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SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT, NAGPUR

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

POST GRADUATE
ORDINANCES / REGULATIONS

2016 - 17

Published by

Dr. R.S. Pande

Principal

Shri Ramdeobaba College of Engineering & Management Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur - 440 013

Ph.: 0712-2580011 Fax: 0712 - 2583237 ISO 9001: 2008 CERTIFIED ORGANISATION

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 810 candidates for UG programmes, around 381 candidates for PG programmes and 60 candidates for Dual Degree Course 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 the July and ends in December; the 2nd Semester (**Even Semester**) starts in January and ends in June.

1.2 Departments

The various Departments and their two-letter codes are given below;

S.No.	Name of Department	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

1.3 Programmes Offered

RCOEM Nagpur offers academic programmes namely Engineering and Technology at UG and PG levels, MBA, MCA, Integrated Course in Engineering & Management and Dual Degree Course in Management. In undergraduate programmes and in Dual Degree Course in Management, 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. For Master of Technology Management, candidates are selected from total sanctioned UG engineering intake (all UG engineering programmes in first shift). For Academic year 2015-16, the selection of candidates for MTM programme shall be done at the start of semester III, UG engineering programme on programme wise merit of first year (Semester I & II) results. Admission to all these programmes are based as per the eligibility criteria laid down by the competent authority.

1.3.1 Under Graduate Programmes A. Bachelor of Engineering : (B.E.)

Sr. No.	Department	Programme Title	Programme Code	Eligibility for admission
1	Civil Engineering	B.E. (Civil Engineering)	CEU	
2	Computer Science and Engineering	B.E. (Computer Science and Engineering)	CSU	Eligibility
3	Electrical Engineering	B.E. (Electrical Engineering)	EEU	Criteria as laid down
4	Electronics and Communication	B.E. (Electronics and	r.c.u	by the
	Engineering	Communication Engineering)	ECU	competent
5	Electronics Design Technology	B.E. (Electronics Design Technology)	EDU	authority from time
6	Electronics Engineering	B.E. (Electronics Engineering)	ENU	to time
7	Industrial Engineering	B.E. (Industrial Engineering)	INU	
8	Information Technology	B.E.(Information Technology)	ITU	
9	Mechanical Engineering	B.E.(Mechanical Engineering)	MEU	

1.3.2 Post Graduate Programme

A. Masters:

S.	Department	Programme Title	Programme	Eligibility for
No.			Code	admission
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	Eligibility Criteria as
4	Industrial Engineering	M.Tech. (Industrial Engineering)	IND	laid down
5	Electrical Engineering	M. Tech (Power Electronics & Power System)	EEP	by the competent
6	Computer Science and Engineering	M. Tech (Computer Science & Engineering)	CSE	authority from time to time
7	Mechanical Engineering	M. Tech (Heat Power Engineering)	HPE	to time
8	Computer Application	MCA	MCA	
9	Management Technology	MBA	MBA	

1.3.3 Integrated Course in Engineering & Management

Sr. No.	Department	Programme Title	Programme Code	Eligibility for admission
1	Management Technology	Masters of Technology Management	МТМ	Eligibility Criteria as laid down by the competent authority from time to time

1.3.4 Dual Degree Course in Management

Sr. No.	Department	Programme Title	Programme Code	Eligibility for admission
1		Bachelor's Degree in Management	ВМ	Eligibility Criteria
2	Management Technology	Bachelor's Degree in Applied Management	ВАМ	as laid down by the competent authority from time to time
3		Master's Degree in Applied Management	MAM	

ORDINANCES FOR THE P.G. PROGRAMMES 2016

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)	"Government" 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)	"Regulating Authority" 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)	"Institute" shall mean Shri Ramdeobaba College of Engineering and Management, Ramdeo Tekdi, Gittikhadan, Katol Road, Nagpur 440013.				
	(viii)	"Board" 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)	"APEC" 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)	"Finance Committee" shall mean the Finance committee of the Institute constituted as per the guidelines of UGC for autonomous colleges.				

(xiii)	"BOS" shall mean the Board of Studies of the department, constituted as per the Guidelines of UGC for autonomous colleges.
(xiv)	"Degree" 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 U programme of the Institute.
(xvi)	"Student" shall mean a student registered for UG programme for studional leading to any degree course offered by the Institute and sought fin admission to the degree programme.
(xvii)	"Direct Admission Student" shall mean a student who is admitted directly second year of the B.E. degree program after completion of the appropria Diploma Course and registered for undergraduate program for full time studies and the respective B.E. degree.
(xviii)	"Course" shall mean a curricular component identified by a designate number and title.
(xix)	"Programme" Programme shall mean the stream in which the degree awarded.
(xx)	"Scheme of Teaching and Examination" shall mean the scheme of teaching and examination for a programme of study as approved by the Academ Council.
(xxi)	"Course Coordinator" shall mean a faculty member who shall have for responsibility for the course, coordinating the work of other facul member(s) involved in that course, including examinations and the award grades.
(xxii)	"Departmental Faculty Board (DFB)" shall mean the committee of the facul members involved in teaching a course or a group of courses of technical relevant subjects.
(xxiii)	"Grade Moderation Committee" shall mean the committee appointed by the Academic Council to moderate grades awarded by the examiner, if required
(xxiv)	"SGPA" 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 in 4/1999 of the University.
(xxvii)	"EXC" shall mean Examination committee constituted as per the Direction No. 4/1999 of the University for autonomous colleges.

	(xxviii)	"COE" 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.
	(xxxi)	"DEC" shall mean the Departmental Examination Committee.
	(xxxii)	"Guide" shall mean a person who is qualified to supervise a project / dissertation work of students and is approved by the Academic Council.
	(xxxiii)	"RCC" shall mean Departmental Research Coordination Committee.
	(xxxiv)	"GRC" shall mean Grievance Redressal Committee formed by the Academic Council.
	(xxxv)	"Competent Authority" shall mean the Board of Management / Academic Council of the Institute/ University/Government/UGC/Regulating Authority as the case may be.
	(xxxvi)	"Equivalence Committee" shall mean the Equivalence Committee appointed by the Academic Council.
	(xxxvii)	"APAC" shall mean Academic Performance Advisory Committee.
	(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,
		provided 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 (Geotechnical Engineering) Semester Pattern I Semester M. Tech (Geotechnical Engineering)

C.	S.,					Maxin	F.v.a.us	Cata		
Sr. No.	Code	Course	L	P	Credit	Continuous Assessment	End Sem Exam	Total	Exam Duration	Cate gory
1	CET 571	Advanced Soil Mechanics	4	-	4	40	60	100	3 Hours	PC
2	CEP 571	Advanced Soil Mechanics (P)	-	2	1	25	25	50		PC
3	CET 572	Geotechnical Exploration & Investigation	4	-	4	40	60	100	3 Hours	PC
4	CEP 572	Geotechnical Exploration & Investigation (P)	-	2	1	25	25	50		PC
5	CET 595	Engineering Computational Techniques	4	-	4	40	60	100	3 Hours	FC
		Total	12	4	14					

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

Sr.					P Credit	Maximur	n Marks		l	Cate
No.	Code	Course	L	P		Continuous Assessment	End Sem Exam	Total		gory
1	CET 573	Foundation Engineering I	4	-	4	40	60	100	3 Hours	PC
2	CEP 573	Foundation Engineering I (P)	-	2	1	25	25	50		PC
3	CET 596	Research Methodology	3	-	3	40	60	100	3 Hours	FC
4	CET 597	Group Elective I	4	-	4	40	60	100	3 Hours	GE
5	CEP 597	Group Elective I(P)	-	2	1	25	25	50		GE
6	CET 599	Open Elective		-	3	40	60	100	3 Hours	OE
		Total	14	4	16					

Course Code	Group Elective I (T + P)
CET/ CEP 597-1	Applied Soil Engineering
CET/ CEP 597-2	Finite Element Method
CET/ CEP 597-3	Instrumentation & Material Science
CET/ CEP 597-4	Soil Dynamics

Course Code	Open Elective
CET 599-1	Advanced Construction Materials & Techniques
CET 599-2	Geoscience
CET 599-3	Prestressed Concrete Structure
CET 599-4	Watershed Management

Scheme of Examination of Master of Technology (Geotechnical Engineering) Semester Pattern

III Semester M. Tech. (Geotechnical Engineering)

C .				_	6 11	Maximum Marks				
Sr. No.	Code	Course	L	P	Credit	Continuous Assessment	End Sem Exam	Total	Exam Duration	Cate gory
1	CET 598	Group Elective - II	4	-	4	40	60	100	3 Hours	GE
2	CET 671	Ground Improvement	4	-	4	40	60	100	3 Hours	PC
3	CEP 671	Ground Improvement	-	2	1	25	25	50	-	PC
4	CET 672	Earth and Rockfill dams	4	-	4	40	60	100	3 Hours	PC
5	CET 673	Foundation Engineering - II	4	-	4	40	60	100	3 Hours	PC
		Total	16	2	17					

Course Code	Group Elective II
CET 598-1	Design of Bridges
CET 598-2	Design of Environmental Structures
CET 598-3	Geo-Environmental Engineering
CET 598-4	Soil Structure Interaction

Scheme of Examination of Master of Technology (Geotechnical Engineering) Semester Pattern

IV Semester M. Tech. (Geotechnical Engineering)

					-	Maxim				
Sr. No.	Code	Course	L	P	Credit	Continuous Assessment	End Sem Exam	Total	Exam Duration	Cate gory
1	CET 674	Program Elective I	4	_	4	40	60	100	3 Hours	PE
2	CET 675	Program Elective II	4	-	4	40	60	100	3 Hours	PE
3	CEP 676	Project Phase I	-	3	6	50	50	100	-	PC
		Total	8	3	14					

Course Code	Program Elective I (T)
CET 674-1	Special Geotechnical Construction
CET 674-2	Geotechnical Earthquake Engineering

Course Code	Program Elective II (T)
CET 675-1	Pavement Analysis and Design
CET 675-2	Rock Mechanics

Scheme of Examination of Master of Technology (Geotechnical Engineering) Semester Pattern

V Semester M. Tech. (Geotechnical Engineering)

Sr	Sr. No. Code	e Course			Credit	Maximi		Exam	Cate	
No.			L	P		Continuous Assessment	End Sem Exam	Total	Duration	
1	CEP 771	Project Phase II	-	6	12	100	100	200		PC
		Total		6	12					

				Maximum Marks					
Semester	L	Р	Credits	Internal Assessment	End Semester Examination				
First Semester	12	4	14	170	230	400			
Second Semester	14	4	16	210	290	500			
Third Semester	16	2	17	185	265	450			
Fourth Semester	8	3	14	130	170	300			
Fifth Semester	0	6	12	100	100	200			
Total	50	19	73	795	1055	1850			

Scheme of Examination of Master of Technology (Structural Engineering) Semester Pattern I Semester M. Tech. (Structural Engineering)

						Max	kimum Marks		F	
SN	Course Code	Course Name		P	Credits	Continuous Assessment	End Semester Examination	Total	Exam Duration	Category
1	CET595	Engineering Computational Techniques	4	0	4	40	60	100	3	FC
2	CET551	Matrix Method	4	0	4	40	60	100	3	PC
3	CEP551	Matrix Method (P)	0	2	1	25	25	50	-	PC
4	CET552	Structural Dynamics	4	0	4	40	60	100	3	PC
5	CEP552	Structural Dynamics (P)	0	2	1	25	25	50	-	PC
6	CET553	Advanced Steel Structures	4	0	4	40	60	100	3	PC
7	CEP553	Advanced Steel Structures (P)	0	2	1	25	25	50	-	PC
8	CET554	Programme Elective I	4	0	4	40	60	100	3	PE
		Total	20	6	23	275	375	650	15	

Course Code	Programme Elective I
CET554-1	Theory of Elasticity & Elastic Stability
CET554-2	Composite Structures

Scheme of Examination of Master of Technology (Structural Engineering) Semester Pattern II Semester M. Tech. (Structural Engineering)

		_				Ma	ximum Marks		_	Category
SN	Course Code	Course Name	L	P	Credits	Continuous Assessment	End Semester Examination	Total	Exam Duration	caregory
1	CET555	Foundation Design	4	0	4	40	60	100	3	PC
2	CET556	Advanced Concrete Structures	4	0	4	40	60	100	3	PC
3	CEP557	Computer aided analysis and design (P)	0	2	1	25	25	50	-	PC
4	CET558	Design of Earthquake Resistance RCC Structures	4	0	4	40	60	100	3	PC
5	CET596	Research Methodology	3	0	3	40	60	100	3	FC
6	CET597	Group Elective I	4	0	4	40	60	100	3	GE
7	CEP597	Group Elective I (P)	0	2	1	25	25	50	-	GE
8	CET599	Open Elective	3	0	3	40	60	100	3	OE
		Total	22	4	24	290	410	700	18	

Course Code	Group Elective I (T + P)
CET/ CEP 597-1	Applied Soil Engineering
CET/ CEP 597-2	Finite Element Method
CET/ CEP 597-3	Instrumentation & Material Science
CET/ CEP 597-4	Soil Dynamics

Course Code	Open Elective
CET 599-1	Advanced Construction Materials & Techniques
CET 599-2	Geoscience
CET 599-3	Prestressed Concrete Structure
CET 599-4	Watershed Management

Scheme of Examination of Master of Technology (Structural Engineering) Semester Pattern III Semester M. Tech. (Structural Engineering)

	Course					Ma	aximum Marks	Exam		
SN	Code	Course Name	L	P	Credits	Continuous Assessment	End Semester Examination	Total	Duration	Category
1	CET598	Group Elective II	4	0	4	40	60	100	3	GE
2	CET651	Programme Elective II	4	0	4	40	60	100	3	PE
3	CEP652	Project Phase I (D)	0	3	6	50	50	100	-	PC
		Total	8	3	14	130	170	300	6	

Course Code	Group Elective II
CET 598-1	Design of Bridges
CET 598-2	Design of Environmental Structures
CET 598-3	Geo-Environmental Engineering
CET 598-4	Soil Structure Interaction

Course Code	Programme Elective II
CET651-1	Design of High Rise Structures
CET651-2	Theory of Plates & Shells
CET651-3	Design of Earthquake Resistance Steel Structures

Scheme of Examination of Master of Technology (Structural Engineering) Semester Pattern IV Semester M. Tech. (Structural Engineering)

SN	Course	Course Name				Maxin	Evam			
SIN	Code	Course Name	L	P	Credits		End Semester Examination	Total	Exam Duration	Category
1	CEP653	Project Phase II (D)	0	6	12	100	100	200	-	PC
		Total	0	6	12	100	100	200	-	

· ·			C I'	Maxim	um Marks	
Semester	L	P	Credits	Internal Assessment	End Semester Examination	Total
First Semester	20	6	23	275	375	650
Second Semester	22	4	24	290	410	070
Third Semester	8	3	14	130	170	300
Fourth Semester	0	6	12	100	100	200
Total	50	19	73	795	1055	1850



Scheme of Examination of Master of Technology (VLSI Design) **Semester Pattern** I Semester M. Tech. (VLSI Design)

Sr.						Maxi	mum <i>N</i>	Marks	Exam	Category
No.	Code	Course	L	P	Credits	Continuous	End	Total	Duration	
						Assessment	Sem			
1	ENT551	CMOS Digital Circuit Design	4	0	4	40	60	100	3 Hrs.	PC
2	ENT552	Digital System Design	4	0	4	40	60	100	3 Hrs.	PC
3	ENT553	Embedded System and RTOS	4	0	4	40	60	100	3 Hrs.	PC
4	ENT554	T554 Semiconductor Devices		0	4	40	60	100	3 Hrs.	FC
5	ENP551 CMOS Digital Circuit									
		Design Lab	0	2	1	25	25	50		PC
6	ENP552	Digital System Design Lab	0	2	1	25	25	50		PC
7	ENP553	Embedded System & RTOS Lab	0	2	1	25	25	50		PC
8	ENT555	Programme Elective-I	4	0	4	40	60	100	3 Hrs.	PE
		Total	20	6	23					

Course Code	Programme Elective - I
ENT555-1	VLSI Technology
ENT555-2	Advanced computer Architecture
ENT555-3	Advanced Digital Signal Processing

Scheme of Examination of Master of Technology (VLSI Design) **Semester Pattern** II Semester M. Tech. (VLSI Design)

Sr.						Maxi	mum <i>N</i>	Marks	Exam	Category
No.	Code	Course	L	P	Credits	Continuous	End	Total	Duration	
						Assessment	Sem			
1	ENT556	Analog IC Design	4	0	4	40	60	100	3 Hrs.	PC
2	ENT557	System Verilog for Verification	4	0	4	40	60	100	3 Hrs.	PC
3	ENT558	Research Methodology	3	0	3	40	60	100	3 Hrs.	FC
4	ENP556	Analog IC Design Lab	0	2	1	25	25	50		PC
5	ENP557	System Verilog for								
		Verification Lab	0	2	1	25	25	50		PC
6	ENT559	Programme Elective-II	4	0	4	40	60	100	3 Hrs.	PE
7	ENT560	Group Elective-I	4	0	4	40	60	100	3 Hrs.	GE
8	ENT599	Open Elective-I	3	0	3	40	60	100	3 Hrs.	OE
9	ENP561	Seminar	0	2	0	-		-		PC
		Total	22	6	24					

	Course Code	Programme Elective - II
	ENT559-1	VLSI Signal Processing
	ENT559-2	RF Circuit Design
	ENT559-3	MEMS
16		

Course Code	Group Elective-I
ENT560	VLSI Design Automation
EET561	Electrical Power Distribution & Smart Grid
CST561-1	Optimization Techniques in Artificial Intelligence
CST561-2	Social Network Analysis

Course Code	Open Elective-I
ENT599-1	Wireless Sensor Network

III SEMESTER

Sr.						Maxii	mum <i>N</i>	Aarks	Exam	Category
No.	Code	Course	L	P	Credits	Continuous	End	Total	Duration	
						Assessment	Sem			
1	ENT651	System-on-Chip	4	0	4	40	60	100	3 Hrs.	PC
3	ENT652	Programme Elective-III	4	0	4	40	60	100	3 Hrs.	PE
4	ENP653	Project Phase I	0	3	6	50	50	100		PC
		Total	8	3	14					

Course Code	Programme Elective-III
ENT652-1	VLSI Testing
ENT652-2	Nanoelectronics
ENT652-3	Low Power VLSI Design
ENT652-4	Industry Offered Elective

IV SEMESTER

Sr.						Maxii	mum <i>N</i>	Aarks	Exam	Category
No.	Code	Course	L	P	Credits	Continuous	End	Total	Duration	
						Assessment	Sem			
1	ENP654	Project Phase-II	0	6	12	150	150	300		PC
		Total	0	6	12					

Scheme of Examination of Master of Technology (Industrial Engineering) Semester Pattern I Semester M. Tech. (Industrial Engineering)

						Max	imum Mai	ks	_	
Sr. No.	Subject Code	Subject Name	L	P	Credits	Internal Assessment	End Semester Exam	Total	Exam Duration (Hrs)	Category
1	INT551	Operations Research	4	0	4	40	60	100	3	PC
2	INT552	Statistics & Quality Control	4	0	4	40	60	100	3	PC
3	INT553	Planning and Control of Manufacturing Systems	4	0	4	40	60	100	3	PC
4	INP554	Lab Practice-I	0	4	2	25	25	50	-	PC
5	INT555	Program Elective-I	4	0	4	40	60	100	3	PE
6	MET556	Research Methodology	3	0	3	40	60	100	3	FC
		Total	19	4	21	225	325	550	-	-

Sr no	Course Code	Program Elective-1
1	INT 555-1	Automation In Production
2	INT 555-2	Financial Management
3	INT 555-3	Marketing Management
4	INT 555-4	Human Capital Management

Scheme of Examination of Master of Technology (Industrial Engineering) Semester Pattern II Semester M. Tech. (Industrial Engineering)

							Maximum	Marks		
Sr. No.	Subject Code	Subject Name	L	P		Internal Assessment	End Semester Exam	Total	Exam Duration (Hrs)	Category
1	INT 556	Supply Chain Management	4	0	4	40	60	100	3	PC
2	INT 557	Human Factors Engineering	4	0	4	40	60	100	3	PC
3	INT 558	Maintenance Engg.	4	0	4	40	60	100	3	PC
4	INP559	Lab Practice-II	0	4	2	25	25	50	-	PC
5	INT 560	Program Elective-II	4	0	4	40	60	100	3	PE
6	NT 561	Advanced Computation Techniques	3	0	3	40	60	100	3	FC
7	INT 599	Open Elective	3	0	3	40	60	100	3	OE
		Total	22	4	24	265	385	650	-	-

Sr no	Course Code	Program Elective-II
1	INT 560-1	Materials Management
2	INT 560-2	Reliability Engineering
3	INT 560-3	Project Management

Sr no	Course Code	Open Electives
1	INT 599-1	Quality Management
2	INT 599-2	Optimization Techniques
3	INT 599-3	Fundamentals of financial
		Management

Scheme of Examination of Master of Technology (Industrial Engineering) **Semester Pattern** III Semester M. Tech. (Industrial Engineering)

Sr.	Subject					ı	Maximum <i>N</i>	Marks		
No.	Code	Subject Name	L	P	Credits	Internal Assessment	End Semester Exam	Total	Exam Duration (Hrs)	Category
1	INT 651/ MET 651	Group Elective-I	4	0	4	40	60	100	3	GE
2	INT 652/ MET 652	Group Elective-II	4	0	4	40	60	100	3	GE
3	INP 653	Project Phase-I		3	6	100	100	200	-	-
		Total	8	3	4	180	220	400	-	-

GIM is group head of Industrial and Mechanical Engineering PG Program

Sr no	Course Code	Group Elective-I
1	INT 651-1	Total Quality Management
2	INT 651-2	Value Engineering
3	INT 651-3	System Design Engineering
4	MET651-1	Energy Conservation & Management
5	MET651-2	Thermal Storage System
6	MET651-3	Advanced Turbo Machinery

Sr no	Course Code	Group Elective-II
	INT 652-1	Computer & Database Management Systems
	INT 652-2	Manufacturing Economic Analysis
	INT 652-3	Business Communications
	MET652-1	Environmental Pollution and Control
	MET652-2	Design of Heat Exchangers
	MET652-3	Cryogenics
	MET652-4	Advanced IC Engines and Alternative Fuels

Scheme of Examination of Master of Technology (Industrial Engineering) **Semester Pattern** IV Semester M. Tech. (Industrial Engineering)

						I	Maximum <i>N</i>	Aarks		
Sr. No.	Subject Code	Subject Name	L	P	Credits	Internal Assessment	End Semester Exam	Total	Exam Duration (Hrs)	Category
1	INP654	Project Phase - II		6	12	200	200	400	1	-
		Total		6	12	200	200	400	-	-

Summary of the Credits

Sr no	Semester	Credits
1	I	21
2	II	24
3	III	14
4	IV	12
	Total	71

Summary of the Marks

Sr. no	Semester	Internal Assessment	End Semester Exam	Total Marks
1	I	225	325	550
2	II	265	385	650
3	III	180	220	400
4	IV	200	200	400
	Total	870	1130	2000

Scheme of Examination of Master of Technology (Power Electronics and Power System) Semester Pattern

I Semester, M. Tech. (Power Electronics and Power System)

Sr.						Maxi	mum A	Marks	Exam	Category
No.	Code	Course	L	P	Credits	Continuous	End	Total	Duration	
						Assessment	Sem			
1.	EET551	Advanced Power Electronics	4	0	4	40	60	100	3 Hrs.	PC
2.	EEP551	Advanced Power Electronics								
		Lab.	0	2	1	25	25	50		PC
3.	EET552	Power System Modeling								
		& Analysis	4	0	4	40	60	100	3 Hrs.	PC
4.	EET553	Research Methodology	3	0	3	40	60	100	3 Hrs.	FC
5.	EET554	Processor Applications in								
		Power System	4	0	4	40	60	100	3 Hrs.	PC
6.	EEP554	Processor Lab.	0	2	1	25	25	50		PC
7.	EEP555	Simulation Lab.	0	4	2	25	25	50		FC
8.	EET556	FACTS & HVDC Transmission	4	0	4	40	60	100	3 Hrs.	PC
		Total	19	8	23			650		

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

GE = Group Elective, OE = Open Elective

II Semester, M. Tech. (Power Electronics and Power System)

		·								
Sr.						Maxi	mum A	Aarks	Exam	Category
No.	Code	Course	L	P	Credits	Continuous	End	Total	Duration	
						Assessment	Sem			
1.	EET557	Advanced Drives	4	0	4	40	60	100	3 Hrs.	PC
2.	EEP557	Advanced Drives Lab.	0	2	1	25	25	50		PC
3.	EET558	Advanced Power System								
		Protection	4	0	4	40	60	100	3 Hrs.	PC
4.	EEP559	Energy Audit Lab.	0	2	1	25	25	50		PC
5.	EET560-X	Program Elective - I	4	0	4	40	60	100	3 Hrs.	PE
6.	EET561	Group Elective	4	0	4	40	60	100	3 Hrs.	GE
7.	EET599	Open Elective	3	0	3	40	60	100	3 Hrs.	OE
		Total	19	4	21			600		

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

GE = Group Elective, OE = Open Elective

Program Elective -I								
EET560-1	Power Quality							
EET560-2	Digital Signal Processing							
	Open Elective							

LL 1300 Z	Digital signal Freecising							
Open Elective								
	<u> </u>							
EET599	Energy Management							
	System							

Group Elective							
EET561	Electrical Power Distribution & Smart Grid						
ENT560	VLSI Design Automation						
CST575-1	Optimization Techniques in Artificial Intelligence						
CST575-2	Social Network Analysis						
·							

III Semester, M. Tech. (Power Electronics and Power System)

Sr.						Maximum Marks		Marks	Exam	Category
No.	Code	Course	L	P	Credits	Continuous	End	Total	Duration	
						Assessment	Sem			
1.	EET651-X	Program Elective II	4	0	4	40	60	100	3 Hrs.	PE
2.	EET652-X	Program Elective III	4	0	4	40	60	100	3 Hrs.	PE
3.	EEP653	Circuit Simulation &								
		Hardware Implementation								
		Lab.	0	4	2	25	25	50	-	PC
4.	EEP654	Project Phase - I	-	3	6	100	100	200		Project
		Total	8	9	16			450		

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

GE = Group Elective, OE = Open Elective

	Program Elective - II	Ш		
EET651-1	Microcontroller Applications in		EET652-1	P
	Power Controllers			8
EET651-2	Electric Vehicles		EET652-2	Α
EET651-3	Renewable Power Generation Sources		EET652-3	Ir

		Program Elective - III							
	EET652-1 Power System Dynamics								
	& Control								
	EET652-2 Advanced Control System								
╗	EET652-3	Industry offered elective							

IV Semester, M. Tech. (Power Electronics and Power System)

Sr.						Maximum Marks			Exam	Category
No.	Code	Course	L	P	Credits	Continuous	End	Total	Duration	
						Assessment	Sem			
1	EEP655	Project Phase - II	-	6	12	200	200	400	-	Project
		Total	-	6	12	-	-	400	-	

Total credits = 72; Total Marks = 2100

Scheme of Examination of Master of Technology (Computer Science and Engineering) Semester Pattern I Semester M. Tech. (Computer Science and Engineering)

Sr.	Code	Course	L	P	Credits	Maxii	mum Mark	(S	Exam	Category
No.						Internal Assessment	End Sem Exam	Total	Duration	,
1	CST551	Advanced Computer Architecture	4	0	4	40	60	100	3 Hours	FC
2	CST552	Software Architecture	4	0	4	40	60	100	3 Hours	PC
3	CSP552	Software Architecture Lab	0	2	1	25	25	50	_	PC
4	CST553	Advancesin Algorithms	4	0	4	40	60	100	3 Hours	PC
5	CST554	Advanced Techniques in Data Management	4	0	4	40	60	100	3 Hours	PC
6	CSP554	Advanced Techniques in Data Management Lab	0	2	1	25	25	50		PC
7	CST555	Program Elective-I	4	0	4	40	60	100	3 Hours	PE
8	CSP555	Software Lab I	0	2	1	25	25	50	-	PC
		TOTAL	20	6	23	275	375	650		

Course code	Program Elective-I
CST555-1	Graph Mining
CST555-2	Pattern Recognition
CST555-3	Advance topics in networking

Category Details

PC	Programme Core
PE	Programme Elective
GE	Group Elective
OE	Open Elective
FC	Foundation Course

Teaching scheme for First Year (Semester II) Master of Technology

Sr.	Code	Course	L	P	Credits	redits Maximum Marks		Exam	Cate	
No.						Internal Assessment	EndSem Exam	Total	Duration	gory
1	CST556	Compiling For High Performance Architecture	4	0	4	40	60	100	3 Hours	PC
2	CSP556	Compiling For High Performance Architecture Lab	0	2	1	25	25	50		PC
3	CST557	Advanced Digital Image Processing	4	0	4	40	60	100	3 Hours	PC
4	CSP557	Advanced Digital Image Processing Lab	0	2	1	25	25	50		PC
5	CST558	Research Methodology	3	0	3	40	60	100	3 Hours	FC
6	CST561	Group Elective I	4	0	4	40	60	100	3 Hours	GE
7	CST599	Open Elective I	3	0	3	40	60	100	3 Hours	OE
8	CSP559	Software Lab II	0	2	1	25	25	50		PC
9	CSP560	Seminar	0	2	1	50	50	100		PC
		TOTAL	18	8	22	325	425	750		

Rof Technology

Course Code	Group Elective-I					
EET561	Electrical Power Distribution & Smart Grid					
ENT560	VLSI Design Automation					
CST561 -I	Optimization Techniques in Artificial Intelligence					
CST561 -2	Social Network Analysis					

Course code	Open Elective-I
CST599-1	Advance Programming Techniques

Teaching scheme for Second Year (Semester III) Master Technology

Sr.	Course	Course	ı	P	Credits	Maximum Marks			Exam	Category
No.	Code	Course	_	•	Credits	Internal Assessment	End Sem Exam	Total	Durati on	
1	CST651	Program Elective -II	4	0	4	40	60	100	3Hrs.	PE
2	CST652	Program Elective - III	4	0	4	40	60	100	3Hrs.	PE
3	CSP653	Project Phase-I	0	3	6	50	50	100		PC
		TOTAL	8	3	14	130	170	300		

Course code	Program Elective -II
CST651 - 1	Statistical Machine Learning
CST651 - 2	Cryptography
CST651 - 3	Big Data Analysis
CST651 - 4	Industry Offered Elective

Course Code	Program Elective - III				
CST652-1	Reconfigurable and Cloud Computing				
CST652-2	Information Retrieval				
CST652-3	Ubiquitous Computing				

Teaching scheme for Second Year (Semester IV) Master Technology

						Maximum Marks			F	Category
Sr. No.	Course Code	Course	L	P	Credits	Internal Assessment	End Sem Exam	Total	Exam Duration	
1	CSP654	Project Phase-II	0	6	12	200	200	400		PC
		TOTAL	0	6	12	200	200	400		

Category	PC	PE	GE	OE	FC	Total
Credits	45	12	4	3	7	71

	Theory	Practical	Project	Total
Credits	46	7	18	71

Scheme of Examination of Master of Technology (Heat Power Engineering) Semester Pattern I Semester M. Tech. (Heat Power Engineering)

Sr	Course						Max	ximum Marks		
No	Code	Course Name	L	P	Total	Credits	Internal Assessment	End Semester Examination	Total	Category
1	MET551	Advanced Thermodynamics	4	-	4	4	40	60	100	P.C.
2	MET552	Conduction and Radiation Heat Transfer	4	-	4	4	40	60	100	P.C.
3	MET553	Fluid Dynamics	4	-	4	4	40	60	100	P.C.
4	MEP554	Lab Practice - 1	-	4	4	2	25	25	50	P.C.
5	MET555	Program Elective-I	4	ı	4	4	40	60	100	P.E.
6	MET556	Research Methodology	3		3	3	40	60	100	F.C.
		Total	19	4	23	21	225	325	550	

Course Code	Program Elective-I
MET555-1	Micro Fluidics
MET555-2	Fuels and Combustion
MET555-3	Finite Element Method

Scheme of Examination of Master of Technology (Heat Power Engineering) Semester Pattern II Semester M. Tech. (Heat Power Engineering)

							Max	kimum Marks		
Sr No	Course Code	Course Name	L	P	Total	Credits	Internal Assessment	End Semester Examination	Total	Category
1	MET557	Convective Heat and Mass transfer	4	-	4	4	40	60	100	P.C.
2	MET558	Advanced Refrigeration and Air Conditioning	4	-	4	4	40	60	100	P.C.
3	MET559	Computational Fluid Dynamics	4	-	4	4	40	60	100	P.C.
4	MEP560	Lab Practice -II	-	4	4	2	25	25	50	P.C.
5	MET561	Program Elective -II	4	-	4	4	40	60	100	P.E.
6	MET562	Advanced computational Techniques	3	-	3	3	40	60	100	F.C.
7	MET599	Open Elective	3	-	3	3	40	60	100	O.E.
		Total	22	4	26	24	265	385	650	

Course Code	Program Elective-II				
MET561-1	Solar Energy Utilization				
MET561-2	Industrial Fluid Power				
MET561-3	Power Plant Engineering				
Course Code	Open Elective				
Course Code MET599-1	Open Elective Mechatronics				
	•				

Scheme of Examination of Master of Technology (Heat Power Engineering)
Semester Pattern
III Semester M. Tech. (Heat Power Engineering)

Sr	Course						Max	ximum Marks		
No	Code	Course Name	L	P	Total	Credits	Internal Assessment	End Semester Examination	Total	Category
1	MET651/ INT651	Group Elective - I	4	-	4	4	40	60	100	GE.
2	MET652/ INT652	Group Elective-II	4	-	4	4	40	60	100	GE
3	MEP653	Project Phase-I	-	3	3	6	100	100	200	
		Total	8	3	11	14	180	220	400	

Course Code	Group Elective-I						
MET651-1	Energy Conservation and Management						
MET651-2	Thermal Storage Systems						
MET651-3	Advanced Turbo Machineries						
INT651-1	Total Quality Management						
INT651-2	Value Engineering						
INT651-3	System design and Engineering						
Course Code	Group Elective-II						
MET652-1	Environmental Pollution & Control						
MET652-2	Design of heat Exchangers						
MET652-3	Cryogenics						
MET652-4	Advanced IC Engines & Alternate Fuels						
INT652-1	Advance Industrial Engineering techniques						
	/computer and database techniques						
INT652-2	Manufacturing Economics and Analysis						

Course Code	Group Elective-I					
MET651-1	Energy Conservation and Management					
MET651-2	Thermal Storage Systems					
MET651-3	Advanced Turbo Machineries					
INT651-1	Total Quality Management					
INT651-2	Value Engineering					
INT651-3	System Design and Engineering					
Course Code	Group Elective-II					
MET652-1	Environmental Pollution & Control					
MET652-2	Design of Heat Exchangers					
MET652-3	Cryogenics					
MET652-4	Advanced IC Engines & Alternate Fuels					
INT652-1	Advance Industrial Engineering techniques / computer and database Techniques					
INT652-2	Manufacturing Economics and Analysis					

Scheme of Examination of Master of Technology (Heat Power Engineering)
Semester Pattern
IV Semester M. Tech. (Heat Power Engineering)

							Ma				
Sr No	Course Code	Course Name	L	P	Total	Credits	Internal Assessment	End Semester Examination	Total	Category	
1	MEP654	Project Phase (II)	-	6	6	12	200	200	400	-	
		Total	-	6	6	12	200	200	400		

Total 21 + 24 + 14 + 12 = 71 Credits

Scheme of Examination of Master in Computer Application Semester Pattern I Semester Master in Computer Application

Sr.	Code	Course	Category	L	Р	Credits	Ma	ximum M	arks	Exam
No.							Continuous	End Sem		Duration
							Assessment	Exam	Total	
1	MCT530	Computer Organization &								
		Architecture	CORE	4	0	4	40	60	100	3 Hrs.
2	MCT531	Concepts in Data Structures	CORE	4	0	4	40	60	100	3 Hrs.
3	MCP531	Concepts in Data								
		Structures Lab	CORE	0	4	2	25	25	50	-
4	MCT532	Principles of Programming								
		Languages	CORE	4	0	4	40	60	100	3 Hrs.
5	MCT533	(01)Discrete Mathematics								
		& Graph Theory	DSE	4	0	4	40	60	100	3 Hrs.
6		(01) Numerical Methods lab	DSE	0	4	2	25	25	50	-
7	MCT534	(01) Principles of								
		Management	AEC	0	4	2	40	60	100	3 Hrs.
8	MCP534	(01) Basics of Computer								
		Hardware Lab	DSE	4	0	4	10	15	25	-
9	HUP 501	(01)Communication Skills								
		(02)Environmental Science	AEC	0	2	2	25	25	50	-
		TOTAL		20	14	28				

CORE	AEC	DSE	Total Credits
14	6	8	28

Scheme of Examination of Master in Computer Application Semester Pattern II Semester Master in Computer Application

Sr.	Code	Course	Category	L	P	Credits	Max	kimum Ma	arks	Exam
No.							Continuous	End Sem		Duration
							Assessment	Exam	Total	
1	MCT535	Theory of Automata &								
		Formal Languages	CORE	4	0	4	40	60	100	3 Hrs.
2	MCT536	Introduction to Operating								
		System	CORE	4	0	4	40	60	100	3 Hrs.
3	MCP536	Computer Workshop-I Lab	AEC	0	4	2	25	25	50	-
4	MCT537	Concepts in Software								
		Engineering	CORE	4	0	4	40	60	100	3 Hrs.
5	MCP537	Concepts in Software								
		Engineering Lab	CORE	0	4	2	25	25	50	-
6	MCT538	Object Oriented								
		Programming-1	CORE	4	0	4	40	60	100	3 Hrs.

7	MCP538	Object Oriented								
		Programming-1 Lab	CORE	0	4	2	25	25	50	-
8	MCP539	(01) Game Programming Lab								
		(02) PHP Programming Lab	DSE	0	4	2	40	60	100	3 Hrs.
9	HUP502	(01) Soft Skills								
		(02) Professional Practice								
		& Ethics	AEC	0	2	2	25		25	-
		TOTAL		16	18	26				

CORE	AEC	DSE	Total Credits
20	4	2	26

Scheme of Examination of Master in Computer Application Semester Pattern III Semester Master in Computer Application

Sr.	Code	Course	Category	L	P	Credits		ximum M		Exam
No.							Continuous Assessment		Total	Duration
1		Database Management Systems	CORE	4	0	4	40	60	100	3 Hrs.
2	MCP620	Database Management Systems Lab	CORE	0	4	2	25	25	50	-
3	MCT621	Design and Analysis of Algorithms	CORE	4	0	4	40	60	100	3 Hrs.
4	MCT622	Object Oriented Programming-2	CORE	4	0	4	40	60	100	3 Hrs.
5	MCP622	Object Oriented Programming-2 Lab	CORE	0	4	2	25	25	50	-
6	MCT623	(01) Multimedia & its Application	AEC	4	0	4	40	60	100	3 Hrs.
7	MCP623	(01)Mobile Application Development Lab (02) Linux System Administration & Maintenance lab (03)Ethical Hacking Lab (04)System Programming Lab	DSE	0	4	2	25	25	50	-
8	MCT624	(01)Development Frameworks & Virtual Machines (02)Advanced Computer Architecture (03) Image Processing (04) Introduction to RTOS (05) Pattern Recognition	DSE	4	0	4	40	60	100	3 Hrs.
9	HUP601	(01) Business Correspondence & Report Writing (02)Constitution of India & Human Rights	AEC	0	2	2	25		25	-
		TOTAL		20	14	28				

CORE	AEC	DSE	Total Credits
16	6	6	28

Scheme of Examination of Master in Computer Application

Semester Pattern		
IV Semester Master in Computer	· Appli	cation

							pheation			
	Code	Course	Category	L	P	Credits		ximum M		Exam
No.							Continuous	End Sem		Duration
							Assessment	Exam	Total	
1.	MCT625	Compiler Construction	CORE	4	0	4	40	60	100	3 Hrs.
2	MCT626	Internet & Web Technologies	CORE	4	0	4	40	60	100	3 Hrs.
3	MCP626	Internet & Web Technologies Lab	CORE	0	4	2	25	25	50	_
4	MCT627	Elective-I (01) Soft Computing (02) Introduction to IOT	GE	4	0	4	40	60	100	3 Hrs.
5	MCT628	Software Documentation	AEC	2	0	2	25		25	-
6	HUT602	(01) Human Resource Management (02) Organizational Behavior	AEC	4	0	4	40	60	100	3 Hrs.
7	MCT629	(01) Advanced Databases (02) Operation Research (03) Computer Graphics & its Application (04) High Performance Computing	DSE	4	0	4	40	60	100	3 Hrs.
8	MCP629	(01) Programming in Python Lab (02) Web Development Lab	DSE	0	4	2	25	25	50	-
		TOTAL		22	08	26				

CORE	AEC	DSE	GE	Total Credits
10	6	6	4	26

Scheme of Examination of Master in Computer Application **Semester Pattern** V Semester Master in Computer Application

Sr. No.	Code	Course	Category	L	P	Credits	Continuous End Sem			Exam Duration
1		Elective-II (01)Artificial Intelligence (02)Data Warehouse & Mining	DSE	4	0	4	40	60	100	3 Hrs.
2	MCP720	(01)Artificial Intelligence Lab (02) Data Warehouse & Mining lab	DSE	0	4	2	25	25	50	-

3	MCT721	Elective-III (01)Cloud Computing (02)Network Security	GE	4	0	4	40	60	100	3 Hrs.
4	MCP721	(01) Technical Seminar								
		(02) Mini-Project	AEC	0	2	2	25		25	-
5	MCT722	(01) Distributed Database								
		Management Systems								
		(02) Distributed Systems	DSE	4	0	4	40	60	100	3 Hrs.
		(03) Business Intelligence								
		(04) Information Retrieval								
6	HUT 701	(01) Presentation &								
		Interview Skills	AEC	2	0	2	25		25	-
		(02) Research Methodology								
		& Tools								
7	MCP722	(01) API level Programming	DSE	0	4	2	25	25	50	-
		(02)R Programming								
8	MCT723	E -Commerce & its	AEC	2	0	2	40	60	100	3 Hrs.
		Application								
		TOTAL		16	10	22				

AEC	2	DSE	GE	Total Credits
6		12	04	22

Scheme of Examination of Master in Computer Application Semester Pattern VI Semester Master in Computer Application

	Course	Course Name	Category			Maxi	Exam		
No.	Code			Hours/Sem		Continuous Assessment		Total	Duration
1	MCP723	Project Work- Full Time	AEC	20	20	300	300	600	-
	TOTAL					200-Internal 100-Company Mentor			

Total Credits:-

CORE	AEC	DSE	GE	Total Credits
60	48	34	08	150

Total Credits: -28(I Sem) + 26(II Sem) + 28(III Sem) + 26(IV Sem) + 22(V Sem) + 20(VI Sem) = 150

Scheme of Examination of Master of Business Administration Semester Pattern I Semester Master of Business Administration

						Maximum N			
Sr. No.	Course Code	Course Name	L	P	Credits	Internal Assessment	End Semester Examination	Total	Exam Duration
1	MBT551	Financial Management	4	-	4	40	60	100	3
2	MBT552	Marketing Management	4	-	4	40	60	100	3
3	MBT553	Human Resource Management	4	-	4	40	60	100	3
4	MBT554	Entrepreneurial Development	4	-	4	40	60	100	3
5	MBT555	Financial Accounting	4	-	4	40	60	100	3
6	MBT556	Perspective Management	2	-	2	20	30	50	2
7	MBT557	Information Technology Management	2	-	2	20	30	50	2
8	MBT558	Quantitative Decision Making	2	-	2	20	30	50	2
9	MBP551	IT Skill Lab		2	1	25	25	50	-
10	MBP552	Communication Skill Lab		2	1	25	25	50	-
11	MBT559	Business Ethics	2	-	-	-	-	-	-
		Total	28	4	28	-	-	-	-

Scheme of Examination of Master of Business Administration Semester Pattern II Semester Master of Business Administration

C	C	ourse Code Course Name	L	Р	Maximum Marks				
Sr. No.	Code				Credits	Internal Assessment	End Semester Examination	Total	Exam Duration
1	MBT560	Organization Behaviour & Development	4	-	4	40	60	100	3
2	MBT561	Applied Operations Research	4	-	4	40	60	100	3
3	MBT562	Strategic Management	4	-	4	40	60	100	3
4	MBT563	Cost & Management Accounting	4	-	4	40	60	100	3
5	MBT564	Operations Management	4	-	4	40	60	100	3
6	MBT565	Managerial Economics	2	-	2	20	30	50	2
7	MBT566	Business Legislation	2	-	2	20	30	50	2
8	MBT567	Business Research Methods	2	-	2	20	30	50	2
9	MBP553	Analytical skill lab	-	2	1	25	25	50	-
10	MBP554	Corporate Grooming Lab	-	2	1	25	25	50	-
11	MBT568	Environment Management	2	-	-	-		-	-
		Total	28	4	28	-		-	-

Scheme of Examination of Master of Business Administration Semester Pattern III Semester Master of Business Administration

				C	Maximum Marks			
Course Name			P	Cre dits	Internal Assessment	End Sem Exam	Total	Exam Duration
Specialization 1 (4 Papers)								
	Elective 1	4	0	4	40	60	100	3
Four Electives from the	Elective 2	4	0	4	40	60	100	3
Specialization groups offered	Elective 3	4	0	4	40	60	100	3
(Please refer list of electives)	Elective 4	4	0	4	40	60	100	3
Specialization 2 (4 Papers)	Specialization 2 (4 Papers)							
	Elective 1	4	0	4	40	60	100	3
Four Electives from the	Elective 2	4	0	4	40	60	100	3
Specialization groups offered (Please refer list of electives)	Elective 3	4	0	4	40	60	100	3
(Trease refer list of electives)	Elective 4	4	0	4	40	60	100	3
Summer Internship of 4 weeks		-		5	-	-	-	-
Total		32	0	37				

Scheme of Examination of Master of Business Administration Semester Pattern IV Semester Master of Business Administration

					Maximum Marks			
Course Name		L	P	Credits	Internal Assessment	End Sem Exam	Total	Exam. Hrs
Specialization 1 (2 Papers)								
Two Elective Subjects from one of the Specialization selected in	Elective 5	4	0	4	40	60	100	3
Semester III. (Please refer list of electives)	Elective 6	4	0	4	40	60	100	3
Specialization 2 (2 Papers)								
1) Two more Elective Courses from specialization I.	-	4	0	4	40	60	100	3
Or 2) Two Elective Courses from specialization II.								
<u>Or</u>	-	4	0	4	40	60	100	3
3) Two open Elective Courses from any other specialization/s apart from specialization I & II.								
MBP601	Project	-	12	6	100	100	200*	3
Total in Semester		16	12	22				

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

List of Electives:

Students have to opt any two Specializations. In Semester III students will be taught four Electives from each specialization selected. In Semester IV students will be taught two Electives from each specialization selected.

econd Year	– Elective Subjects	Course Code	Elective	
Course		Operations Management		
Code Marketing M	Elective	MBT604-1	Operations & Planning Control	
		MBT604-2	Supply Chain Management	
MBT601-1	Integrated Marketing Communication	MBT604-3	Services Operation	
MBT601-2	Brand Management	MBT604-4	Project Management	
MBT601-3	Retail Management	MBT604-5	Quality Management	
MBT601-4	Sales & Distribution Management	MBT604-6	World Class Manufacturing	
MBT601-5	Service Marketing	MBT604-7	ERP	
MBT601-6	Rural Marketing	MBT604-8	Advanced Operation research	
MBT601-7	Consumer Behavior & Marketing Research			
MBT601-8	Customer Relationship Management	Internation	al Business	
Finance				
MBT602-1	Corporate Taxation	MBT605-1	International Financial Markets	
MBT602-2	Security Analysis & Portfolio Management	MBT605-2	Foreign Exchange Management	
MBT602-3	International Financial Management	MBT605-3	International Marketing	
MBT602-4	Financial Risk Management	MBT605-4	Export Import Procedures,	
MBT602-5	Project Planning & Financing and		Documentation & Logistics	
	Mergers & Acquisition	MBT605-5	International Economic Organizations	
MBT602-6	Indian Banking And Financial System	MBT605-6	India's Foreign Trade Policy	
MBT602-7	Financial Services & Merchant Banking	MBT605-7	Managing International Business	
MBT602-8	Management Control System		Organizations	
	urce Management	MBT605-8	International Logistics Management	
MBT603-1	Performance Management & Compensation	Entreprene	urship and Family Business	
MBT603-2	Management of Change and	MBT606-1	Dynamics of Family Business	
	Organizational Effectiveness	MBT606-2	Legal & Tax Environment	
MARTON 2		MBT606-3	Financing of an Emerging Enterprise	
MBT603-3	Group Behavior & Translation Analysis	MBT606-4	Managing Human Capital	
MBT603-4	Training & Development Practice	MBT606-5	Industrial Marketing	
MBT603-5	Industrial Relations & Labour Legislation	MBT606-6	Business Operations	
MBT603-6	Human Resource Strategies & Systems	MBT606-7	Cost Management & Control Systems	
MBT603-7	Human Resource Planning	MBT606-8	Business Communication	
MBT603-8	International HRM			

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Regulations for the Post Graduate Programmes 2015

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. Post Gradua	te 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 six semesters (spread over three 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 Sys	tem					
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 9	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 credits MBA : 110-120credits MCA : 125-135 credits (Modified in Academic Council Meeting dated 25/04/2016)			
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 R 6.			
R 5. Course ar	nd 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.			
	<u>viz</u> . : PG- CET5XX :			
	CE- Civil Engineering, T-Theory, 5-First Year and XX-Course Number.			
R 6. Course C	redits			
R 6.1	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); (a) Lectures/Tutorial: One lecture/tutorial hour per week shall be assigned one credits. (b) Practical: One laboratory hour per week shall be assigned half credit. Not more than four credits may be assigned to a practical course having only laboratory component. (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. (Modified in Academic Council Meeting dated 25/04/2016)			
R 7.1 Incentiv	ves to the students participating in NCC/NSS/Games & Sports/Cultural Activities/ACEES.			
R.7.1.1	The students admitted to the PG programme participating in NCC/ NSS/ Games & Sports / Cultural Activities/ ACEES as per norms of the University will be treated as the additional courses and shall be awarded grades as shown in Table of "Structure of grading of incentives". Guidelines for calculation of Grade point for participating in activities NCC/NSS/Games			
	& Sports/Cultural Activities/ACEES in the semester.			

Award of grades and conversion to Grade points shall be done as below

Grades	Grade Points	Range of Marks
AA	10	90-100
AB	9	80-89
BB	8	70-79
ВС	7	60-69
CC	6	50-59
CD	5	40-49
DD	4	30-39
FF	0	Less than 30

Various components for calculating the marks out of 100 are as below:-

Sr.	Components of marks	Eligibility	Marks
no.	A., I. /C. : .	All a l a	_
1	Attendance / Consistency	All students	5
2	Physical fitness Test / Post holder	I & II Semester /	5
_	(University / College team Captain,	III to VIII	3
	secretary, branch secretary)		
3	Behavior on field or during	All students	5
3	competition / event	An students	3
	Participation in Intra Collegiate /		5
4	inter branch activities	All students	
	(1st, 2nd, 3rd position).		(5, 3, 1)
5	Participation in Inter Collegiate	All team members	30
)	activities.	All teall members	30
6	Securing 1st, 2nd, 3rd position	All team members	50
0	in inter collegiate activities.	All teall members	30
7	Participation in University / State	All team members	70
′	level activities	All teall members	70
8	National / International	All team members	80
	level activities	An team members	00
9	Organization of Co-curricular and	All SRC members	10
	extra-curricular activities		

Evaluation of student for NCC/NSS/Games & Sports/ACEES activities shall be done by HOD of Physical Education Department. Evaluation of student for CULTURAL/LITERARY activities shall be done by Dean SRC. Evaluation of co-curricular activities like technical paper presentation / model project exhibition etc. shall be done by H.O.D. of respective department. However compilation of student data for all the activities shall be the responsibility of H.O.D. Physical Education.

Students shall be assessed for the marks mentioned in serial number 5, 6 & 7 of above table and best of three items should only be awarded. Serial No. 1, 2, 3 & 4 are add-on marks that should be added with the marks received by students for serial number 5, 6 & 7.

Community Service Programme (CSP) will be announced by the Sports/Humanities/NSS department from time to time at the start of academic year. The students should register in the concerned department and shall participate in the CSP conducted during that academic year.

R 7.2 Incentives to the students participating in Industrial/ Corporate Training/ Publications

R 7.2.1

The students admitted to the PG programme undergoing Industrial/Corporate training in listed / reputed companies / organizations having minimum duration of 4 weeks shall be eligible for award of additional grades as per the regulations.

Guidelines for incentive credits to the Students Participating in Industrial / Corporate Training/Publications

Award of grades based on absolute mark system out of 100 is prepared. The same is converted to grade points and grades as below:

Grade Point	Range of Marks
10	90-100
9	80-89
8	70-79
7	60-69
6	50-59
5	40-49
4	30-39
3	20-29
0	Below 20

Various components for calculating the marks out of 100 are as below:-

The students admitted to the PG programme undergoing Industrial/Corporate training in listed/reputed companies/ organizations having minimum duration of 4 weeks shall be eligible for award of additional grades as per the following table.

Industrial & Corporate Training

Sr. No.	Training undertaken at	Marks
1	MNC/ Public Sector/ Large Scale Industry	30
2	Small and Medium Enterprise	20

Note:- A student must produce a certificate from the enterprise in which he/she has undertaken training, produce a report and give a presentation in order to be eligible for securing the marks.

The PG students publishing research papers in international/ national journals and international/ national conferences organized by IITs/IIMs and Institutes of national/ international repute shall be eligible for award of additional grades as per the following table

Research Paper	Published/	Presented
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Sr. No.	Particular	Marks
1	Research Paper accepted and presented in International conference	20
2	Research Paper accepted and presented in National conference	15
3	Research Paper accepted and presented in state level/ regional conference	10
4	Research Paper accepted for publication in referred International Journal	50
5	Research Paper accepted for publication in Non-referred International Journal but with ISBN/ISSN No.	40
6	Research Paper accepted for publication in referred National Journal	40
7	Research Paper accepted for publication in Non-referred National Journal but with ISBN/ISSN No.	30

In a semester a student can earn a maximum of 100 marks.

In case a research paper is jointly presented / published by more than one student, the marks awarded will be divided equally among the students.

Evaluation of the students for incentive credits for participating in Industrial / Corporate training/Paper presentation/ Paper Publication shall be done by the respective head of the departments.

R 7.2.2

The PG students publishing research papers in international/ national journals and international/ national conferences organized by IITs/IIMs and Institutes of national/international repute shall be eligible for award of additional grades as per the regulations.

R 8. Academic Council

Academic Council shall be constituted as per the guidelines for autonomous colleges prescribed by UGC under plan 11 of para 8.

R 8.1

Academic Council shall consist of

- 1. Principal (Chairman)
- 2. All Heads of the Departments in the Institute.
- 3. Four teachers of the Institute representing different categories of teaching staff by rotation on the basis of seniority of service in the Institute.
- 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.
- 6. 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 of 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 Coordination Committee

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 Studies (BOS)

R 10.1

Every programme shall have its own Board of Studies (BOS) to look after all matters pertaining to that particular programme.

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.
- e) One representative from the industry/ corporate sector/allied area relating to placement.
- f) One post graduate meritorious alumnus to be nominated by the Principal.

The Chairman BOS, may with the approval of the Principal, co-opt

- Expert from outside the college whenever sufficient courses of studies are to be formulated.
- i. Other members of staff of the same faculty.

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.

R. 10.2	Functions:
	BOS of a department in the Institute shall:
	 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;
	b) Suggest methodologies for innovative teaching and evaluation techniques;
	c) Suggest panel of names to the Academic Council for appointment of examiners; and
	d) Coordinate research, teaching, extension and other academic activities in the department/institute.
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 of	Special Nature
R 11.1	(a) Project
	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.
	(b) Offering an Elective
	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.
R 12.	Starting a New Programme
R 12.1	(a) An 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.
	(b) An 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 the university shall be duly informed of such programmes.
	(c) An Institute may rename the existing programme after restructuring/ redesigning it with the approval of the Academic Council as per UGC norms. The university should be duly

	informed of such proceedings so that it may award new degrees in place of the old.
	(d) An interdisciplinary programme may be proposed by a Department in consultation with other participating Department(s), or by a group of Department(s), or by a Committee appointed by the Principal.
	(e) A new programme proposed by Department(s) shall be placed before the APEC and the Academic Council for their recommendation to the Board / Government /AICTE for obtaining its approval.
R 13.	Registration
R13.1	Every student admitted shall have his/her unique Student ID. The Student ID of a student shall consist of alpha-numerals nnPPPSmmmPPPS where, nn: Indicates year of admission, PPP: Indicates programme, S: Indicates shift and mmm: Indicates serial number in a programme.
	Example, 15EEU1001EEU1; 15— year of admission, EEU— programme in which admitted, 1— shift, 001—his serial number, EEU— programme in which admitted and 1— shift. If his branch is changed to, let us say CS in second shift, then his ID will change as; 15EEU1001CSU2. Advantage of this is the first 9 alpha-numerals remain same throughout the course. Hence, in the software they can be used for his coding.
R 13.2	Registration at the beginning of each year, on the prescribed dates announced from time to time, by payment of the stipulated fees along with duly filled in admission form is compulsory for every student till he/she completes the Programme.
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 25 th April 2015).
R 13.4	In-absentia registration may be allowed only in rare cases at the discretion of the Dean Academics in case of circumstances beyond the control of students.
R. 13.5	For Registering to Third semester (All PG Programmes): A student should earn at least 60% of the total credits (rounded off to nearest lower integer) offered in Semester I & II put to gather.
	For Registering to Fifth semester (M. Tech (part time) and MCA: A student should earn all the credits of first year and atleast 60% of total credits offered in Semester III & IV put to gather.
	Re-Registration to Courses
	If a student is eligible for 'FF', 'Z' or 'I' grade in a course, he/she shall have to re-register for the course whenever the course is offered again. Re-registration for the course shall mean that the student shall have to take up the course again along with the regular courses in the current semester. His/ her previous performance in the course shall be treated as null and void.
	Modified in Academic Council Meeting dated 25/04/2016)
R 13.6	The student admitted for regular/part time PG course shall not undertake any course of study in any university/college/institution. The student admitted for regular PG course shall not undertake any full time employment during the period of the programme.
R 13.7	All courses in M. Tech. semester I and MBA semester I shall be compulsory (a student shall not be allowed to take up additional course(s) or drop certain course(s) during the first semester)
	(Regulation introduced as approved in Academic Council in its meeting dated 25 th April 2015)

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R 13.8	A student w	1 1	1 11 4		•• ((1 201 4		ous somester in	M Tecl
	A student who has secured all the credits offered till the previous semester in M. Tecl programme with a minimum CGPA of 8.0 (termed as fast learner) shall have an option taking up courses offered in the Semester III in the Summer Term.								
	He/ She shall complete the course work in the summer term however the End Term ar continuous assessment shall have to be undertaken along with the regular students of the programme. (Students not availing this provision).								
	Such studen	nts shall have to	o meet th	ne minir	num crit	eria of 7		ndance in the sum regular students.	mer teri
		hip in the indu						n option to under man Board of Stud	
		m shall be offe n Academic Co	,			•	•	any other constrair	nts.
R 13.9	shall have a semester. H (Geotech), tl	an option to He/she shall ha	drop mave to ta also be	iaximun ike up tl	n one c nis cours	ompulso se in the	ory cou forth se	ner) in M. Tech. pro rse offered in the emester. In case of ne/she shall have t	secon M. Teo
		n Academic Co					5)		
R 14. Equivalence					<u> </u>			us of seeking admis	
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R.14.2	students have examination student also autonomous Academic C time. (Modified in While switch CGPA of such CG	ve to clear bans of the colle has foregisters CBCS patter Council on the Academic Coching from Utch student shall CGPA Percentage ttent percentage dent switches courses offered not covered courses shall be courses shall be courses shall be courses and the courses shall be courses of the courses of the courses of the courses shall be courses of the cours	acklog sige as per and passion. The erecompuncil Minimum and a sign and a sign and a sign and a sign are a sin	subjects or the absence of norms of nor	(course sorption ourses, i of absorptions of lated 25, n/ Non as per the lated 25, rsity/ Notemester conding	s) if any in and eq f any, in ption/eq the Equ (04/2016) 70 The based unit of the control of the ption (04/2016) The control of the control of the ption (04/2016) The control of the control of the ption (04/2016) University of the control of	, by ap uivalend troduced uivalend ivalence (ivalence (i	pearing for the rece scheme. In add din earlier semest ce shall be decide Committee from autonomous pa	espectivelition the ers of the er

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.
	<i>Provided,</i> 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	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.
	a) Lack of courtesy and decorum, as well as indecent behavior;
	b) Willful damage of property of Institute/ Hostel or of fellow students;
	c) Possession/Consumption/Distribution of alcoholic drink and banned drugs;
	d) Mutilation or unauthorized possession of library materials like books, journals etc.
	e) Noisy and Unseemly behavior disturbing peace in Institute and Hostel;
	f) Hacking in Computer system, either hardware or software or both;
	g) Any other act considered by the Institute as a gross indiscipline.
R 15.3	Any act of indiscipline of a student reported to the Dean, Student Affairs, will be discussed in a Complaint Redressal Committee constituted by the Academic Council.
	The Committee will enquire into the charges and recommend suitable punishment if the charges are substantiated. The concerned Heads of the Departments will consider the recommendations of the Complaint Redressal Committee and authorize the Dean Student Affairs to take appropriate action.
	Also the Academic Council will duly and transparently form a Grievance Redressal Committee. In case of any issue the student has to submit his grievance in writing with a copy to the Dean Student Affairs.
	The committee will look into the matter and forward the action taken to the Dean Student Affairs and the student.
R 15.4	Appeal: The student may appeal to the Chairman, Academic Council whose decision will be final and will be conveyed to the Dean Student Affairs. The Dean Student Affairs will report the action taken at the next meeting of the Academic Council.
R 15.5	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 15.6	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 15 th May 1999.
R 15.7	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 15.8	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 15.9	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 15.10	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	For want of attendance if a student is not permitted to appear for the end semester examination in the semester in which the shortfall exists, his/her registration for that semester will be treated as cancelled, and he/she shall be awarded `Z' grade in that semester. This grade shall appear in the grade card till the successful completion of course requirements in that semester.
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. Withdra	iwals
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	The maximum duration for completion of a PG degree programme will be of five years for M. Tech/ MBA and six years for MCA and M. Tech. (part time). Final decision will be taken by the competent authority.
R 18. Examin	ation Scheme
course throug	a student shall be evaluated for his/her academic performance in a theory (Lecture / Tutorial) gh Mid Semester Examinations and one End Semester Examination. All the examinations shall as per the syllabi prescribed by the respective BOS and approved by the Academic Council
R 18.1	a) Three test examinations covering 15% evaluation each will be conducted as per schedule in the Academic Calendar. The best two scores, amongst the three tests shall be considered. Test examination will be normally of one-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 the theory examination. Grievances, if any, shall be addressed by the HOD on application of the students within next two days.
	b) Teachers' assessment of students' performance covering 10% evaluation shall be done on the basis of any two heads such as home assignments, tutorials, open book

	tests, seminars, group discussions, projects, quizzes etc. The course coordinator shall declare the two heads chosen for each course, within the date prescribed by the Dean Academics.
	c) End Semester Examination shall be conducted as per schedule in Academic Calendar. End semester examinations 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 the theory examination. Grievances, if any, shall be addressed by the Head of the Department 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 zero marks in end semester examination. If a student is 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 or MBA programme and in case of MCA programme has cleared semester V and Semester VI (ie He/she has earned all the credits offered in Semester V and Semester VI as well as has secured 'SF' grade in the audit courses offered in these semesters as per the scheme of examination) 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 25/04/2016)
R 18.4	a) Continuous assessment covering 50% evaluation on the basis of his/ her performance in each practical examination, journal completion and 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. (Modified regulation as approved by Academic Council in its meeting dated 15 th 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 1.5:1 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 to continuous assessment.
	An examinee can opt for forego of his/her marks in continuous assessment of a practical course only after submission of 'Term work completion' certificate issued by the concerned head of the department along with the 'Application for the examination'.
R 19. The Gr	ading System
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 Mo	deration 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 I	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)
R 22. Grade Car	$rac{1}{d}$
R 22.1	 The grade card shall be issued at the end of the semester to each student and will contain the following: a) The credits for each course registered for that semester. b) The grade points and letter grades obtained in each course. c) The total number of credits earned by the student up to the end of that semester in each of the course. d) The SGPA and the CGPA.

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.									
	CGPA 4.0 5.0 6.0 7.0 8.0 9.0 10.0									
		Percentage	40	50	60	70	80	90	100	
	The interm	nittent percent e table.	ages sh	ould be	e calcul	ated ba	sed upo	on the e	extrapolat	ion of the
R 23. Minimu	m Requirements	for the Award	d of the	Degree						
R 23.1		nt should have use and project		-		-				- 1
R 23.2	degree as p in program	who fails to o per norms, he/s till the minim n R 17.4 and R	she sha um CG	ll take a	dditiona	al course	es or rep	peat the	courses r	mentioned
R 23.3	The credits for the courses in which a student has obtained 'CC' grade or higher shall be counted as credits earned by him/her. The grades awarded for successful and unsuccessful completion shall be 'Satisfactory' and 'Unsatisfactory' respectively. The grades shall be denoted by 'SF' and 'USF' respectively. The student should also have 'Satisfactory' grade in all the audit courses otherwise he/she will have to repeat the audit course provided that a student should have no case of indiscipline pending against him/her.									
R 24. Extensio	n of Maximum I	Period for Con	npletion	n of a pr	ogramn	ie				
R 24.1	for genuin	num duration for cases and usedemic Council	navoida	able cire	cumstan	ces on			-	
R 25. Award o	f Medals/ Schol	arships								
R 25.1		⁄ailable unde . shall be giver		-			-		al, extra-	curricular,
R 25.2		of scholarship he Governme		•				e in aco	cordance	with rules
R 25.3		of merit scho framed by the	-						be goverr	ned by the
R 25.4		earing all cournsidered for th					regular	examin	ation in fi	rst attempt
		tudent has cle Ill not consider		-			_	me in M	akeup ex	amination
R 25.5	eligible for	availing the o award of monitoring a an introduced a	erit/me	dals co	nferred	by the	college	for aca	ademic e	xcellence.

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R 26. Interpretation of Regulations

R 26.1 In case of any dispute, difference of opinion in interpretation of these regulations or any other matter not covered in these regulations, the decision of the Chairman, Academic Council shall be final and binding.

R 27. Academic Calendar

R 27.1

The Academic Calendar will be designed, updated and followed up by Dean Academics from time to time. The academic activities of the Institute are regulated by Academic Calendar approved by the Principal on the recommendation of Dean Academics from time to time and made available to the students/ Faculty members and all other concerned in printed and electronics form. It is mandatory for students / Faculty to strictly adhere to the Academic Calendar for completion of academic activities until and unless permitted by the competent authorities.

R 28. Calculation of SGPA and CGPA

(i) Calculation of Semester Grade Point Average (SGPA)

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.

Where,

 $SGPA = \frac{\sum_{i=1}^{n} C_i P_i + C_a P_a}{\sum C_i}$

- C_i = The number of credits offered in the ith course of a semester for which SGPA is to be calculated
- P_i = Grade Point earned in the ith course
- $i = 1, 2, \dots, n$ represent the number of courses in which a student is registered in the concerned semester
- $C_a = 1$; Incentive credit per activity
- P_a = 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.

(ii) Calculation of Cumulative Grade Point Average (CGPA)

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.

$$CGPA = \frac{\sum_{j=1}^{m} C_{j} P_{j} + \sum_{l=0}^{k} C_{al} P_{al} + \sum_{r=0}^{q} C_{br} P_{br}}{C_{j}}$$

Where,

- C_j = The number of credits offered in the j^{th} course up to the semester for which CGPA is to be calculated
- P_i = Grade point earned in the jth course.
- j = 1,2,..., m represent the number of courses in which a student is registered up to the semester for which the CGPA is to be calculated
- C_{al} ; Incentive credit in semester
- P_{al} =Grade point for participating in activities NCC/NSS/Games & Sports/Cultural Activities/ACEES in the semester.
- *l* = number of semester of participation
- C_{br} ; Incentive credit in semester
- P_{br} = Grade point for participating in industrial/corporate training/publications
- r = number of semester of participation
- CGPA is rounded up to two decimal places and shall not exceed 10.

R 29. Guidelines for the Award of Grades

Following are the general guidelines for the award of grades:

- (i) In general standard relative grading system will be followed.
- (iii) For each student, evaluation in different components of a course shall be done in absolute marks considering the weightage in scheme.
- (iv) The marks of various components shall be added to get total marks secured on a 100 points scale. The rounding off shall be done on the higher side.
- (v) The provisional grades shall be awarded by the Examination Committee. The grades shall be finalized within fifteen working days after the End Semester Examination.
- (vi) The grades so awarded shall be moderated by a Grade Moderation committee for that semester of the department within next three working days. This committee will finalize the grades and display a copy of the grades awarded on the Notice board of the Department. All the final grades shall be communicated to the Controller of Examinations within three working days from the date of display of grades.
- (vii) The procedures for evaluation and award of grades for project, training, seminar and group discussion shall be decided by the respective DFB.

(viii) In case of audit courses the students would be awarded grades as follows

- i. Satisfactory
- ii. Unsatisfactory

The grades shall be awarded by the course coordinators and communicated to the controller of examinations. The course coordinator shall decide and declare the mode of evaluation for the audit courses within the date prescribed by the Dean Academics.

R 29.1	Stan	dard Kel	ative C	irac	ling	Syst	tem

Computation of Standard Relative Grades

The Mean and Standard Deviation would be calculated for the course based upon the marks obtained by the students in that course

Formula for Mean (\overline{x}) $\overline{X} = \frac{\sum_{i=1}^{n} X_i}{\sum_{i=1}^{n} X_i}$

Formula for Standard Deviation(s) $s = \sqrt{\sum_{i=1}^{N} (x_i - \overline{x})^2}$

For PG Courses having 30 or more students

Grades	Grade Points	Range for Grade Calculation			
AA	10	$\geq \overline{x} + 1.5 s$			
AB	9	$<$ AA and $\ge \overline{x} + 1.0 s$			
ВВ	8	$<$ AB and $\ge \overline{x} + 0.25 s$			
ВС	7	$<$ BB and $\ge \overline{x}$ -0.5 s			
CC	6	$<$ BC and $\ge \overline{x}$ -1.0 s			
FF	0	< x-1.0 s			
1		I .			

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,
 - 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.
- 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. Re-registration 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 noncompliance of these provisions, 'I' grade shall automatically be converted into 'F' grade.

R 30.2 MBA :

Project Evaluation Guidelines

- Every student has to undertake a project of professional interest. The project has to be related to the area of specialization, the student has opted in Semester III. The project may 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
- 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 done by external examiner.

• Internal Assessment 50%

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.

External Assessment 50%

The external assessment will be done by external examiner for 50% weightage based on project work presentation, defence seminar and oral examination.

- 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.
- Student who does not submit the project report for assessment by the due 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 oral 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 30.3 MCA:

- Every student has to undertake a minor project in V semester and a full time industrial project in VI 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.
- The final project report for both V and VI 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.
- 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 the 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. Reregistration 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 31 Award of Grade Based on Absolute Marking System

The award of grades based on absolute marking system for M. Tech and elective courses offered by all PG programmes for which less than 30 number of students are enrolled shall be made as follows:

Percentage of Marks	Grade	Grade Points
> 85 %	AA	10
76-85 %	AB	9
66-75 %	BB	8
56-65 %	ВС	7
50-55 %	CC	6
< 50 %	FF	0

Indication of attempt on grade card

R 32.

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) Improvement 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.
- 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 33. (b) Improvement 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.
- 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 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 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 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. Emergent Cases

R 34.1

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 at the earliest opportunity; report it in the next meeting of the Academic Council.

R 35. Power to Modify

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.

TABLE-1: PG PROGRAMMES LEADING TO MASTER'S DEGREE

Sr. No.	Department	Programme Title	Programme 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. (Heat Power Engineering)	HPE
7	Computer Applications	M.C.A.	MCA
8	Management Technology	MBA	MBA

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

Academic Performance	Grades	Grade Points
Outstanding	AA	10
Excellent	AB	9
Very Good	BB	8
Good	ВС	7
Average	CC	6
Poor	FF	0
Incomplete	I	Subsequently to be changed into the grade earned.
Withdrawal	W	-
Non completion of course	Z	-
requirement		
Extension (in projects only)	X	-

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' 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.

'I' Grade

This grade indicates an 'Incomplete' course requirement due to absence in End Semester Examination (excluding Practical end semester examination). The grade is required to be converted into an earned grade as per the regulations.

'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.

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