has been stated above, the Board has the right to modify any of the above regulations from time to time. <b>R 36. Swachha Bharat Summer Internship for UG and PG Students</b> Student who completes the Swachha Bharat Summer Internship as per the guidelines of Ministry of Human Resource Development, Department of Higher Education, Government of India (as communicated through the websites of UGC, New Delhi and AICTE, New Delhi) and submits a cop		Ordinance for improvement of his/her CGPA and improves his CGPA by such re- appearance, he/ she shall have to return the original grade cards to the College, within		
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	and Start-up component. The academic component will be completed in the respective department of the institute before the student is relieved for Start-up.
	For students admitted in the program having scheme/curriculum existing before 2018-19, the academic component will include conduction of classes and internal evaluation of compulsory Theory and Lab courses of Final semester to be held during the Winter Term prior to Final Semester. For students admitted in the program having scheme/curriculum implemented progressively from 2018-19 onwards, the academic component will include conduction of classes and internal evaluation of All the theory and lab courses of Final semester to be held during Winter Term prior to Final Semester. In both cases, minimum 75% student attendance during Winter term shall be mandatory and such students will appear for End Semester Examination along with other regular students of Final semester as per the time-table provided by the institute.
	The Start-up component will include working on various aspects of startups like, market survey / customer identification, validation / technology / product / service development/business model/business plan/MVP/ detailed project report. It will be conducted and evaluated by RCOEM TBI Foundation in coordination and consultation with the Head of concerned department. For students admitted in the program having scheme/curriculum existing before 2018-19, the Start-up component will cover the Electives and Project work of Final Semester where as for students admitted in the program having scheme/curriculum implemented progressively from 2018-19 onwards, the Start-up component will cover only the Project work of Final Semester.
	There will be one Internal Mentor and One External Advisor assigned for each Start-up. The RCOEM TBI Foundation and Head of respective department will assign an internal mentor who in association with RCOEM TBI Foundation will continually monitor and evaluate the progress of each startup. The External Advisor shall be identified and assigned by RCOEM TBI Foundation.
	This Startup scheme during Final Semester shall be offered subject to fulfillment of selection criteria by the student as decided and revised by RCOEM TBI Foundation, permission granted by RCOEM TBI Foundation and Head of respective department at RCOEM. The process of selection shall start by submission of application by the student in the beginning of Pre Final Semester (as notified by RCOEM TBI Foundation)

Sr.	Department	Programme Title	Programme
No.		rrogramme ritte	Code
1	Civil Engineering	M. Tech. (Geotechnical Engineering) (Part-Time)	CEG
2	Civil Engineering	M. Tech.( Structural Engineering)	CES
3	Electronics Engineering	M. Tech.(Very Large Scale Integration Design)	ENV
4	Industrial Engineering	M. Tech.(Industrial Engineering)	IND
5	Electrical Engineering	M. Tech. (Power Electronics & Power System)	EEP
6	Computer Science and Engineering	M. Tech. (Computer Science and Engineering)	CSE
7	Mechanical Engineering	M. Tech. (Robotics and Automation)	RAA
8	Computer Applications	M.C.A.	MCA
9	Management Technology	MBA	MBA

#### Table -1 : PG Programmes Leading To M. Tech. Degree

Academic Performance	Grades	Grade Points
Outstanding	AA	10
Excellent	AB	9
Very Good	BB	8
Good	BC	7
Average	CC	6
Poor	FF	0
Incomplete	I	
Withdrawal	W	
Non completion of course requirement	Z	
Extension (in projects only)	Х	

### Explanation

'FF' Grade

- The 'FF' grade denotes poor performance amounting to failure.
- A student has to repeat all courses in which he/ she obtains 'FF' grade.
- For the elective courses in which 'FF' or I grade has been obtained, the student may take the same course or any other course from the same elective group. If the course is not offered /available in the current semester he will have to take it whenever it is offered by the department and then appear for the examination.

### 'l' Grade

This grade indicates absence in End Semester Examination

### 'W' Grade

This refers to withdrawal from the course as per the regulations.

### 'X' Grade

This grade is awarded for incomplete Project work only and will be converted into an earned grade in the subsequent academic session on the completion of the Project work and its evaluation.

### 'Z' Grade

This grade stands for non-completion of course requirement.



Academic Performance	Grades	Grade Points
Outstanding	AA	10
Excellent	AB	9
Very Good	BB	8
Good	BC	7
Satisfactory	CC	6
Average	CD	5
Poor	FF	0
Incomplete	I	
Withdrawal	W	
Non completion of course requirement	Z	
Extension (in projects only)	Х	

Table 2: Structure of Relative Grading of Academic Performance (UG)

### Explanation :

### 'FF' Grade

- The 'FF' grade denotes poor performance amounting to failure.
- A student has to repeat all courses in which he/ she obtains 'FF' grade, till a passing grade is obtained within the prescribed duration.
- For the elective courses in which 'FF' or 'Z' grade has been obtained, the student may take the same course or any other course from the same elective group. If the course is not offered / available in the current semester he will have to take it whenever it is offered by the department and then appear for the examination.

### 'l' Grade

This grade indicates absence in End Semester Examination.

### 'W' Grade

This refers to withdrawal from the course as per the regulations.

#### 'X' Grade

This grade is awarded for incomplete Project work and will be converted to a regular grade on the completion of the Project work and its evaluation.

### 'Z' Grade

This grade stands for non-completion of course requirement.

