

MNITJAIPUR

UG Scheme & Course Of Study

Academic Section

4/12/2017

B.Arch. - Architecture & Planning

Semes ter	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 09	Semester Credits	Cumulati ve
	CET102	HST110	MAT103	ART101	ART103	ARP105					
	Environmental Science & Ecology	English	Mathematics I	Introduction to Architecture and Basic Design	Architectural Drawing	Architectural Presentation Techniques I					
1 & II	2(2-0-0-0)	3(2-0-2-0)	4(3-1-0-0)	6(1-0-5-0)	4(2-0-4-0)	3(0-0-4-0)				22	22
	ART102	ART104	ART106	CPT110	ARP108	ARP110		ICP101	ICP102		
	History of Architecture I	Theory of Design	Building Construction & Materials I	Comp. System and Programming	Architecture Presentation Techniques II	Architectural Design I		CREATIVE ARTS / SPORTS / NSS	DISCIPLINE		
	3(2-1-0-0)	2(1-1-0-0)	4(2-0-3-0)	3(2-0-2-0)	3(0-0-5-0)	8(0-0-0-8)		1	1	25	47
	ART201	ART203	CET293	ART205	ART207	ART209	ARP211				
Ш	History of Architecture II	Building Science- I (Climatology)	Surveying	Building Construction & Materials II	Architectural Presentation Techniques III	Comp. Applications for Architects-I	Architectural Design II				
	3(2-1-0-0)	3(2-1-0-0)	2(1-0-2-0)	4(2-0-3-0)	3(1-0-3-0)	2(1-0-2-0)	8(0-0-0-8)			25	72
	ART202	ART204	CET242	ARPE01	ART206	ART208	ARP210	ICP201	ICP202		
IV	History of Architecture III	Building Services I	Architectural Structures I	Program Elective-I	Building Construction & Materials III	Comp. Applications for Architects-II	Architectural Design III	CREATIVE ARTS / SPORTS / NSS	DISCIPLINE		
	3(2-1-0-0)	2(1-1-0-0)	3(2-0-2-0)	3(2-1-0-0)	4(2-0-3-0)	2(1-0-2-0)	8(0-0-0-8)	1	1	27	99
	ART301	ART303	CET343	ARPE02	ART305	ARPE03	ARP309				
V	History of Architecture IV	Quantity Survey and Specifications	Architectural Structures II	Pr <mark>ogram</mark> Ele <mark>ctive-</mark> II	Building Construction & Materials IV	Program Elective- III	Architectural Design IV				
	3(2-1-0-0)	2(1-1-0-0)	3(2-1-0-0)	3(2-1-0-0)	4(2-0-3-0)	3(2-1-0-0)	8(0-0-0-8)			26	125
	ART302	CET344	ARPE04	ARPE05	ART306	ART308	ARP310		ICP302		
VI	Building Services II (Electrical)	Architectural Structures III	Program Elective-IV	Progr <mark>am</mark> Elective-V	Building Construction & Materials V	Site Planning & Landscape	Architectural Design V		DISCIPLINE		
	3(2-1-0-0)	3(2-0-2-0)	3(2-1-0-0)	3(2-1-0-0)	4(2-0-3-0)	3(1-0-3-0)	8(0-0-0-8)		1	28	153
	ART401	CET445	ART403	ARPE06	ARP407	ARP409					
VII	Building Science- II	Architectural Structures IV	Introduction to Planning	Program Elective-VI	Working Drawing	Architectural Design VI					
	3(2-1-0-0)	3(2-1-0-0)	3(1-0-4-0)	3(2-1-0-0)	2(0-0-3-0)	8(0-0-0-8)				22	175
	ARP402								ICP402		
VIII	Practical Training								DISCIPLINE		4.5.5
	12(0-0-0-0)	A D.T.CO	A D D E 0.7	4 D O F 0 7	A D D 5 4 4				1	13	188
	ART501	ART503	ARPE07	ARS507 Thesis	ARP511						
ΙX	Building Services -III (Mechanical)	Housing	Program Elective-VII	Preparatory Seminar & Group Discussion	Architectural Design VII						
	2(1-1-0-0)	3(1-0-4-0)	3(2-1-0-0)	3(1-0-3-0)	8(0-0-0-8)					19	207
Х	ART502	ARPE08	ARD506	3(1.5.5.3)	3(2 2 2 3)				ICP502		

Professional Practice & Management	Program Elective-VIII	Thesis Project			DISCIPLINE		
2(1-1-0-0)	3(2-1-0-0)	16(0-0-0-16)			1	22	229



B.Arch.-Architecture & Planning

	Overall minimum credit requirement
3	Institute Core(IC)
179	Programme Core(PC)
16	Thesis Project
24	Programme Elective(PE)
0	Advance Elective(AE)
0	Open Elective(OE)
2	CAS
5	Discipline
229	Total Credits

		To	otal (cred	lits	229
	Institute Core					
Course Code	Course Name	Credits	L	T	P	S
CPT101	Computer Science & Programming	3	2	0	2	0
		Total	Crec	lits		3
	Programme Core					
Course Code	Course Name	Credits	L	T	P	S
CET102	Course Name Environmental Science & Ecology	Credits 2	L 2	T 0	P 0	S 0
				-	0	-

	Project					
Course Code	Course Name	Credits	L	T	P	S
ARD506	Thesis Project	16	0	0	0	16
Course Code Course N ARD506 Thesis Project Program		Total Cred	lits		16	
	Programme Elective					
Course Code	Course Name	Credits	L	T	P	S
ART307	Vernacular Architecture	3	1	0	3	0
ART304	Barrier Free Architecture	3	2	1	0	0
ART405	Product Design	3	1	0	3	0
ART505	Programme Elective-IV	3	2	0	1	0
ART504	Programme Elective-V	3	1	0	3	0
ARP212	Architectural Model Making	3	1	0	3	0
ART315	Interior Design	3	2	1	0	0
ART312	Construction Management	3	2	1	0	0

	Creative Arts/ Sports/ NSS &	Discipline			
Course Code	Course Name	Credits L	T l	P	S
*	Creative Arts Society	2			
*	Discipline	5			
		Total Credits		7	

Course Code CET102 Environmental Science & E HST110 English MAT103 Mathematics I ART101 Introduction to Architectur ART103 Architectural Drawing ARP105 Architectural Presentation ART102 History of Architecture I ART104 Theory of Design ART106 Building Construction & Mathematics I						
	Programme Core					
	Course Name	Credits	L	T	P	S
		2	2	0	0	0
	9	3	2	0	2	0
		4	3	1	0	0
	Introduction to Architecture and Basic Design	6	1	0	5	0
	ů .	4	2	0	4	0
	Architectural Presentation Techniques I	3	0	0	4	0
	·	3	2	1	0	0
	,	2	1	1	0	0
	Building Construction & Materials I	4	2	0	3	0
ARP108	Architecture Presentation Techniques II	3	0	0	5	0
ARP110	Architectural Design I	8	0	0	0	8
ART201	History of Architecture II	3	2	1	0	0
ART203	Building Science- I (Climatology)	3	2	1	0	0
CET293	Surveying	2	1	0	2	0
ART205	Building Construction & Materials II	4	2	0	3	0
ART207	Architectural Presentation Techniques III	3	1	0	3	0
ART209	Comp. Applications for Architects-I	2	1	0	2	0
ARP211	Architectural Design II	8	0	0	0	8
ART202	History of Architecture III	3	2	1	0	0
ART204	Building Services I	2	1	1	0	0
CET242	Architectural Structures I	3	2	0	2	0
ART206	Building Construction & Materials III	4	2	0	3	0
ART208	Comp. Applications for Architects-II	2	1	0	2	0
ARP210	Architectural Design III	8	0	0	0	8
ART301	History of Architecture IV	3	2	1	0	0
ART303	Quantity Survey and Specifications	2	1	1	0	0
CET343	Architectural Structures II	3	2	1	0	0
ART305	Building Construction & Materials IV	4	2	0	3	0
ARP309	Architectural Design IV	8	0	0	0	8
ART302	Building Services II (Electrical)	3	2	1	0	0
CET344	Architectural Structures III	3	2	0	2	0
ART306	Building Construction & Materials V	4	2	0	3	0
ART308	Site Planning & Landscape	3	1	0	3	0
ARP310	Architectural Design V	8	0	0	0	8
ART401	Building Science-II	3	2	1	0	0
CET445	Architectural Structures IV	3	2	1	0	0
ART403	Introduction to Planning	3	1	0	4	0
ARP407	Working Drawing	2	0	0	3	0
ARP409	Architectural Design VI	8	0	0	0	8
ART501	Building Services -III (Mechanical)	2	1	1	0	0
ART503	Housing	3	1	0	4	0
ARS507	Thesis Preparatory Seminar & Group	3	1	0	3	0
	Discussion Architectural Design VII	8	0	0	0	8
ARP511						
ART502	Professional Practice & Management	2	1	1	0	0
ARP402	Practical Training	12	0 dite	0	17	0
		Total Cre	uits		17	7

B.Tech. - Chemical Engineering

Semester	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	Course 11	Semester Credits	Cumi
	MAT101	PHT101	EET101	HST101	CET102	MET101	CYT101	CPT101	ECT101	HST102			
	Mathematics-I	Physics	Basic Electrical Engineering	Technical Communication	Environmental Science & Ecology	Basic Mechanical Engineering	Chemistry	Computer Science & Programming	Basic Electronics Engineering	Basic Economics			
MAT101 Mathematics-I I & II	4 (3 1 0 0)	4 (3 1 0 0)	2 (1 2 0 0)	2 (2 0 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	2 (2 0 0 0)	4 (3 1 0 0)	3 (2 1 0 0)				
10411		MAT102	PHP102	EEP102	HSP103	MEP102	CYP102	CPP102	ECP102	ICP101	ICP102		
	Aided Engineering Drawing	Mathematics-	Physics Lab	Electrical Engineering Lab	Language Laboratory	Workshop Practice	Chemistry Lab	Programming Lab	Electronics Engineering Lab	CREATIVE ARTS / SPORTS / NSS	DISCIPLINE		
		4 (3 1 0 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1	1	24+24	4
	CHT201	CHT203	CHT205	CHT207	CHT209	CHT211	CHP213	CHP215	CHP217				
III	Process	Momentum Transfer Operations	Chemical Engineering Thermodynamics-	Energy Resources Utilization	Process Instrumentation	Numerical Methods in Chemical Engineering	Momentum Transfer Operations Lab	Numerical Methods in Chemical Engineering Lab	Simulation Lab				
		4 (3 1 0 0)	4 (3 1 0 0)	3 (3 0 0 0)	2 (2 0 0 0)	2 (2 0 0 0)	2 (0 0 3 0)	2 (0 0 3 0)	2 (0 0 3 0)			25	7
	CHT202	CHT204	CHT206	CHT208	CHT210	CHP212	CHP214	CHP216		ICP201	ICP202		
IV	Heat Transfer	Chemical Reaction Engineering-I	Industrial Pollution Abatement	Fluid Particle Mechanics	Mass Transfer-	Fluid Particle Mechanics Lab	Heat Transfer Lab	Industrial Pollution Abatement Lab		CREATIVE ARTS / SPORTS / NSS	DISCIPLINE		
	4 (3 1 0 0)	4 (3 1 0 0)	3 (3 0 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	2 (0 0 3 0)	2 (0 0 3 0)	2 (0 0 3 0)		1	1	27	1
		CHT303	CHT305	CHT307	CHT309	CHP311	CHP313	CHP315			·		-
v	Mass Transfer-	Chemical Reaction Engineering- II	Optimization of Chemical Processes	Chemical Engineering Thermodynamics- II	Process Equipment Design	Chemical Reaction Engineering Lab	Mass Transfer Lab	Process Equipment Design Lab					
	4 (3 1 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	3 (3 0 0 0)	2 (0 0 3 0)	2 (0 0 3 0)	2 (0 0 3 0)				25	1:
	CHT302	CHT304	CHT306	CHT308	CHT310	CHT312	CHP314	CHP316	CHP318		ICP302		
VI	Engineering	Petroleum Refining	Mathematical Methods in Chemical Engineering	Process Dynamics and Control	Chemical Technology	Transport Phenomena	Petroleum Lab	Process Dynamics and Control Lab	Process Engineering and Plant Design Lab		DISCIPLINE		
	3 (3 0 0 0) BMT499	3 (3 0 0 0) CHS401	3 (3 0 0 0) CHPE01	4 (3 1 0 0) CHPE02	3 (3 0 0 0) OE01	4 (3 1 0 0) OE02	2 (0 0 3 0)	2 (0 0 3 0)	2 (0 0 3 0)		1	27	1
VII	Basic Management	TRAINING SEMINAR	Program Elective 01	Program Elective 02	Open Elective 01	Open Elective 02							
ľ	4 (3 1 0 0)	2 (0 2 0 0)	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0)						18	1
	CHD402	CHAE01	CHAE02	OE03	OE04						ICP402		
VIII	Major Project	Advance Elective 01	Advance Elective 02	Open Elective 03	Open Elective 04						DISCIPLINE		
	12 (0 0 12 0)	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0)						1	25	19

B.Tech.-Chemical Engineering

		B.T	ecnc	JHE	iiiica	l Engineeri	ng				
	Overall credit requirem										
			te Core(I	-	46	Course Code	Course Name	Credits			P S
		Programm	•	-		CHT303	Chemical Reaction Engineering-II	4	3	1	0 0
			Proje			CHT304	Petroleum Refining	3			0 0
		Programme E		-		CHT305	Optimization of Chemical Processes	4			0 0
		Advance E	-	-	6	CHT306	Mathematical Methods in Chemical Engineering				0 0
		Open E.	lective(0	1		CHT307	Chemical Engineering Thermodynamics-II	4			0 0
					2	CHT308	Process Dynamics and Control	4			0 0
		т-	Discipli			CHT309	Process Equipment Design	3			0 0
	Institute Core	10	tal Credi	its]	195	CHT310 CHT312	Chemical Technology Transport Phonomena	3 4	3		0 0 0 0
Course Code	Course Name	Credits	L T	P	S	CH1312	Transport Phenomena	Total Cred			0 0 07
CET101	Computer Aided Engineering Drawing	2		3	0		Project				
CET102	Environmental Science & Ecology	2	2 0	0	0	Course Code	Course Name	Credits	L	Т	P S
CPP102	Programming Lab	1		2	0	CHD402	Major Project	12			12 0
CPT101	Computer Science & Programming	2		0	0			Total Cred			12
CYP102	Chemistry Lab	1		2	0		Programme Elective				
CYT101	Chemistry	4		0	0	Course Code	Course Name	Credits	L	Т	P S
ECP102	Electronics Engineering Lab	1		2	0	CHT403	Modelling and Simulation	3			0 0
ECT101	Basic Electronics Engineering	4		0	0	CHT405	Introduction to Plastic Materials	3			0 0
EEP102	Electrical Engineering Lab	1		2	0	CHT409	Operations Research	3			0 0
EET 102	Basic Electrical Engineering	4		0	0	CHT407	Nanotechnology	3			0 0
HSP103	Language Laboratory	1		2	0	CHT407	Mechanical Design of Process Equipment	3			0 0
HST103	Technical Communication	2		0	0	CHT417	Polymer Science and Technology	3			0 0
			and the same of					3			
HST102	Basic Economics	3	. * 11	0	0	CHT413 CHT415	Bioprocess Engineering	3			0 0
MAT101 MAT102	Mathematics-I	4		-	0		Non-Conventional Energy Sources me Electives from the above list in VII Semest				0 0
	Mathematics-II	5		0		Ally 2 Flogra	the Electives if one the above list in vir semest	ei oi iotai	0 0	reu	113
MEP102	Workshop Practice				0		Advance Elective				
MET101	Basic Mechanical Engineering	4		0 2	0	Course Code		Condita	Ţ		D C
PHP102	Physics Lab	\$ 1			0	Course Code	Course Name	Credits			P S
PHT101	Physics	4 Total (3 1 Credits	0 46	0	CHT404 CHT406	Advanced Separation Processes Polymer Process Modelling	3	U		0 0 0
		Total	creurts		_	C111400	Folymer Frocess Moderning	3		U	0 0
							777				
	Programme Core				_	CHT410	Process Piping and Design	3	3	0	0 0
Course Code	Course Name	Credits	L T	P/	s	CHT410 CHT414	Process Piping and Design Applied Statistics for Chemical Engineers	3			0 0
Course Code BMT499		Credits 4	_	P 0	S		Applied Statistics for Chemical Engineers Process Modification for Green Technology and		3	0	
	Course Name	3	_	0	0	СНТ414	Applied Statistics for Chemical Engineers		3	0	0 0
BMT499	Course Name Basic Management	100 A	3 1 0 0	0	0	CHT414 CHT418	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration	3	3 3	0 0 0	0 0 0 0
BMT499 CHP212	Course Name Basic Management Fluid Particle Mechanics Lab	4 2	3 1 0 0 0 0	0 3 3	0	CHT414 CHT418 CHT408	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards	3 3 3	3 3 3 3	0 0 0 0	0 0 0 0 0 0
BMT499 CHP212 CHP213	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab	4 2 2 2	3 1 0 0 0 0 0 0	0 3 3	0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control	3 3 3 3 3	3 3 3 3 3	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab	4 2 2 2	3 1 0 0 0 0 0 0 0 0	0 3 3 3	0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes	3 3 3 3 3	3 3 3 3 3	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee	4 2 2 2 2 ring 2	3 1 0 0 0 0 0 0 0 0 0 0	0 3 3 3	0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes	3 3 3 3 3	3 3 3 3 3	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semester	3 3 3 3 3	3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab	4 2 2 2 2 2 2 2 2 2 2 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semeste Open Elective Course Name Petroleum, Petrochemicals & Natural Gas	3 3 3 3 3 er of Total	3 3 3 3 "6 Cr	0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab	4 2 2 2 2 2 2 2 2 2 2 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semeste Open Elective Course Name	3 3 3 3 er of Total	3 3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab	4 2 2 2 2 2 2 2 2 2 2 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semeste Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and	3 3 3 3 er of Total Credits 3	3 3 3 3 3 ""6 Cr	0 0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 its"
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP313 CHP314	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semeste Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design	3 3 3 3 2er of Total Credits 3 3	3 3 3 3 3 TO CO	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 its" P S 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP311 CHP313 CHP314	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Elee	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell ctives (2 in each VII & VIII semester) from the	3 3 3 3 3 er of Total Credits 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 T 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La	4 2 2 2 2 2 2 2 2 2 2 2 2 b 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Elee	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semeste Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell	3 3 3 3 3 er of Total Credits 3 3 3 3	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 T 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP313 CHP314 CHP315 CHP316 CHP318 CHS401	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design Lat TRAINING SEMINAR	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 0	0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Elee	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes CE Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Ctives (2 in each VII & VIII semester) from the expartments of Minimum "12 Credits"	3 3 3 3 er of Total Credits 3 3 3 list of cour	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 T 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La	4 2 2 2 2 2 2 2 2 2 2 2 2 b 2 2	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Elee	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell ctives (2 in each VII & VIII semester) from the	3 3 3 3 er of Total Credits 3 3 3 list of cour	3 3 3 3 3 "6 Cr	0 0 0 0 0 0 T 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP313 CHP314 CHP315 CHP316 CHP318 CHP318 CHP318 CHS401 CHT201 CHT202	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La TRAINING SEMINAR Chemical Process Calculations Heat Transfer	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 4	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 3 3 3 0	0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell ctives (2 in each VII & VIII semester) from the spartments of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Disciplin Course Name	3 3 3 3 3 er of Total Credits 3 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 0 T 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316 CHP316 CHP316 CHP317 CHP311	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La TRAINING SEMINAR Chemical Process Calculations Heat Transfer Momentum Transfer Operations	4 2 2 2 2 2 2 2 2 2 2 2 4 4	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes Ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Ctives (2 in each VII & VIII semester) from the Expartments of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Disciplin Course Name Creative Arts Society	3 3 3 3 3 2 or of Total Credits 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 0 T 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316 CHP316 CHP316 CHP316 CHP318 CHS401 CHT201 CHT202 CHT203 CHT204	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La TRAINING SEMINAR Chemical Process Calculations Heat Transfer Momentum Transfer Operations Chemical Reaction Engineering-I	4 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 3 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de Course Code *	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes Ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Cetives (2 in each VII & VIII semester) from the Expartments of Minimum "12 Credits" Creative Arts/Sports/ NSS & Disciplin Course Name Creative Arts Society Discipline	3 3 3 3 3 er of Total Credits 3 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316 CHP316 CHP318 CHS401 CHT201 CHT202 CHT203 CHT204 CHT205	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design Lat TRAINING SEMINAR Chemical Process Calculations Heat Transfer Momentum Transfer Operations Chemical Reaction Engineering-I Chemical Engineering Thermodynamics-	4 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4 4	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de Course Code *	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes Ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Cetives (2 in each VII & VIII semester) from the Expartments of Minimum "12 Credits" Creative Arts/Sports/ NSS & Disciplin Course Name Creative Arts Society Discipline	3 3 3 3 3 2 or of Total Credits 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316 CHP316 CHP318 CHS401 CHT201 CHT202 CHT203 CHT204 CHT205 CHT206	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La TRAINING SEMINAR Chemical Process Calculations Heat Transfer Momentum Transfer Operations Chemical Reaction Engineering-I Chemical Engineering Thermodynamics-Industrial Pollution Abatement	4 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4 4	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de Course Code *	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes Ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Cetives (2 in each VII & VIII semester) from the Expartments of Minimum "12 Credits" Creative Arts/Sports/ NSS & Disciplin Course Name Creative Arts Society Discipline	3 3 3 3 3 2 or of Total Credits 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP311 CHP313 CHP314 CHP318 CHP316 CHP318 CHS401 CHT201 CHT202 CHT203 CHT204 CHT205 CHT206 CHT207	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La TRAINING SEMINAR Chemical Process Calculations Heat Transfer Momentum Transfer Operations Chemical Reaction Engineering-I Chemical Engineering Thermodynamics-Industrial Pollution Abatement Energy Resources Utilization	4 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4 4	3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de Course Code *	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes Ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Cetives (2 in each VII & VIII semester) from the Expartments of Minimum "12 Credits" Creative Arts/Sports/ NSS & Disciplin Course Name Creative Arts Society Discipline	3 3 3 3 3 2 or of Total Credits 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316 CHP318 CHS401 CHT201 CHT202 CHT203 CHT204 CHT205 CHT206 CHT207 CHT208	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La TRAINING SEMINAR Chemical Process Calculations Heat Transfer Momentum Transfer Operations Chemical Reaction Engineering-I Chemical Engineering Thermodynamics-Industrial Pollution Abatement Energy Resources Utilization Fluid Particle Mechanics	4 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4 4	3 1 0 1 3 1 3 1 3 1 3 1 3 0 3 0 3 1	0 3 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de Course Code *	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes Ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Cetives (2 in each VII & VIII semester) from the Expartments of Minimum "12 Credits" Creative Arts/Sports/ NSS & Disciplin Course Name Creative Arts Society Discipline	3 3 3 3 3 2 or of Total Credits 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316 CHP316 CHP316 CHP318 CHS401 CHT201 CHT202 CHT203 CHT204 CHT205 CHT206 CHT207 CHT208 CHT209	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La TRAINING SEMINAR Chemical Process Calculations Heat Transfer Momentum Transfer Operations Chemical Reaction Engineering-I Chemical Engineering Thermodynamics-Industrial Pollution Abatement Energy Resources Utilization Fluid Particle Mechanics Process Instrumentation	4 2 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4 4	3 1 0 2 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 2 0 3 0	0 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de Course Code *	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes Ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Cetives (2 in each VII & VIII semester) from the Expartments of Minimum "12 Credits" Creative Arts/Sports/ NSS & Disciplin Course Name Creative Arts Society Discipline	3 3 3 3 3 2 or of Total Credits 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
BMT499 CHP212 CHP213 CHP214 CHP215 CHP216 CHP217 CHP311 CHP311 CHP313 CHP314 CHP315 CHP316 CHP316 CHP318 CHS401 CHT201 CHT202 CHT203 CHT204 CHT205 CHT206 CHT207 CHT208	Course Name Basic Management Fluid Particle Mechanics Lab Momentum Transfer Operations Lab Heat Transfer Lab Numerical Methods in Chemical Enginee Industrial Pollution Abatement Lab Simulation Lab Chemical Reaction Engineering Lab Mass Transfer Lab Petroleum Lab Process Equipment Design Lab Process Dynamics and Control Lab Process Engineering and Plant Design La TRAINING SEMINAR Chemical Process Calculations Heat Transfer Momentum Transfer Operations Chemical Reaction Engineering-I Chemical Engineering Thermodynamics-Industrial Pollution Abatement Energy Resources Utilization Fluid Particle Mechanics	4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4 4	3 1 0 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	0 3 3 3 3 3 3 3 3 3 3 3 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CHT414 CHT418 CHT408 CHT412 CHT416 Any 2 Advan Course Code CHT321 CHT410 CHT418 CHT419 Any 4 Open Ele by the other de Course Code *	Applied Statistics for Chemical Engineers Process Modification for Green Technology and Energy Integration Process Safety and Hazards Advanced Process Control Catalytic Processes Ce Electives from the above list in VIII Semester Open Elective Course Name Petroleum, Petrochemicals & Natural Gas Engineering Process Piping and Design Process Modification for Green Technology and Energy Integration Fuel Cell Cetives (2 in each VII & VIII semester) from the Expartments of Minimum "12 Credits" Creative Arts/Sports/ NSS & Disciplin Course Name Creative Arts Society Discipline	3 3 3 3 3 2 or of Total Credits 3 3 list of course	3 3 3 3 3 "6 Cr	0 0 0 0 0 redi	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

CHT301

CHT302

Mass Transfer-II

Process Engineering and Plant Design

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B.Tech. - Civil Engineering

Semes ter	Course 1	Course 2	Cours e 3	Course 4	Course 5	Course 6	Cours e 7	Course 8	Course 9	Course 10	Course 11	Course 12	Course 13	Semeste r Credits	Cumulati ve
	MAT101	PHT10	EET10	HST101	CET102	MET101	CYT10	CPT101	ECT101	HST102					
	Mathematic s-I	Physics	Basic Electrical Engineer ing	Technical Communic ation	Environme ntal Science & Ecology	Basic Mechanica I Engineerin g	Chemistr y	Computer Science & Programmi ng	Basic Electronic s Engineerin g	Basic Economic s					
I & II	4 (3 1 0 0	4 (3 1 0	4 (3 1	2 (1 2 0 0	2 (2 0 0	4 (3 1 0	4 (3 1 0	2 (2 0 0 0	4 (3 1 0	3 (2 1 0					
	CET101	MAT10	PHP10	EEP102	HSP103	MEP102	CYP10	CPP102	ECP102			ICP101	ICP102		
	Computer Aided Engineering Drawing	Mathema tics-II	Physics Lab	Electrical Engineerin g Lab	Language Laboratory	Workshop Practice	Chemistr y Lab	Programmi ng Lab	Electronic s Engineerin g Lab			CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE		
	2 (0 0 3 0	4 (3 1 0	1 (0 0	1 (0 0 2 0	1 (0 0 2	1 (0 0 2	1 (0 0 2	1 (0 0 2 0	1 (0 0 2			1	1	24+24	48
	CET201	CET20	CET20	CET204	CET205	MAT209	CEP20	CEP208	CEP209	CEP210					
III	Constructio n Materials	Fluid Mechanic s	Surveyin g	Mechanics of Solids	Engineerin g Geology	Mathemati cs III	Construc tion Materials Lab	Fluid Mechanics Lab	Surveying Lab	Geology Lab					
	3 (3 0 0 0	4 (3 1 0	3 (3 0	4 (3 1 0 0	2 (2 0 0	4 (3 1 0	1 (0 0 2	1 (0 0 2 0	1 (0 0 2	1 (0 0 2				24	72
	CET221	CET22	CET22	CET224	CET225	CET226	CEP22	CEP228	CEP229	CEP230	CEP231	ICP201	ICP202		
IV	Building Technology	Pipe & Channel Hydraulic s	Advance d Surveyin g	Highway Engineerin g	Structural Analysis-I	Water Supply Engineerin g	Building Drawing	H <mark>y</mark> draulics Lab	Advanced Surveying Lab	Road Material Testing Lab	Public Health Engineerin g Lab	CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE		
	2 (2 0 0 0	4 (3 1 0	2 (2 0	3 (3 0 0 0	4 (3 1 0	3 (3 0 0	1 (0 0 2	1 (0 0 2 0	1 (0 0 2	1 (0 0 2	1 (0 0 2	1	1	25	97
v	CET301 Sanitary Engineering	CET30 Structural Analysis- II	Design of RC Structure	CET304 Hydrology	Soil Mechanics	CET306 Estimating & Costing	CEP30 RC Design and Drawing	CEP308 Structural Analysis Lab	Soil Mechanics lab	7					
	3 (3 0 0 0	4 (3 1	3 (3 0	4 (3 1 0 0	4 (3 1 0	3 (2 1 0	1 (0 0 2	1 (0 0 2 0	1 (0 0 2					24	121
	CET321	CET32	CET32	CET324	CET325	CET326	CEP32	CEP328	CEP329				ICP302		
VI	Railway & Airport Engineering	Design of Steel Structure S	Design of Foundati ons & Earth Structure s	Design of RC Systems	Design of Masonry Structures	Water Resources Engineerin g	Structura I Design & Drawing	Environmen tal System Design	Geotechni cal Engineerin g Laboratory				DISCIPLI NE		
	4 (3 1 0 0	4 (3 1 0	4 (3 1	4 (3 1 0 0	3 (2 1 0	4 (3 1 0	1 (0 0 2	1 (0 2 0 0	1 (0 0 2				1	27	148
	BMT499	CES49	CEPE0	CEPE02	OE01	OE02	. (0 0 2	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	. (0 0 =						
VII	Basic Manageme nt	Training Seminar	Program Elective 01	Program Elective 02	Open Elective 01	Open Elective 02									
	4 (3 1 0 0	2 (0 0 4	3 (3 0	3 (3 0 0 0	3 (3 0 0	3 (3 0 0								18	166
	CED498	CEAE0	CEAE0	OE03	OE04								ICP402		
VIII	Major Project	Advance Elective 01	Advance Elective 02	Open Elective 03	Open Elective 04								DISCIPLI NE		

	12 (0 0 1	3 (3 0 0	3 (3 0	3 (3 0 0 0	3 (3 0 0				1	25	191
	0 0)	O \	0 0	`	O \						_



B.Tech.-Civil Engineering

	Overall credit requireme	ent										
		Institute	Core(IC)	46	CET225	Structural Analysis-I	4	3	1	0	C
	Programme Core Project 12	CET226	Water Supply Engineering	3	3	0	0	C				
	Institute Core	CET301	Sanitary Engineering	3	3	0	0	(
	Institute Corporation Co	tive(l	PE)	6	CET302	Structural Analysis-II	4	3	1	0	(
	Programme Co	tive(AE)	6	CET303	Design of RC Structure	3	3	0	0	(
		Open Elec	tive(0	DE)	12	CET304	Hydrology	4	3	1	0	(
		·		CAS	2	CET305	Soil Mechanics	4	3	1	0	(
	Institute Core rse Code Course Name ET101 Computer Aided Engineering Drawing ET102 Environmental Science & Ecology PP102 Programming Lab PT101 Computer Science & Programming PT102 Chemistry Lab PT101 Chemistry PT101 Chemistry PT101 Electronics Engineering Lab PT101 Basic Electronics Engineering PT102 Electrical Engineering PT103 Language Laboratory PT101 Technical Communication PT101 Basic Economics PT101 Mathematics-I PT102 Mathematics-II PT102 Workshop Practice PT101 Basic Mechanical Engineering PT102 Physics Lab PT101 Physics Programme Core PT See Code PT Gourse Name PT GOURSE Name PT GOURSE Name PT GOURSE Name PT GOOR SURVEYING Lab	D	iscipl	ine		CET306	Estimating & Costing	3	2	1	0	(
			-			CET321	Railway & Airport Engineering	4	3	1	0	(
	Institute Core	1011	or cc		171	CET322	Design of Steel Structures	4	3	1	0	(
Course Code	Programme Elective Programme	<u> </u>	CET323	Design of Foundations & Earth Structures	4	3	1	0	(
						CET323	Design of RC Systems	4	3	1	0	(
						CET325	Design of Masonry Structures	3	2	1	0	,
						CET325	Water Resources Engineering	4	3	1	0	·
						MAT209	Mathematics III	4	3			(
						MA1209		otal Credits	3		0	
	-						Project	otal Credits		1	,,	
	•	1				Course Code	Course Name	Credits	L	Т	P	:
ECT101		4	3 1	0	0	CED498	Major Project	12	0	0	12	
EEP102	Electrical Engineering Lab	1	0 0	2	0	•	Т	otal Credits		1	2	_
EET101	Basic Electrical Engineering	4	3 1	0	0		Programme Elective					
HSP103		1	0 0	2	NO TITU	Course Code	Course Name	Credits	L	Т	P	
HST101	•	2		. 1	0	CET409	Traffic Engineering and Transport Planning	3	2	1	0	
HST102	Basic Economics	3	2 1	0	0	CET411	Construction Project Management	3	3	0	0	
MAT101	Mathematics-I	4	3 1	0	0	CET401	Concrete Technology	4	2	1	0	
MAT102	Mathematics-II	4	3 1	0	0	CET402	Design of Hydraulic Structures	3	2	1	0	
MEP102	Workshop Practice	/ Si/ A	0 0	2	0	CET405	System Analysis	3	2	1	0	
	•					CET404	Air and Noise Pollution	3	3	0	0	
		T I							3	0	0	
PHP102	Physics Lab		0 0	2	0	CET406	Indrustrial Waste Treatment	.5				
	Institute Core Code Course Name 101 Computer Aided Engineering Drawing 102 Environmental Science & Ecology 102 Programming Lab 101 Computer Science & Programming 102 Chemistry Lab 101 Chemistry 102 Electronics Engineering Lab 101 Basic Electronics Engineering 102 Electrical Engineering 103 Language Laboratory 101 Technical Communication 102 Basic Economics 101 Mathematics-I 102 Workshop Practice 101 Basic Mechanical Engineering 102 Physics Lab 101 Physics Programme Core Code Course Name 1499 Basic Management 1407 Construction Materials Lab 1409 Surveying Lab 1409 1409 1409 1409 1409 1409 1409 1409	4				CET406 CET407	Indrustrial Waste Treatment	3			0	
	Program Advara Computer Aided Engineering Drawing Finol Computer Science & Ecology Programming Lab Finol Computer Science & Programming Finol Chemistry Lab Finol Chemistry Lab Finol Basic Electronics Engineering Lab Finol Basic Electrical Engineering Lab Finol Basic Electrical Engineering Finol Basic Electrical Engineering Finol Basic Economics Finol Mathematics-I Finol Mathematics-I Finol Mathematics-I Finol Basic Economics Finol Mathematics-I Finol Mathematics-I Finol Basic Mechanical Engineering Finol Physics Finol Basic Mechanical Engineering Finol Physics Finol Basic Mechanical Engineering Finol Physics Finol Materials Lab Finol Physics Finol Physics Finol Physics Finol Materials Lab Finol Physics Fino	4	3 1	0	0	CET407	Presstressed Concrete	3	3	0	0	
	Physics	4	3 1	0	0	CET407 CET408	Presstre <mark>ssed C</mark> oncrete Urban W <mark>ater Co</mark> nveyance System Design	3 4	3 2	0	0	,
PHT101	Programme Core	4 Total Cr	3 1	0	0 46	CET407 CET408 CET410	Presstre <mark>ssed C</mark> oncrete Urban W <mark>ater C</mark> onveyance System Design Sustain <mark>able Bui</mark> lding Project Delivery	3 4 3	3 2 3	0 1 0	0	
PHT101 Course Code	Programme Core Course Name	4 Total Cr Credits	3 1 edits	0 P	0 46 S	CET407 CET408 CET410 CET412	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management	3 4 3 3	3 2 3 3	0 1 0	0 0	
PHT101 Course Code BMT499	Programme Core Course Name Basic Management	4 Total Cr Credits 4	3 1 edits L T 3 1	0 P 0	0 46 S 0	CET407 CET408 CET410 CET412 CET403	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques	3 4 3 3 3	3 2 3 3 2	0 1 0 0	0 0 0 0	
PHT101 Course Code BMT499 CEP207	Programme Core Course Name Basic Management Construction Materials Lab	4 Total Cr Credits 4	3 1 edits L T 3 1 0 0	0 P 0 2	0 46 S 0	CET407 CET408 CET410 CET412 CET403	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management	3 4 3 3 3	3 2 3 3 2	0 1 0 0	0 0 0 0	
PHT101 Course Code BMT499 CEP207 CEP208	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab	Total Cr Credits 4 1 1	3 1 edits L T 3 1 0 0 0 0	0 P 0 2 2	0 46 S 0 0	CET407 CET408 CET410 CET412 CET403	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques The Electives from the above list in VII Sem	3 4 3 3 3	3 2 3 3 2	0 1 0 0	0 0 0 0	
Course Code BMT499 CEP207 CEP208 CEP209	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab	Total Cr Credits 4 1 1	3 1 edits L T 3 1 0 0 0 0	0 P 0 2 2 2	0 46 S 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques ame Electives from the above list in VII Sem Advance Elective	3 4 3 3 3 ester of Tota	3 3 3 2 al "6	0 1 0 0 1 Cre	0 0 0 0	s"
Course Code BMT499 CEP207 CEP208 CEP209 CEP210	Physics Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab	Credits 4 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2	0 46 S 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques ame Electives from the above list in VII Sem Advance Elective Course Name	3 4 3 3 3 ester of Tota	3 2 3 3 2 2 L	0 1 0 0 1 Cre	0 0 0 0	s"
Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227	Physics Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing	Credits 4 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2 2	0 46 S 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method	3 4 3 3 3 ester of Tota	3 2 3 2 2 L 2	0 1 0 0 1 5 Cree	0 0 0 0 edits	s"
Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228	Physics Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab	Credits 4 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2 2 2 2	0 46 S 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System	3 4 3 3 3 ester of Tota Credits 3 3	3 2 3 3 2 L 2 2	0 1 0 0 1 Cree T 1	0 0 0 0 edits	s"
Course Code BMT499 CEP207 CEP208 CEP210 CEP227 CEP228 CEP228	Physics Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab	Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2 2 2 2 2	0 46 8 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics	3 4 3 3 3 ester of Tota Credits 3 3 3	3 2 3 3 2 al "6 L 2 2 2	0 1 0 1 Cree T 1 1	0 0 0 0 edits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP210 CEP227 CEP228 CEP229 CEP229	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab	Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2 2 2 2 2 2 2	0 46 5 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design	3 4 3 3 3 ester of Tota Credits 3 3 3 3	3 2 3 3 2 L 2 2 3 3	0 1 0 0 1 T 1 1 1	0 0 0 0 edits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab	Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2 2 2 2 2 2 2	0 46 5 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems	3 4 3 3 3 ester of Tota Credits 3 3 3	3 2 3 3 2 al "6 L 2 2 2	0 1 0 0 1 T 1 1 1	0 0 0 0 edits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2 2 2 2 2 2 2 2	0 46 8 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design	3 4 3 3 3 ester of Tota Credits 3 3 3 3	3 2 3 3 2 L 2 2 3 3	0 1 0 0 1 T 1 1 1	0 0 0 0 edits	
Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 46 8 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and	3 4 3 3 3 ester of Tota Credits 3 3 3 3 3 3 3 3	3 2 3 3 2 41 "6 L 2 2 3 2 3	0 1 0 1 1 1 1 1 0 1	0 0 0 0 0 edits	s"
Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis	3 4 3 3 3 ester of Tota Credits 3 3 3 3 3 3 3 3	3 2 3 3 2 41 "6 L 2 2 3 2 3	0 1 0 1 1 1 1 1 0 1	0 0 0 0 0 edits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0	0 P 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis	3 4 3 3 3 ester of Tota Credits 3 3 3 3 3 3 3 3	3 2 3 3 2 41 "6 L 2 2 3 2 3	0 1 0 1 1 1 1 1 0 1	0 0 0 0 0 edits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP308	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0	P 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis are Electives from the above list in VIII Seme	3 4 3 3 3 ester of Tota Credits 3 3 3 3 ester of Tota	3 2 3 3 2 41 "6 L 2 2 3 2 3	0 1 0 1 1 1 1 1 0 1 0 Cre	0 0 0 0 0 edits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP307 CEP308 CEP309 CEP327 CEP328	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 0	P 0 2 2 2 2 2 2 2 2 2 2 2 2 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Semental Open Elective Course Name	3 4 3 3 ester of Tota Credits 3 3 3 3 ester of Tota	3 2 3 2 L 2 2 3 2 3 L "6	0 1 0 1 1 1 1 1 0 1 0 Cre	0 0 0 0 edits P 0 0 0 0 0	S"
Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP309 CEP309	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Seme	3 4 3 3 ester of Tota Credits 3 3 3 3 Credits Credits	3 2 3 2 L 2 2 3 2 L 1 "6	0 1 0 0 1 5 Cree T 1 1 0 1 0 0 T 1 0 0 0 T 1 0 0 0 0 0 0	0 0 0 0 0 edits P 0 0 0 0 0 0 dits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP309 CEP309 CEP327 CEP308 CEP329 CEP329 CEP329 CEP329	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 2	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 P 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Seme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS	3 4 3 3 ester of Tota Credits 3 3 3 ester of Tota Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 2 3 3 2 L 2 2 3 2 1 "6 L 3	0 1 0 0 1 5 Cree T 1 1 0 1 0 Cree	0 0 0 0 0 edits P 0 0 0 0 0 dits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP309 CEP307 CEP308 CEP309 CEP327 CEP328 CEP329 CEP329 CEP329 CEP329 CEP329 CEP329 CEP329 CEP329 CES499 CET201	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar Construction Materials	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 2 3	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 2 2 2 2 2 2 2 2 2 2 2 2 4 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431 CET432	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Seme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS Numerical Methods	3 4 3 3 3 ester of Tota Credits 3 3 3 3 ester of Tota Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 2 3 3 2 L 2 2 3 L 3 3 3	0 1 0 0 1 T 1 1 1 0 Cree T 0 0	0 0 0 0 0 edits P 0 0 0 0 0 dits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP210 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP307 CEP308 CEP309 CEP327 CEP329 CEP329 CEP327 CEP328 CEP329 CEP329 CEP329 CEP329 CEP329 CES499 CET201 CET202	Physics Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar Construction Materials Fluid Mechanics	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 1 2 3 4	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 2 2 2 2 2 2 2 2 2 2 2 2 2 4 0 0 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Seme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS Numerical Methods Earthquake Disaster Mitigation	3 4 3 3 3 ester of Tota Credits 3 3 3 Sester of Tota Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 2 3 3 2 L 2 2 3 2 L 3 3 3 2 L 3 3 3 2 L	0 1 0 0 1 1 1 1 1 0 1 0 Cree	0 0 0 0 0 edits P 0 0 0 0 0 0 dits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP309 CEP307 CEP308 CEP309 CEP327 CEP328 CEP329 CEP327 CEP328 CEP329 CET201 CET202 CET203	Physics Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar Construction Materials Fluid Mechanics Surveying	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 2 3 4 3	3 1 edits L T 0	P 0 2 2 2 2 2 2 2 2 2 2 2 4 0 0 0 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431 CET432 CET433 *	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Semme Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Semme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS Numerical Methods Earthquake Disaster Mitigation Computational Engineering	3 4 3 3 3 ester of Tota Credits 3 3 3 ester of Tota Credits 3 3 3 3 3 ester of 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 2 3 3 2 L 2 2 3 2 3 L 3 3 2 3	0 1 0 0 1 1 1 1 0 1 0 Cree	0 0 0 0 0 edits P 0 0 0 0 0 0 0 0 0 0	5"
Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP307 CEP308 CEP309 CEP327 CEP328 CEP329 CET201 CET202 CET203 CET204	Physics Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar Construction Materials Fluid Mechanics Surveying Mechanics of Solids	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 2 3 4 3 4	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 2 2 2 2 2 2 2 2 2 2 2 4 0 0 0 0 0 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431 CET432 CET433 * Any 4 Open Elec	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Seme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS Numerical Methods Earthquake Disaster Mitigation Computational Engineering Sectives (2 in each VII & VIII semester) from the service of the section of	3 4 3 3 3 ester of Tota Credits 3 3 3 ester of Tota Credits 3 3 3 3 3 ester of 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 2 3 3 2 L 2 2 3 2 3 L 3 3 2 3	0 1 0 0 1 1 1 1 0 1 0 Cree	0 0 0 0 0 edits P 0 0 0 0 0 0 0 0 0 0	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP309 CEP327 CEP308 CEP329 CEP320 CEP327 CEP328 CEP329 CEP320 CEP327 CEP328 CEP329 CET201 CET202 CET203 CET204 CET205	Physics Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar Construction Materials Fluid Mechanics Surveying Mechanics of Solids Engineering Geology	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 2 3 4 3 4 2	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 2 2 2 2 2 2 2 2 2 2 2 4 0 0 0 0 0 0 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431 CET432 CET433 * Any 4 Open Elec	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Seme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS Numerical Methods Earthquake Disaster Mitigation Computational Engineering Introduction of Minimum "12 Credits"	Credits 3 3 3 Credits 3 3 3 Credits 3 3 3 Credits 3 3 Credits 3 3 Credits 3 3 Credits 3 A A A A A A A A A A A A A A A A A A	3 2 3 3 2 L 2 2 3 2 3 L 3 3 2 3	0 1 0 0 1 1 1 1 0 1 0 Cree	0 0 0 0 0 edits P 0 0 0 0 0 0 0 0 0 0	3"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP309 CEP309 CEP327 CEP328 CEP329 CEP320 CEP327 CEP328 CEP329 CET201 CET202 CET203 CET204 CET205 CET221	Physics Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar Construction Materials Fluid Mechanics Surveying Mechanics of Solids Engineering Geology Building Technology	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 2 3 4 3 4 2 2	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 2 2 2 2 2 2 2 2 2 2 2 4 0 0 0 0 0 0 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431 CET432 CET433 * Any 4 Open Eleby the other de	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Acce Electives from the above list in VIII Seme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS Numerical Methods Earthquake Disaster Mitigation Computational Engineering Sectives (2 in each VII & VIII semester) from the Epartments of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discip	3 4 3 3 3 ester of Tota Credits 3 3 3 3 ester of Tota Credits 3 3 3 he list of coulding	3 2 3 2 2 3 2 3 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 3 2 3 3 3 3 2 3 3 3 3 2 3	1 0 0 1 1 0 Cre T 1 1 0 1 0 Cre T 0 0 0 1 0 0 es of	0 0 0 0 0 dits	s"
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP309 CEP309 CEP327 CEP328 CEP329 CEP329 CEP329 CET201 CET202 CET203 CET204 CET205 CET221 CET222	Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar Construction Materials Fluid Mechanics Surveying Mechanics of Solids Engineering Geology Building Technology Pipe & Channel Hydraulics	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 2 3 4 3 4 2 2 4	3 1 edits L T 3 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 2 2 2 2 2 2 2 2 2 2 4 0 0 0 0 0 0 0 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431 CET432 CET433 * Any 4 Open Eleby the other de	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Imme Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Ince Electives from the above list in VIII Seme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS Numerical Methods Earthquake Disaster Mitigation Computational Engineering Introduction of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discip Course Name	3 4 3 3 3 ester of Tota Credits 3 3 3 ester of Tota Credits 3 3 3 he list of coultine Credits	3 2 3 2 2 3 2 3 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 3 2 3 3 3 3 2 3 3 3 3 2 3	1 0 0 1 1 0 Cre T 1 1 0 1 0 Cre T 0 0 0 1 0 0 es of	0 0 0 0 0 dits	::::::::::::::::::::::::::::::::::::::
PHT101 Course Code BMT499 CEP207 CEP208 CEP209 CEP210 CEP227 CEP228 CEP229 CEP230 CEP231 CEP307 CEP308 CEP309 CEP309 CEP309 CEP327 CEP328 CEP329 CEP327 CEP328 CEP329 CET201 CET202 CET203 CET204 CET205 CET221	Physics Programme Core Course Name Basic Management Construction Materials Lab Fluid Mechanics Lab Surveying Lab Geology Lab Building Drawing Hydraulics Lab Advanced Surveying Lab Road Material Testing Lab Public Health Engineering Lab RC Design and Drawing Structural Analysis Lab Soil Mechanics lab Structural Design & Drawing Environmental System Design Geotechnical Engineering Laboratory Training Seminar Construction Materials Fluid Mechanics Surveying Mechanics of Solids Engineering Geology Building Technology	4 Total Cr Credits 4 1 1 1 1 1 1 1 1 1 1 1 2 3 4 3 4 2 2 4 2	3 1 edits L T 3 1 0	P 0 2 2 2 2 2 2 2 2 2 2 2 4 0 0 0 0 0 0 0	0 46 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CET407 CET408 CET410 CET412 CET403 Any 2 Progra Course Code CET423 CET421 CET422 CET424 CET425 CET420 Any 2 Advan Course Code CET434 CET431 CET432 CET433 * Any 4 Open Eleby the other de	Presstressed Concrete Urban Water Conveyance System Design Sustainable Building Project Delivery Solid Waste Management Ground Improvement Techniques Ame Electives from the above list in VII Sem Advance Elective Course Name Finite Element Method Construction Information System Structural Dynamics Advanced Foundation Design Design of Steel Structural Systems Introduction of Spatial Data Collection and Analysis Acce Electives from the above list in VIII Seme Open Elective Course Name Water Conservation Technology Introduction to Remote Sensing & GIS Numerical Methods Earthquake Disaster Mitigation Computational Engineering Sectives (2 in each VII & VIII semester) from the Epartments of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discip	3 4 3 3 3 ester of Tota Credits 3 3 3 3 ester of Tota Credits 3 3 3 he list of coulding	3 2 3 2 2 3 2 3 3 3 2 3 3 2 3 3 2 3 3 3 2 3 3 3 2 3 3 3 3 2 3 3 3 3 2 3	1 0 0 1 1 0 Cre T 1 1 0 1 0 Cre T 0 0 0 1 0 0 es of	0 0 0 0 0 dits	s"

B.Tech. - Computer Science & Engineering

Semest er	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	Course 11	Course 12	Semes ter	Cumulati ve
	MAT101	PHT101	EET101	HST101	CET102	MET101	CYT101	CPT101	ECT101	HST102				
	Mathematics-I	Physics	Basic Electrical Engineering	Technical Communicatio n	Environment al Science & Ecology	Basic Mechanical Engineering	Chemistry	Computer Science & Programm ing	Basic Electronic s Engineerin g	Basic Economic s				
I & II	4 (3 1 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	2 (1 2 0 0)	2 (2 0 0 0)	4 (3 1 0 0	4 (3 1 0 0	2 (2 0 0	4 (3 1 0	3 (2 1 0				
	CET101	MAT102	PHP102	EEP102	HSP103	MEP102	CYP102	CPP102	ECP102		ICP101	ICP102		
	Computer Aided Engineering Drawing	Mathematics -II	Physics Lab	Electrical Engineering Lab	Language Laboratory	Workshop Practice	Chemistry Lab	Programm ing Lab	Electronic s Engineerin g Lab		CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE		
	2 (0 0 3 0)	4 (3 1 0 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0	1 (0 0 2 0	1 (0 0 2	1 (0 0 2		1	1	24+24	48
	CST201	CST203	CST205	CST207	CST209	HST201	CSP211	CSP213						
III	Logic in Computing	Data Structures and Algorithms	Digital Logic Design	Programming Methodology	Introduction to Signals & Communicati ons	Effective Communica tion	Programmi ng Lab	Digital logic Design Lab						
	3 (3 0 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	3 (3 0 0 0)	4 (3 1 0 0)	3 (2 1 0 0	2 (0 0 4 0	2 (0 0 3					25	73
	CST202	CST204	CST206	CST208	CST210	HST202	CSP212	CSP214	CSP216		ICP201	ICP202		
IV	Computer organization and Microprocesso rs	Discrete Structures	Formal languages and Automata Theory	Design and Analysis of Algorithms	Systems Programmin g	Economic Environmen t	Assembly Language Programmi ng Lab	Algorithms Lab	System Programm ing Lab		CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE		
	3 (3 0 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	3 (3 0 0 0)	3 (2 1 0 0	2 (0 0 3 0	2 (0 0 3	2 (0 0 3		1	1	29	102
	CST301	CST303	CST305	CST307	CST309	CST311	CSP313	CSP315	CSP317					
V	Computer Architecture	Concurrent and Parallel Programmin g	DBMS	Computer Networks	Compiler Design	Software Engineering	DBMS Lab	Concurren t and Parallel Programm ing Lab	Computer Network Lab					
	3 (3 0 0 0)	3 (3 0 0 0)	4 (3 1 0 0)	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0	2 (0 0 3 0	2 (0 0 3	2 (0 0 3				25	127
VI	CST302 Operating System	CST304 Embedded Systems	CST306 Object Oriented Analysis and Design	CST308 Computer and Networks Security	CST310 Computer Graphics	CST312 Al and Expert System	OS and Security Lab	CSP316 Graphics Lab	CSP318 Advanced Programm ing Lab	CSP320 Embedded System Design Lab		DISCIPLI NE		
	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0)	3 (3 0 0 0	2 (0 0 3 0	2 (0 0 3	2 (0 0 3	2 (0 0 3		1	27	154
	CSS401	CPPE01	CPPE02	OE01	OE02									
VII	Training Seminar	Program Elective 01	Program Elective 02	Open Elective 01	Open Elective 02									
	2 (0 2 0 0)	4 (3 0 2 0)	4 (3 0 2 0)	3 (3 0 0 0)	3 (3 0 0 0)								16	170
	BMT499	CSD402	CPAE01	CPAE02	OE03	OE04						ICP402		
VIII	Basic Management	Major Project	Advance Elective 01	Advance Elective 02	Open Elective 03	Open Elective 04						DISCIPLI NE		

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	4 (3 1 0 0)	12 (0 0 12	4 (3 0 2 0)	4 (3 0 2 0)	3 (3 0 0 0)	3 (3 0 0 0			1	31	201



B.Tech.-Computer Science & Engineering

	Overall credit requiremen	•							
		Institute Core(IC)			Programme Elective	_ ··	Ţ		
		Programme Core(PC)		Course Code		Credits			P S
	D	Project rogramme Elective(PE)		CST445 CST449	Natural Language Processing	4 4	3 0		2 0 2 0
	ŗ	Advance Elective(AE)		CST449 CST455	Real Time Systems Digital Image Processing	4	3 (2 0
		Open Elective(OE)		CST457	Evolving Architectures	4	3 (2 0
		CAS		CST433	Wireless Communication	4	3 (2 0
		Discipline		CST435	VHDL	4	3 (2 0
		Total Credits		CST437	Neural Networks	4	3 0		2 0
	Institute Core			CST439	Speech Recognition	4	3 (2 0
Course Code	Course Name	Credits L T P	S	CST441	Software Project Management	4	3 (2 0
CET101	Computer Aided Engineering Drawing	2 0 0 3	0	CST443	Data Compression	4	3 (2 0
CET102	Environmental Science & Ecology	2 2 0 0	0	CST447	Wireless & Ad-hoc Networks	4	3 (2 0
CPP102	Programming Lab	1 0 0 2	0	CST451	Cryptography	4	3 0) 2	2 0
CPT101	Computer Science & Programming	2 2 0 0	0	CST453	VLSI Algorithms	4	3 () 2	2 (
CYP102	Chemistry Lab	1 0 0 2	0	CST479	Implementation of Databases	4	3 0) 2	2 (
CYT101	Chemistry	4 3 1 0	0	CST481	Information Retrival	4	3 0) 2	2 (
ECP102	Electronics Engineering Lab	1 0 0 2	0	CST483	Digital Watermarking	4	3 () 2	2 (
ECT101	Basic Electronics Engineering	4 3 1 0	0	CST475	Multi-Core Architectures	4	3 () 2	2 (
EEP102	Electrical Engineering Lab	1 0 0 2	0	CST459	Topics in Computing	4	3 () 2	2 (
EET101	Basic Electrical Engineering	4 3 1 0	0	CST461	Machine Learning	4	3 () 2	2 (
HSP103	Language Laboratory	1 0 0 2	0	CST463	Modelling and Simulation	4	3 () 2	2 (
HST101	Technical Communication	2 1 2 0	0	CST431	Programming in Java	4	3 () 2	2 (
HST102	Basic Economics	3 2 1 0	0	CST465	Phyton Programming	4	3 0) 2	2 (
MAT101	Mathematics-I	4 3 1 0	0	CST467	Multimedia Technology	4	3 () 2	2 (
MAT102	Mathematics-II	4 3 1 0	0	CST469	Computer Human Interaction	4	3 () 2	2 (
MEP102	Workshop Practice	1 0 0 2	0	CST471	GUI Programming	4	3 () 2	2 (
MET101	Basic Mechanical Engineering	4 3 1 0	0	CST473	Wireless and Mobile Computing	4	3 () 2	2 (
PHP102	Physics Lab	1 0 0 2	0	CST477	Distributed Systems	4	3 0) 2	2 (
PHT101	Physics	4 3 1 0	0	Any 2 Pr	ograme Electives from the above list in VII Semeste	r of Total "8	Credi	its"	
	Programme Core	Total Credits	46		Advance Elective				
Course Code	Course Name	Credits L T P	S	Course Code		Credits	L T	г 1	P 5
BMT499	Basic Management	4 3 1 0	0	CST434	Parallel and Distributed Computing	4	3 (2 (
CSP211	Programming Lab	2 0 0 4	0	CST450	Wireless Sensor Networks	4	3 (2 (
CSP212	Assembly Language Programming Lab	2 0 0 3	0	CST484	Semantic Web	4	3 (2 (
CSP213	Digital logic Design Lab	2 0 0 3	0	CST486	Intrusion Detection	4	3 (2 (
CSP214	Algorithms Lab	2 0 0 3 2 0 0 3	0	CST432	Topics in Data Structures and Algorithms	4	3 (2 0
CSP216	System Programming Lab	2 0 0 3	0	CST436	Selected Topics in Operating System	4	3 (2 (
CSP313	DBMS Lab	2 0 0 3	0	CST438	Advanced Topics in Computer Graphics	4	3 () 2	2 0
CSP314	OS and Security Lab	2 0 0 3	0	CST440	Advanced Topics in Databases	4	3 (2 0
CSP315	Concurrent and Parallel Programming Lal		0	CST442	Network Performance Modelling	4	3 () 2	2 0
CSP316	Graphics Lab	2 0 0 3	0	CST444	Software Testing and Validation	4	3 0) 2	2 0
CSP317	Computer Network Lab	2 0 0 3	0	CST446	Topics in SOC Design	4	3 () 2	2 0
CSP318	Advanced Programming Lab	2 0 0 3	0	CST448	Advances in Compiler Design	4	3 0) 2	2 0
CSP320	Embedded System Design Lab	2 0 0 3	0	CST452	Digital Image Analysis	4	3 0) 2	2 0
CSS401	Training Seminar	2 0 2 0	0	CST476	Critical Systems	4	3 0) 2	2 0
CST201	Logic in Computing	3 3 0 0	0	CST478	Pattern Recognition	4	3 0) 2	2 0
CCT202	Computer organization and	3 3 0 0	. 1	CCT400	Piomotuio Cogunitus	4	2 (, ,	2 (
CST202	Microprocessors	3 3 0 0	0	CST480	Biometric Security	4	3 (, ,	2 (
CST203	Data Structures and Algorithms	4 3 1 0	0	CST482	Computer Forenics	4	3 () 2	2 0
CST204	Discrete Structures	4 3 1 0	0	CST454	Data Mining and Data Warehousing	4	3 () 2	2 0
CST205	Digital Logic Design	4 3 1 0	0	CST456	Topics in High Speed Networking	4	3 (2 (
CST206	Formal languages and Automata Theory	4 3 1 0	0	CST458	E-Commerce	4	3 (2 (
CST207	Programming Methodology	3 3 0 0	0	CST460	High Level Synthesis of Digital Systems	4	3 (2 (
CST208	Design and Analysis of Algorithms	4 3 1 0	0	CST462	Parallelizing Compiler	4	3 (2 (
CST209	Introduction to Signals & Communication		0	CST464	Public Key Infrastructure and Trust Management	4	3 (2 (
CST210	Systems Programming	3 3 0 0	0	CST466	Selected Topics in Cryptography	4	3 (2 (
CST301	Computer Architecture	3 3 0 0	0	CST468	Robotics and Control	4	3 (2
CST302	Operating System	3 3 0 0	0	CST470	FPGA based System Design	4	3 (2
CST303	Concurrent and Parallel Programming	3 3 0 0	0	CST472	Security in Computing	4	3 (2
CST304	Embedded Systems	3 3 0 0	0	CST474	Intelligent Agents	4	3 (2
CST305	DBMS	4 3 1 0	0	CST488	Internet Security	4	3 (2 (
CST306	Object Oriented Analysis and Design	3 3 0 0	0	CST490	Malware Analysis and Detection	4	3 (2 (
CST307	Computer Networks	3 3 0 0	0	Any 2 Ac	dvance Electives from the above list in VIII Semester	r of Total "8 (Credi	ts"	
CST308	Computer and Networks Security	3 3 0 0	0		O Bl				
CST309	Compiler Design	3 3 0 0	0	6 7 7	Open Elective	<u> </u>	الب		
('C'T') 1 A	Computer Graphics	3 3 0 0	0	Course Code		Credits			P 9
CST310	Software Engineering	3 3 0 0	0	CST203	Data Structures and Algorithms	4	3 1		0 (
CST311	AI and Expert System	3 3 0 0	0	CST302	Operating System	3	3 (0 (
CST311 CST312	Effective Communication	3 2 1 0	0	CST492	Database Management System	3	3 (0 0
CST311 CST312 HST201	Parameter Parameter 1	3 2 1 0	0	CST494	Computer Networks lectives (2 in each VII & VIII semester) from the list	3	3 (0 (z the
CST311 CST312	Economic Environment		100			of courses of			
CST311 CST312 HST201	Economic Environment Project		109		nents of Minimum "12 Credits"	of courses of	ierec	5	-
CST311 CST312 HST201 HST202		Total Credits Credits L T P	S	other departn	nents of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline	!			
CST311 CST312 HST201	Project	Total Credits Credits L T P 12 0 0 12	S 0	other departm	nents of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline Course Name	Credits			
CST311 CST312 HST201 HST202	Project Course Name	Total Credits Credits L T P	S	other departn	nents of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline	!			

B.Tech. - Electrical Engineering

Semes ter	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	Course 11	Semes ter	Cumulati ve
	MAT101	PHT101	EET101	HST101	CET102	MET101	CYT101	CPT101	ECT101	HST102			
	Mathematics -I	Physics	Basic Electrical Engineering	Technical Communicati on	Environmental Science & Ecology	Basic Mechanical Engineering	Chemistry	Computer Science & Programming	Basic Electronics Engineering	Basic Economics			
I & II	4 (3 1 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	2 (1 2 0 0)	2 (2 0 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	2 (2 0 0 0)	4 (3 1 0 0)	3 (2 1 0 0)	100400		
	CET101 Computer Aided Engineering Drawing	MAT102 Mathematics -II	PHP102 Physics Lab	EEP102 Electrical Engineering Lab	HSP103 Language Laboratory	MEP102 Workshop Practice	CYP102 Chemistry Lab	CPP102 Programming Lab	ECP102 Electronics Engineering Lab	ICP101 CREATIVE ARTS / SPORTS / NSS	DISCIPLIN E		
	2 (0 0 3 0)	4 (3 1 0 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0)	1	1	24+24	48
III	Network Theory	EET203 Electrical Measuremen t & Instrumentati on	EET205 Electrical Machines-I	EET207 Electronics Devices & Circuits	Power Station Practices	Circuit & Measurement Lab	EEP213 Electronics Devices & Circuit Lab	EEP215 Electrical Software & Simulation Lab					
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	1 (0-0-2)	1 (0-0-2)	1 (0-0-2)				23	71
IV	EET202 Analysis & Design of Digital Logic Circuits	EET204 Electromagn etic Field Theory	EET206 Electrical Machines - II	Network, Systems and Signals	Integrated Electronics	EET212 Electrical Power Transmission Systems	EEP214 Electrical Machine Lab-I	Instrumentatio		ICP201 CREATIVE ARTS / SPORTS / NSS	DISCIPLIN E		
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	1 (0-0-2)	1 (0-0-2)		1	11	28	99
v	Power System Switchgear& Protection	Power Electronics	EET305 Microprocess ors	Control System Engineering	Principles of Communication n Engineering	EEP311 Electrical Machine Lab	Power Systems Lab	EEP315 Digital Electronics & Microprocesso r Lab					
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	2 (0-0-3)	1 (0-0-2)	1 (0-0-2)				24	123
VI	Control of Power Systems	Electric Drives & Control	Digital Signal Processing	EET308 Modern Control Theory & Design Technique	Power System Restructuring, Deregulation & Economics	Power Electronics Lab	Power System & Electrical Design Lab	Control System Lab.			DISCIPLIN E		
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	1 (0-0-2)	2 (0-0-3)	1 (0-0-2)			1	25	148
VII	EES401 Training Seminar	Open Elective-I	Open Elective -II	Program Elective-I	Program Elective -II	Program Elective -III							
	2 (0-0-3)	3 (3-0-0)	3 (3-0-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)						20	168
VIII	BMT499 Basic Management	Open Elective -III	Open Elective - IV	Advance Elective-I	EEAE02 Advance Elective-II	EED402 Major Project	EES404 Seminar				DISCIPLIN E		
	4 (3-1-0)	3 (3-0-0)	3 (3-0-0)	4 (3-1-0)	4 (3-1-0)	12 (0-0-	2 (0-0-3)				1	33	201



B.Tech.-Electrical Engineering

	Overall minimum credit requ	rement										
	Overan minimum credit requ	Institu	ite Co	re(IC) 4	·6	EET302	Operation and Control of Power Systems	4	3 1	0	0
		Programn		•	-		EET303	Power Electronics	4	3 1	0	
		8		rojec	-		EET304	Electric Drives and Control	4	3 1	0	
		Programme E		,			EET305	Microprocessor	4	3 1	0	
		Advance E		-	-	8	EET306	Digital Signal Processing	4	3 1	0	
		Open E		-	-	2	EET307	Control System Engineering	4	3 1	0	0
				CA		2	EET308	Modern Control Theory & Design Technique	4	3 1	0	
			Disc	ciplin	e 4	4	EET309	Principles of Communications Engineering	4	3 1	0	0
		Te	otal C	-		01	EET310	Power System Restructuring, Deregulation and	4	3 1	٥	0
	Institute Core	10	rtai C	cuit	3 21		EE1310	Economics	Total C			05
Course Code	Course Name	Credits	L	T P		<u> </u>		Project	Total C	reures		0.5
CET101	Computer Aided Engineering Drawing	2	0	0 3	(0	Course Code	Course Name	Credits	L T	P	s
CET102	Environmental Science & Ecology	2	2	0 0	(0	EED402	Major Project	12	0 0	12	2 0
CPP102	Programming Lab	1	0	0 2	(0	-	, ,	Total Cred	lits	12	<u>-</u>
CPT101	Computer Science & Programming	2	2	0 0	(0		Programme Elective				
CYP102	Chemistry Lab	1	0	0 2	(0	Course Code	Course Name	Credits	L T	P	S
CYT101	Chemistry	4	3	1 0	(0	EET409	Computer Architecture and Organization	4	3 1	0	0
ECP102	Electronics Engineering Lab	1	0			0	EET411	Advanced Electrical Machines	4	3 1	0	
ECT 102 ECT 101	Basic Electronics Engineering	4		1 0		0	EET415	Renewable Energy Sources	4	3 1	0	
EEP102	Electrical Engineering Lab	1	0			0	EET417	Power System Planning and Reliability	4	3 1	0	
EET 102	Basic Electrical Engineering	4	3				EET419	Computer Aided Power System Analysis	4	3 1	0	
HSP103	Language Laboratory	1	0	170	201	0	EET421	Advance Engineering Mathematics	4	3 1	0	
HST101	Technical Communication	2	1			0	EET403	High Voltage Engineering	4	3 1	0	
HST102	Basic Economics	3	2	-0.		0	EET405	Electrical Machine Design	4	3 1	0	
MAT101	Mathematics-I	4	3			0	EET407	Utilization of Electrical Power	4	3 1	0	
MAT102	Mathematics-II	4	3			0	EET413	Microcontroller Based System Design	4	3 1	0	
MEP102	Workshop Practice	\$ 1	0			0	EET 113	Power System Operation in Restructured	4	3 1	0	
		\$ 4	3			0		Markets	-	3 1		
MET101	Basic Mechanical Engineering	T					EET425	Intelligent Systems & Control	4		0	
PHP102	Physics Lab	1	0		-	0	EET427	Advanced Course in Power Electronics	4	3 1	0	0
PHT101	Physics	4 Total (3 Credit	_	46	0	Any 3 Progra	me Elec <mark>tives fr</mark> om the above list in VII Semester	r of Total "	12 Cre	dit	s"
	Programme Core							Advance Elective				
Course Code	Course Name	Credits			7 Tona	S	Course Code	Course Name	Credits	L T	P	S
BMT499	Basic Management	4	3	1 0	9	014	EET404	Advance Power Transmission	4	3 1	0	0
EEP211	Circuit and Measurement Lab	1	0	0 2	- (0	EET406	Advance Power System Dynamics	4	3 1	0	0
EEP213	Electronic Devices and Circuit Lab	10	0	0 2		0	EET408	Energy Conservation and Management	4	3 1	0	0
EEP214	Electrical Machine Lab I	1	0	0 2	A.	0	EET410	Advanced Control Systems	4	3 1	0	0
EEP215	Electrical Software and Simulation Lab	1	0	0 2	All	0	EET412	Advances in Power Transmission & Distribution	4	3 1	0	0
EEP216	Instrumentation Lab	1	0	0 2		0	EET414	Power System Stability	4	3 1	0	0
EEP311	Electrical Machine Lab II	2	0	0 3	(0	EET416	Applications of Power Electronics in Power Systems	4	3 1	0	0
EEP312	Power Electronic Lab	1	0	0 2		0	EET418	Modelling & Simulation of Power Electronic	4	3 1	0	0
EEP313	Power System Lab	1	0	0 2		0	EET420	Systems Modelling and Analysis of Electrical Machines	4	3 1	Λ	0
	Power System and Electrical Design Lab							ace Electives from the above list in VIII Semeste				
EEP314	, ,	2	0			0	Ally 2 Auvail	ice Electives if oill the above list iii viii Seilleste	i di Totai	o cre	IILS	
EEP315	Digital Electronics and Microprocessor Lab			0 2		0		On on Floative				_
EEP316	Control System Lab	1		0 2		0	0 0 1	Open Elective	0 111		_	_
EES401	Training Seminar	2		0 3		0	Course Code	Course Name	Credits			
EES404	Seminar	2	0			0	EET201	Network Theory	4	3 1		0
EET201	Network Theory	4		1 0		0	EET203	Electrical Measurement & Instrumentation	4	3 1		0
EET202	Analysis and Design of Digital Logic Circuit			1 0		0	EET209	Power Station Practices	4	3 1		
EET203	Electrical Measurement & Instrumentation			1 0		0	EET307	Control System Engineering	4	3 1		
EET204	Electromagnetic Field Theory	4		1 0		0		ctives (2 in each VII & VIII semester) from the li	st of cours	es off	erec	1
EET205	Electrical Machines I	4		1 0		0	by the other de	partments of Minimum "12 Credits"				_
EET206	Electrical Machines II	4		1 0		0		Creative Arts/ Sports/ NSS & Discipline				
EET207	Electronic Devices and Circuits	4		1 0		0	Course Code	Course Name	Credits	L T	P	5
EET208	Network, Systems and Signals	4		1 0		0	*	Creative Arts Society	2			
EET209	Power Station Practices	4		1 0		0	*	Discipline	4			
EET210	Integrated Electronics	4		1 0		0			Total Cred	lits	6	
EET212	Electrical Power Transmission Systems	4	3	1 0	(0						
EET201	Dawar Creaton Cruitabasan and Drotaction		2									

4 3 1 0 0

Power System Switchgear and Protection

B.Tech. - Electronics & Communication Engineering

Semest er	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	Course 11	Course 12	Semes ter	Cumulati ve
	MAT101	PHT101	EET101	HST101	CET102	MET101	CYT101	CPT101	ECT101	HST102				
	Mathematics -I	Physics	Basic Electrical Engineering	Technical Communicatio n	Environmen tal Science & Ecology	Basic Mechanical Engineering	Chemistry	Computer Science & Programmi ng	Basic Electronics Engineering	Basic Economic s				
&	4 (3 1 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	2 (1 2 0 0)	2 (2 0 0 0	4 (3 1 0 0	4 (3 1 0 0	2 (2 0 0 0	4 (3 1 0 0	3 (2 1 0				
	CET101	MAT102	PHP102	EEP102	HSP103	MEP102	CYP102	CPP102	ECP102		ICP101	ICP102		
	Computer Aided Engineering Drawing	Mathematics -II	Physics Lab	Electrical Engineering Lab	Language Laboratory	Workshop Practice	Chemistry Lab	Programmi ng Lab	Electronics Engineering Lab		CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE		
	2 (0 0 3 0)	4 (3 1 0 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0	1 (0 0 2 0	1 (0 0 2 0	1 (0 0 2 0	1 (0 0 2 0		1	1	24+24	48
	ECT201	ECT202	ECT203	ECT204	ECT205	ECT206	ECP201	ECP202	ECP204	ECP206				
Ш	Electronics Devices & Circuits	Switching Theory & Finite Automata	Network Theory	Probabilistic Methods in Signals & System	Graph Theory	Data Structures & Algorithms	Electronic Devices & Circuits Lab	Switching Theory & Finite Automata Lab	Data Structures & Algorithms Lab	Probabilist ic Methods in Signals & System Lab				
	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	2 (2-0-0)	3 (3-0-0)	2 (0-0-3)	2 (0-0-3)	2 (0-0-3)	2 (0-0-3)			25	73
	ECT211	ECT212	ECT213	ECT214	ECT215	ECT216	ECP211	ECP212	ECP213	ECP215	ICP201	ICP202		
IV	Applied Electronics	Analog Communicati on	Microprocess ors	Electromagnet ic Field Theory	Operating Systems	Measureme nts & Instrumenta tion	Applied Electronics Lab	Analog Communica tion Lab	Microproce ssors Lab	Operating Systems Lab	CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE		
	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	2 (0-0-3)	2 (0-0-3)	2 (0-0-3)	2 (0-0-3)	1	1	28	101
	ECT301	ECT302	ECT303	ECT304	ECT305	ECT306	ECP301	ECP303	,					
V	Microwave Engineering	Digital Signal Processing	Digital Communicati on Systems	Digital CMOS IC	Optical Communica tion Systems	VLSI Testing & Testability	Microwave Engineering Lab	Digital Communica tion Systems Lab						
	3 (3-0-0)	4 (3-0-2)	3 (3-0-0)	4 (3-0-2)	4 (3-0-2)	3 (3-0-0)	2 (0-0-3)	2 (0-0-3)					25	126
	ECT311	ECT312	ECT313	ECT314	ECT315	ECT316	ECP316	ECP317	ECS318			ICP302		
VI	Antenna & Wave Propagation	Computer Architecture	Wireless & Mobile Communicati on	Control System Engineering	Embedded Systems	Analog CMOS IC	Analog CMOS IC Lab	Embedded Systems Design Lab	Seminar			DISCIPLI NE		
	4 (3-0-2)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	2 (0-0-3)	2 (0-0-3)	2 (0-0-3)			1	26	152
	ECS481	ECP483	ECD498	ECOE01*	ECOE02	ECPE01	ECPE02	ECPE03	ECAE01					
VII	Training Seminar	System Design Lab-I	Major Project A	Open Elective-I	Open Elective -II	Program Elective-I	Program Elective -II	Program Elective -III	Advance Elective-I					
	2 (0-0-3)	2 (0-0-3)	4 (0-0-8)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)				17/26	169/178
	BMT499	ECD482	ECD499	ECOE01*	ECOE02	ECAE02	ECAE03	ECAE04	ECAE01			ICP402		
VIII	Basic Management	System Design Lab-II	Major Project B	Open Elective-I	Open Elective -II	Advance Elective-II	Advance Elective-III	Advance Elective-IV	Advance Elective-I			DISCIPLI NE		
	4 (3-1-0)	2 (0-0-3)	8 (0-0-16)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)	3 (3-0-0)			1	33/24	202

 $\ensuremath{^{\star}}$ Indicates that the course individually, may be opted either in VII semester or VIII semester.



B.Tech.-Electronics & Communication Engineering

	Overall minimum credit requ						ration Engineering					
		Institute C					Project					
		Programme Co	re(PC) Projec			Course Code ECD498	Course Name	Credits 4	L 0	T 0	P	S 0
		Programme Electi	,		9	ECD498 ECD499	Major Project A Major Project B	8	0	0	16	
		Advance Electi						Total				2
		Open Electi	ve(OE) (6		Programme Elective & Advance Elective					
			CAS			Course Code		Credits		T	P	S
			ciplin			ECT413	Computer Networks	3	3	0	0	0
	Institute Core	Total (ream	S Z(02	ECT672 ECT674	Wireless and Mobile Adhoc Networking Cryptography	3 3	3	0	0	0
Course Code	Course Name	Credits L	TF	, ,	s	ECT678	Design of MIC and MMIC's	3	3	0	0	0
CET101	Computer Aided Engineering Drawing		0 3		0	ECT680	Advanced Mobile Systems	3	3	0	0	0
CET102	Environmental Science & Ecology	2 2 1 0			0	ECT682	Smart and Phased Array Antenna Design	3 3	3	0	0	0
CPP102 CPT101	Programming Lab Computer Science & Programming	2 2	0 2		0 0	ECT684 ECT686	Advanced Topics in Communication Photonic integrated Devices and Systems	3	3	0	0	0
CYP102	Chemistry Lab	1 0			0	ECT688	EMI/EMC	3	3	0	0	0
CYT101	Chemistry	4 3			0	ECT690	Wireless Sensor Network	3	3	0	0	0
ECP102	Electronics Engineering Lab	1 0 4 3			0	ECT692	Computational Electromagnetic	3	3	0	0	0
ECT101 EEP102	Basic Electronics Engineering Electrical Engineering Lab	4 3 1 0			0 0	ECT694 ECT696	Advanced Photonic Devices and Components Telecommunication Technology and Management	3	3	0	0	0
EET101	Basic Electrical Engineering	4 3			0	ECT698	Advanced Networking Analysis	3	3	0	0	0
HSP103	Language Laboratory	1 0			0	ECT662	Advaced Digital Signal & Image Processing	3	3	0	0	0
HST101	Technical Communication	2 1			0	ECT620	Microelectronic Devices and Circuit	3	3	0	0	0
HST102 MAT101	Basic Economics Mathematics-I	3 2 4 3			0 0	ECT630 ECT634	Advanced Computer Architecture Micro and Nano Electro Mechanical Systems	3	3	0	0	0
MAT101 MAT102	Mathematics-II	4 3			0	ECT638	Design of Asynchronous Sequential Circuits	3	3	0	0	0
MEP102	Workshop Practice	1 0	0 2	? (0	ECT664	Estimation and Detection	3	3	0	0	0
MET101	Basic Mechanical Engineering		1 0		0	ECT650	Special Topics in VLSI - 1	3	3	0	0	0
PHP102 PHT101	Physics Lab		0 2		0 0	ECT652 ECT654	Special Topics in VLSI - 2 RF Integrated Circuits	3 3	3	0	0	0
РППОТ	Physics				_		Mathematical Methods & Techniques For ECE					
		Total Cre	dits	46		ECT991	Technologies I	3	3	0	0	0
	Programme Core				-7	ECT992	Mathematical Methods & Techniques For ECE	3	3	0	0	0
					51		Technologies II		3	U	U	U
Course Code	Course Name	Credits L	-		S	ECT411	Neural Networks	3	3	0	0	0
BMT499	Basic Management	4 3	1 0	()	ECT409	Sy <mark>stem Level D</mark> esign and Modelling	3	3	0	0	0
ECP201	Electronic Devices and Circuits Lab	2 0	0 3)	ECT460	Formal Verification of Digital Hardware and Embedded	3	3	0	0	0
							Software			-	-	
ECP202 ECP204	Switching Theory and Finite Automata Data Structures & Algorithms Lab		$\begin{array}{ccc} 0 & 3 \\ 0 & 3 \end{array}$		0	ECT467 ECT468	Adaptive Signal Processing VLSI signal processing architectures	3 3	3	0	0	0
	Probabilistic Methods in Signals & Syst	ome							3	U	U	U
ECP206	Lab	2 0	0 3	3 (0	ECT452	Design of Micro <mark>strip An</mark> tennas	3	3	0	0	0
ECP211	Applied Electronics Lab	2 0	0 3	2 (0	ECT401	Spread Spectrum Technology	3	3	0	0	0
ECF 211	Analog Communication Lab	2 0			0	ECT401	Advanced Error Control Codes	3	3	0	0	0
ECP213	Microprocessors Lab	2 0			0 🚣	ECT404	Satellite Commu <mark>nication</mark> & Radar Engineering	3	3	0	0	0
ECP215	Operating Systems Lab		0 3			ЕСТ405	Image Processing	3	3	0	0	0
ECP301	Microwave Engineering Lab	1 11	0 3	_	0	ЕСТ406	CAD Algorithms For VLSI Physical Design	3	3	0	0	0
ECP303	Digital Communication Systems Lab	2 0	0 3	3 (0	ECT408	Computer Arithemetic & Microarchitecture Design	3	3	0	0	0
ECP316	Analog CMOS IC lab		0 3		0	ECT412	Advanced Microprocessors & Micro-Controllers	3	3	0	0	0
ECP317 ECP482	Embedded Systems Design Lab System Design Lab-II	2 0 0 0	0 3	} (ECT451 ECT453	Adv. Microwave Engineering Advanced Antenna Systems	3 3	3	0	0	
ECP482 ECP483	System Design Lab-II System Design Lab-I		0 3			ECT454	Microwave Integrated Circuits	3	3	0	0	0
ECS318	SEMINAR		0 3			ECT455	Power Electronics	3	3	0	0	0
ECS481	Training Seminar		0 3		-20	ECT456	Semiconductor opto -Electronics	3	3	0	0	0
ECT201	Electronic Devices and Circuits		0 0			ECT457	Memory Design & Testing	3 3	3	0	0	0
ECT202 ECT203	Switching Theory and Finite Automata Network Theory		0 0			ECT459 ECT462	Electronic Manufacturing Technology Artificial Intelligence & Expert System	3	3	0	0	0
	Probabilistic Methods in Signals and											
ECT204	Systems	3 3	0 0) (0	ECT463	Parallel Computing Arch	3	3	0	0	0
ECT205	Graph Theory	2 2			0	ECT464	Bio-Medical Engineering	3	3	0	0	0
ECT206	Data Structures and Algorithms	3 3			0	ECT465	Current -Mode Analog Signal Processing	3	3	0	0	0
ECT211 ECT212	Applied Electronics Analog Communication	3 3 3	0 0		0 0	ECT466 ECT470	Optical Codes and Applications Human Values - I	3	3	0	0	0
ECT212 ECT213	Microprocessors		0 0		0	ECT470 ECT478	FPGA Physical Design	3	3	0	0	0
ECT214	Electromagnetic Field Theory	3 3			0	ECT479	VLSI Technology	3	3	0	0	0
ECT215	Operating Systems	3 3			0	ECT480	Information Theory & Coding	3	3	0	0	0
ECT216	Measurement and Instrumentations	3 3 3	0 0		0 n	ECT481	System Design using FPGAs	3	3	0	0	
ECT301 ECT302	Microwave Engineering Digital Signal Processing		0 0		0 0	ECT482 ECT407	Instrumentation & Control CAD Algorithms For synthesis of digital systems	3	3			0
ECT302	Digital Communication Systems		0 0		0		ame Electives from the above list in VII Semester of Tol					
ECT304	Digital CMOS IC	4 3	0 2	2 (0		ime Electives from the above list in VII Semester of 1 of ince Electives from the above list in VIII Semester of To				апу	·T
ECT305	Optical Communication Systems		0 2		0						7777	
ECT306	VLSI Testing & Testability	3 3			0	Note : 1 Ac	lvance Elective course individually, may either be opto	a either ir	ı VII	or V	/111	
ECT311 ECT312	Antenna & Wave Propagation	4 3 3	0 2		0 0	Course Code	Open Elective Course Name	Crodit-	T	т	P	S
ECT312 ECT313	Computer Architecture Wireless & Mobile Communication		0 0		0	ECT202	Switching Theory and Finite Automata	Credits 3	ъ 3	T 0		0
ECT314	Control System Engineering		0 0		0	ECT204	Probabilistic Methods in Signals and Systems	3	3	0		0
ECT315	Embedded Systems	3 3	0 0) (0	ECT313	Wireless & Mobile Communication	3	3	0		0
ECT316	Analog CMOS IC		0 0		0	ECT404	Satellite & Radar Engineering	3	3	0		0
		Total Cre	uitS	111	<u> </u>		ectives (either in VII or VIII semester) from the list of o	ourses off	erec	ıby	tne	
						otner departn	nents of Minimum "6 credits" Creative Arts/ Sports/ NSS & Discipline				_	_
						Course Code		Credits			Į	ų.

Course Code

Credits L 2 4 Total Credits

6

Creative Arts Society Discipline

B.Tech. - Mechanical Engineering

Semest er	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	Course 11	Course 12	Semes ter	Cumulati ve
	MAT101	PHT101	EET101	HST101	CET102	MET101	CYT101	CPT101	ECT101	HST102				
	Mathematics-I	Physics	Basic Electrical Engineering	Technical Communicatio n	Environmen tal Science & Ecology	Basic Mechanica I Engineerin g	Chemistry	Computer Science & Programm ing	Basic Electronic s Engineerin g	Basic Economic s				
I & II	4 (3 1 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	2 (1 2 0 0)	2 (2 0 0 0	4 (3 1 0	4 (3 1 0	2 (2 0 0	4 (3 1 0	3 (2 1 0				
	CET101	MAT102	PHP102	EEP102	HSP103	MEP102	CYP102	CPP102	ECP102	ICP101	ICP102			
	Computer Aided Engineering Drawing	Mathematics -II	Physics Lab	Electrical Engineering Lab	Language Laboratory	Workshop Practice	Chemistry Lab	Programm ing Lab	Electronic s Engineerin g Lab	CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE			
	2 (0 0 3 0)	4 (3 1 0 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0	1 (0 0 2	1 (0 0 2	1 (0 0 2	1 (0 0 2	1	1		24+24	48
	MET201	MET202	MET203	MET204	MAT205	MET206	MEP207	MEP208	MEP209	MEP211				
III	Engineering Thermodynam ics	Fluid Mechanics & Machines	Engineering Mechanics	Casting, Forming and Welding	Engineering Mathematic s - III	Material Science	Mechanica I Engineerin g Drawing	Casting, Forming and Welding Lab	Fluid Mechanics Lab	Material Testing Lab				
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	3 (3-0-0)	3 (2-1-0)	2 (2-0-0)	2 (0-0-3)	1 (0-0-2)	1 (0-0-2)	1 (0-0-2)			25	73
	MET221	MET222	MET223	MET224	MET225	MET226	MEP227	MEP228	MEP229	MEP230	ICP201	ICP202		
IV	Heat Transfer	Kinematics & Dynamics of Machines	Industrial Engineering	IC Engines	Machining Science and Machine Tools	Mechanics of Solids	Heat Transfer Lab	Dynamics of Machine Lab	Machining Science & Machine Tools Lab	IC Engines Lab	CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE		
	3 (2-1-0)	4 (3-1-0)	3 (2-1-0)	3 (3-0-0)	4 (3-1-0)	4 (3-1-0)	1 (0-0-2)	1 (0-0-2)	1 (0-0-2)	1 (0-0-2)	1	1	27	100
V	MET301 Automobile Engineering	MET302 Turbo Machines	MET303 Design of Machine Elements	MET304 Operation Planning & Control	MET305 Mechanical Measureme nt & Control System	MET306 Operation s Research	MEP307 Machine Design Lab	Automobil e Lab	MEP309 Mechanica I Measurem ent & Control System Lab					
	3 (3-0-0)	4 (3-1-0)	3 (3-0-0)	3 (2-1-0)	4 (3-1-0)	3 (2-1-0)	2 (0-0-4)	1 (0-0-2)	1 (0-0-2)				24	124
VI	MET321 Mechanical Vibrations	MET322 Computer Integrated Manufacturin g	Product Design & Development	MET324 Advanced Manufacturing Processes	MET325 Refrigeratio n and Air Conditionin g	Total Quality Managem ent	MET327 Optimizati on Methods in Engg. Design	MEP328 Modeling & Simulation Lab	WEP329 Vibrations Lab	MEP330 Refrigerati on and Air Conditioni ng Lab		DISCIPLI NE		
	3 (2-1-0)	3 (2-1-0)	3 (2-1-0)	3 (2-1-0)	3 (2-1-0)	3 (2-1-0)	3 (3-0-0)	1 (0-0-2)	1 (0-0-2)	1 (0-0-2)		1	25	149
VII	BMT499 Basic Management	MES417 Training Seminar	MEPE01 Program Elective 01	MEPE02 Program Elective 02	Open Elective 01	Open Elective 02								
	4 (3-1-0)	4 (0-0-2)	4 (3-1-0)	4 (3-1-0)	3 (3-0-0)	3 (3-0-0)							22	171
VIII	MED421	MEAE01	MEAE02	MEOE03	MEOE04							ICP402		

Major Project	Advance Elective 01	Advance Elective 02	Open Elective 03	Open Elective 04				DISCIPLI NE		
12 (0-0-12)	4 (3-1-0)	4 (3-1-0)	3 (3-0-0)	3 (3-0-0)				1	27	198



B.Tech.-Mechanical Engineering

	Overall minimum credit requirer	nent						
		Institute Core(IC)	46	Course Code	Course Name	Credits	L T	P S
		Programme Core(PC)	106	MET321	Mechanical Vibrations	3	2 1	0 0
		Project	12	MET322	Computer Integrated Manufacturing	3	2 1	0 0
		Programme Elective(PE)	8	MET323	Product Design & Development	3	2 1	0 0
		Advance Elective(AE)	8	MET324	Advanced Manufacturing Processes	3	2 1	0 0
		Open Elective(OE)	12	MET325	Refrigeration and Air Conditioning	3	2 1	0 0
		CAS	2	MET326	Total Quality Management	3	2 1	0 0
		Discipline	4	MET327	Optimization Methods in Engg. Design	3	3 0	0 0
		Total Credits	198			Total C	redits	106
	Institute Core				Project			
Course Code	Course Name	Credits L T P	S	Course Code	Course Name	Credits	L T	P S
CET101	Computer Aided Engineering Drawing	2 0 0 3	0	MED421	Major Project	12	0 0	12 0
CET102	Environmental Science & Ecology	2 2 0 0	0			Total C	redits	12
CPP102	Programming Lab	1 0 0 2	0		Programme Elective	e		
CPT101	Computer Science & Programming	2 2 0 0	0	Course Code	Course Name	Credits	L T	P S
CYP102	Chemistry Lab	1 002	0	MET402	Air Conditioning System Design	4	3 1	0 0
CYT101	Chemistry	4 3 1 0	0	MET406	Project management	4	3 1	0 0
ECP102	Electronics Engineering Lab	1 0 0 2	0	MET408	Supply Chain Management	4	3 1	0 0
ECT101	Basic Electronics Engineering	4 3 1 0	0	MET411	Finite Element Methods	4	3 1	
EEP102	Electrical Engineering Lab	1 0 0 2	0	MET413	Design of Mechanisms	4	3 1	
EET101	Basic Electrical Engineering	4 3 1 0	0	MET401	Power Plant Engieerning	4	3 1	0 0
HSP103	Language Laboratory	1 0 0 2	0	MET401 MET409	Total Productive Maintenance	4	3 1	0 0
HST103	Technical Communication	2 1 2 0	0	MET409 MET412	Computer Aided Design	4	3 1	0 0
HST101 HST102	Basic Economics				Advanced Metal Forming	4	3 1	0 0
		INS	0					
MAT101	Mathematics-I	NAME	0	MET415	Design for Manufacturing	4	3 1	0 0
MAT102	Mathematics-II	4 3 1 0	0	MET416	Product Engineering	4	3 1	0 0
MEP102	Workshop Practice	1 0 0 2	0	MET405	Design of Heat Exchanger	4	3 1	
	Basic Mechanical Engineering	4 3 1 0	0	MET410	Fracture Mechanics	4	3 1	
MET101		1 0 0 2	0	MET426	Me <mark>chatroni</mark> cs design	4	3 1	
PHP102	Physics Lab	1 0 0 2	A A	_			"0 Cro	dita"
	Physics Lab Physics	4 3 1 0	0	_	ame E <mark>lectives</mark> from the above list in V	II Semester of Total	o cre	euits
PHP102	Physics	4 3 1 0	A A	_	7 5	II Semester of Total	8 616	euits
PHP102 PHT101	Physics Programme Core	4 3 1 0 Total Credits	0 16	Any 2 Progr	Advance Elective			
PHP102 PHT101	Physics Programme Core Course Name	4 3 1 0 Total Credits 4	0 16 S	Any 2 Progr	Advance Elective Course Name	Credits	L T	P S
PHP102 PHT101 Course Code BMT499	Physics Programme Core Course Name Basic Management	4 3 1 0 Total Credits L T P 4 3 1 0	0 46 S 0	Any 2 Progr Course Code MET422	Advance Elective Course Name Computational Fluid Dynamics	Credits 4	L T 3 1	P S 0 0
PHP102 PHT101 Course Code BMT499 MAT205	Physics Programme Core Course Name Basic Management Engineering Mathematics III	4 3 1 0 Total Credits 4 Credits L T P 4 3 1 0 3 2 1 0	0 46 S 0 0	Course Code MET422 MET428	Advance Elective Course Name Computational Fluid Dynamics Six Sigma	Credits	L T	P S 0 0 0 0 0
PHP102 PHT101 Course Code BMT499	Physics Programme Core Course Name Basic Management Engineering Mathematics III	4 3 1 0 Total Credits	0 46 S 0	Any 2 Progr Course Code MET422	Advance Elective Course Name Computational Fluid Dynamics	Credits 4	L T 3 1	P S 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205	Physics Programme Core Course Name Basic Management Engineering Mathematics III	4 3 1 0 Total Credits 4 Credits L T P 4 3 1 0 3 2 1 0	0 46 S 0 0	Course Code MET422 MET428	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering	Credits 4 4	L T 3 1 3 1	P S 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207	Physics Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing	4 3 1 0 Total Credits	0 46 S 0 0	Any 2 Progr Course Code MET422 MET428 MET423	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning	Credits	L T 3 1 3 1 3 1	P S 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208	Physics Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab	4 3 1 0 Total Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2	0 46 S 0 0 0	Course Code MET422 MET428 MET423 MET425	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering	Credits	L T 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209	Physics Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab	4 3 1 0 Total Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2	0 46 S 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211	Physics Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab	Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2	0 16 S 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427	Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227	Physics Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab	4 3 1 0 Total Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2	0 46 8 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP211 MEP227 MEP228	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab	4 3 1 0 Total Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2	0 446 S 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP211 MEP227 MEP228 MEP228	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab	4 3 1 0 Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2	0 446 S 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430	Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP211 MEP227 MEP228 MEP229 MEP230	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab	4 3 1 0 Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2	0 446 S 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET403	Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources	Credits 4 4 4 4 4 4 4 4 4	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab	4 3 1 0 Total Credits Credits L T P 4 3 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2	0 446 S 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET424	Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics	Credits 4 4 4 4 4 4 4 4 4 4	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab	4 3 1 0 Total Credits Credits L T P 4 3 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2	0 446 S 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET404 MET424 MET407	Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing	Credits 4 4 4 4 4 4 4 4 4 4 4	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP229 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP328	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab	4 3 1 0 Total Credits Credits L T P 4 3 1 0 2 0 0 3 1 0 0 2	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET404 MET424 MET407	Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics	Credits 4 4 4 4 4 4 4 4 4 4 4	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP229 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP308 MEP309 MEP328 MEP329	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab	4 3 1 0 Total Credits Credits L T P 4 3 1 0 2 0 0 3 1 0 0 2	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET404 MET424 MET407	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing nice Electives from the above list in VII	Credits 4 4 4 4 4 4 4 4 4 4 4	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP330	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab	4 3 1 0 Total Credits Credits L T P 4 3 1 0 2 0 0 3 1 0 0 2	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET404 MET424 MET407 Any 2 Advantage	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing The Electives from the above list in VIII Open Elective	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP309 MEP328 MEP329 MEP330 MES417	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar	4 3 1 0 Total Credits Credits L T P 4 3 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 4 0 0 2 1 0 0 2	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET404 MET407 Any 2 Advan	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing nee Electives from the above list in VII Open Elective Course Name	Credits 4 4 4 4 4 4 4 4 4 4 Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 P S
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP309 MEP328 MEP329 MEP330 MES417 MET201	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics	4 3 1 0 Total Credits A 3 1 0 Total Credits A 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 4 1 0 0 2 1 0 0 2 4 1 0 0 2 4 0 0 2 4 0 0 2 4 3 1 0	0 0 446 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET404 MET407 Any 2 Advan Course Code MET428	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing The Electives from the above list in VII Open Elective Course Name Six Sigma	Credits 4 4 4 4 4 4 4 4 4 4 Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP309 MEP328 MEP329 MEP320 MEP330 MES417 MET201 MET202	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines	4 3 1 0 Total Credits A 3 1 0 Total Credits A 3 1 0 A 3 1 0 A 3 1 0 A 3 1 0 A 3 1 0 A 3 1 0 A 3 2 1 0 A 3 2 1 0 A 0 0 2	0 0 446 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET404 MET407 Any 2 Advan Course Code MET428 MET404	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing Topen Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources	Credits 4 4 4 4 4 4 4 4 4 4 Credits 4 4	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP308 MEP309 MEP309 MEP309 MEP328 MEP329 MEP320 MEP320 MEP330 MES417 MET201 MET202 MET203	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science & Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics	4 3 1 0 Total Credits A 3 1 0 Total Credits L T P 4 3 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 4 0 0 2 1 0 0 2 1 0 0 2 4 0 0 2 4 0 0 2 4 3 1 0 4 3 1 0	0 0 446 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET430 MET430 MET403 MET404 MET424 MET407 Any 2 Advan Course Code MET428 MET404 MET301	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing nee Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering	Credits 4 4 4 4 4 4 4 4 4 4 4 4 4	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP309 MEP309 MEP328 MEP329 MEP330 MES417 MET201 MET202 MET203 MET204	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science & Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding	4 3 1 0 Total Credits A 3 1 0 Total Credits L T P 4 3 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 4 0 0 2 1 0 0 2 4 0 0 2 4 3 1 0 4 3 1 0 4 3 1 0 3 3 0 0	0 0 446 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET430 MET430 MET430 MET404 MET424 MET407 Any 2 Advan Course Code MET428 MET404 MET301 MET401	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing nace Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP308 MEP309 MEP309 MEP328 MEP329 MEP320 MEP330 MES417 MET201 MET202 MET203 MET204 MET206	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science & Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science	Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 4 0 0 2 1 0 0 2 1 0 0 2 2 0 0 4 1 0 0 2 1 0 0 2 1 0 0 2 2 0 0 4 1 0 0 2 1 0 0 2 2 1 0 0 2 1 0 0 2 2 2 0 0 4 1 0 0 2 1 0 0 2 2 2 0 0 4 1 0 0 2 1 0 0 2 2 1 0 0 2 1 0 0 2 1 0 0 2 2 2 0 0 0 4 3 1 0 4 3 1 0 4 3 1 0 3 3 0 0 2 2 0 0	0 0 446 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET430 MET404 MET407 Any 2 Advan Course Code MET428 MET404 MET401 MET431	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing nace Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP329 MEP300 MEP320 MEP320 MEP320 MEP330 MES417 MET201 MET202 MET203 MET204 MET206 MET221	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science Heat Transfer	4 3 1 0 Total Credits A 3 1 0 Total Credits A 3 1 0	0 0 446 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET424 MET407 Any 2 Advan Course Code MET428 MET404 MET301 MET401 MET431 MET326	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing nice Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials Total Quality Management	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP300 MEP309 MEP328 MEP329 MEP330 MES417 MET201 MET202 MET203 MET204 MET204 MET206 MET221 MET222	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science Heat Transfer Kinematics & Dynamics of Machines	4 3 1 0 Total Credits A 3 1 0 Total Credits A 3 1 0	0 0 446 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET424 MET407 Any 2 Advan Course Code MET428 MET404 MET301 MET401 MET431 MET326 MET411	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing Ince Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials Total Quality Management Finite Element Methods	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP329 MEP330 MES417 MET201 MET202 MET203 MET204 MET204 MET205 MET221 MET222 MET223 MET224 MET225	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science Heat Transfer Kinematics & Dynamics of Machines Industrial Engineering IC Engines Machining Science and Machine Tools	Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 2 0 0 4 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 3 1 0 0 3 2 1 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET407 Any 2 Advan Course Code MET428 MET404 MET301 MET401 MET431 MET431 MET4326 MET411 MET423 MET416 MET408	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing Ince Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials Total Quality Management Finite Element Methods Robotics Engineering Product Engineering Supply Chain Management	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP329 MEP330 MES417 MET201 MET202 MET203 MET204 MET204 MET205 MET222 MET223 MET224 MET225 MET226	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science Heat Transfer Kinematics & Dynamics of Machines Industrial Engineering IC Engines Machining Science and Machine Tools Mechanics of Solids	Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 2 0 0 4 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 3 1 0 0 3 2 1 0 0 4 3 1 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 4 3 1 0 4 3 1 0 4 3 1 0 4 3 1 0	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET407 Any 2 Advan Course Code MET428 MET404 MET401 MET431 MET431 MET431 MET4326 MET411 MET423 MET416 MET408 - Any 4 Open El	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing Ince Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials Total Quality Management Finite Element Methods Robotics Engineering Product Engineering Supply Chain Management Optimisation	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP329 MEP330 MES417 MET201 MET202 MET203 MET204 MET204 MET205 MET221 MET222 MET223 MET224 MET225 MET226 MET301	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science Heat Transfer Kinematics & Dynamics of Machines Industrial Engineering IC Engines Machining Science and Machine Tools Mechanics of Solids Automobile Engineering	Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 2 0 0 4 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 3 1 0 0 3 3 1 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET407 Any 2 Advan Course Code MET428 MET404 MET401 MET431 MET431 MET431 MET4326 MET411 MET423 MET416 MET408 - Any 4 Open El	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing Toel Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials Total Quality Management Finite Element Methods Robotics Engineerning Product Engineering Supply Chain Management Optimisation ectives (2 in each VII & VIII semester)	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP329 MEP330 MES417 MET201 MET202 MET203 MET204 MET204 MET205 MET204 MET205 MET221 MET222 MET223 MET224 MET225 MET226 MET301 MET302	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science Heat Transfer Kinematics & Dynamics of Machines Industrial Engineering IC Engines Machining Science and Machine Tools Mechanics of Solids Automobile Engineering Turbo Machines	Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 2 0 0 4 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 3 1 0 0 2 4 3 1 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET404 MET407 Any 2 Advan Course Code MET428 MET404 MET401 MET431 MET431 MET431 MET4326 MET411 MET423 MET416 MET408 - Any 4 Open El	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing nee Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials Total Quality Management Finite Element Methods Robotics Engineering Product Engineering Supply Chain Management Optimisation ectives (2 in each VII & VIII semester) epartments of Minimum "12 Credits"	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP329 MEP330 MES417 MET201 MET202 MET203 MET204 MET204 MET205 MET204 MET205 MET221 MET222 MET223 MET224 MET225 MET226 MET301 MET302 MET303	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science Heat Transfer Kinematics & Dynamics of Machines Industrial Engineering IC Engines Machining Science and Machine Tools Mechanics of Solids Automobile Engineering Turbo Machines Design of Machine Elements	Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 2 0 0 4 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 3 1 0 0 3 3 1 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0 4 3 1 0 3 3 0 0	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET407 Any 2 Advan Course Code MET428 MET404 MET301 MET401 MET431 MET431 MET4326 MET411 MET423 MET416 MET408 - Any 4 Open El by the other d	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing Ince Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials Total Quality Management Finite Element Methods Robotics Engineerning Product Engineering Supply Chain Management Optimisation ectives (2 in each VII & VIII semester) epartments of Minimum "12 Credits" Creative Arts/ Sports/ NSS &	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHP102 PHT101 Course Code BMT499 MAT205 MEP207 MEP208 MEP209 MEP211 MEP227 MEP228 MEP229 MEP230 MEP307 MEP308 MEP309 MEP309 MEP309 MEP309 MEP328 MEP329 MEP330 MES417 MET201 MET202 MET203 MET204 MET204 MET205 MET204 MET206 MET221 MET222 MET223 MET224 MET225 MET226 MET301 MET302 MET303 MET304	Programme Core Course Name Basic Management Engineering Mathematics III Mechanical Engg. Drawing Casting, Forming and Welding Lab Fluid Mechanics Lab Material Testing Lab Heat Transfer lab Dynamics of Machine Lab Machining Science &Machine Tools Lab IC Engines Lab Machine Design Lab Automobile Lab Mechanical Measurement & Control System Lab Modeling & Simulation Lab Vibrations Lab Refrigeration and Air Conditioning lab Training Seminar Engineering Thermodynamics Fluid Mechanics & Machines Engineering Mechanics Casting, Forming and Welding Material Science Heat Transfer Kinematics & Dynamics of Machines Industrial Engineering IC Engines Machining Science and Machine Tools Mechanics of Solids Automobile Engineering Turbo Machines Design of Machine Elements Operation Planning & Control	Total Credits Credits L T P 4 3 1 0 3 2 1 0 2 0 0 3 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 2 0 0 4 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 2 1 0 0 0 2 1	0 446 S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Course Code MET422 MET428 MET423 MET425 MET426 MET427 MET429 MET431 MET430 MET403 MET407 Any 2 Advan Course Code MET428 MET401 MET401 MET431 MET431 MET4326 MET411 MET423 MET416 MET408 - Any 4 Open El by the other d	Advance Elective Course Name Computational Fluid Dynamics Six Sigma Robotics Engineerning Tool Engineering Mechatronics design Composite Material Manufacturing Special Course in Manufacturing Smart Materials Composite Materials & Mechanics Gas Dynamics Renewable Energy Sources Advanced Ergonomics Lean Manufacturing Ince Electives from the above list in VII Open Elective Course Name Six Sigma Renewable Energy Sources Automobile Engineering Power Plant Engineering Smart Materials Total Quality Management Finite Element Methods Robotics Engineerning Product Engineering Supply Chain Management Optimisation ectives (2 in each VII & VIII semester) epartments of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Course Name	Credits	L T 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 1	P S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

B.Tech. - Metallurgical & Materials Engineering

Semest er	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Course 9	Course 10	Course 11	Course 12	Semes ter	Cumulati ve
	MAT101	PHT101	EET101	HST101	CET102	MET101	CYT101	CPT101	ECT101	HST102				
	Mathematics-I	Physics	Basic Electrical Engineering	Technical Communicatio n	Environmen tal Science & Ecology	Basic Mechanica I Engineerin g	Chemistry	Computer Science & Programm ing	Basic Electronic s Engineerin g	Basic Economic s				
I & II	4 (3 1 0 0)	4 (3 1 0 0)	4 (3 1 0 0)	2 (1 2 0 0)	2 (2 0 0 0	4 (3 1 0	4 (3 1 0	2 (2 0 0	4 (3 1 0	3 (2 1 0				
	CET101	MAT102	PHP102	EEP102	HSP103	MEP102	CYP102	CPP102	ECP102	ICP101	ICP102			
	Computer Aided Engineering Drawing	Mathematics -II	Physics Lab	Electrical Engineering Lab	Language Laboratory	Workshop Practice	Chemistry Lab	Programm ing Lab	Electronic s Engineerin g Lab	CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE			
	2 (0 0 3 0)	4 (3 1 0 0)	1 (0 0 2 0)	1 (0 0 2 0)	1 (0 0 2 0	1 (0 0 2	1 (0 0 2	1 (0 0 2	1 (0 0 2	1	1		24+24	48
	MTT201	MTT203	MTT205	MTT207	MTT209	MTP211	MTP213	MTP215						
III	Introduction to Extractive Metallurgy	Introduction of Physical Metallurgy	Thermodyna mics of Materials	Introduction to Engineering Materials	Fuels, Furnaces & Refractories	Fuel and Furnace	Metallurgic al and Instrument al Analysis	Metallogra phy						
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	2 (0-0-3)	2 (0-0-3)	2 (0-0-3)					26	74
	MTT212	MTT214	MTT216	MTT218	MTT220	MTP222	MTP224	MTP226			ICP201	ICP202		
IV	Iron Making	Transport Phenomena	Introduction to Nano Materials and Technology	Mechanical Behavior & Testing of Materials	Mineral Processing	Testing of Materials	Mineral Processin g	Metal Joining	PUR · 2		CREATIV E ARTS / SPORTS / NSS	DISCIPLI NE		
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	2 (0-0-3)	2 (0-0-3)	2 (0-0-3)	/פיכ		1	1	28	102
	MTT301	MTT303	MTT305	MTT307	MTT309	MTP311	MTP313	MTP315						
V	Foundry Technology	Particulate Materials	Non-Ferrous Extractive Metallurgy	Electrometallu rgy & Corrosion	Solid State Phase Transformat ion	Powder Metallurgy	Foundry	Electromet allurgy and Corrosion	/					
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	2 (0-0-3)	2 (0-0-3)	2 (0-0-3)	LITEGO			100000	26	128
	MTT312	MTT314	MTT316	MTT318	MTT320	MTP322	MTP324	MTP326	MTP328			ICP302		
VI	Mechanical Working of Metals	Polymeric and Ceramic Materials	Materials in Industry	Heat Treatment	Steel Making	Mechanica I Working of Metals	Experimen tal Technique s	Extractive Metallurgy	Heat Treatment			DISCIPLI NE		
	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	4 (3-1-0)	1 (0-0-2)	1 (0-0-2)	1 (0-0-2)	1 (0-0-2)			1	25	153
	BMT499	MTS401	MTPE01	MTPE02	MTOE01	MTOE0								
VII	Basic Management	Training Seminar	Program Elective 01	Program Elective 02	Open Elective 01	Open Elective 02								
	4 (3-1-0)	2 (0-4-0)	4 (3-1-0)	4 (3-1-0)	3 (3-0-0)	3 (3-0-0)							20	173
	MTD402	MTAE01	MTAE02	MTOE03	MTOE04							ICP402		
VIII	Major Project	Advance Elective 01	Advance Elective 02	Open Elective 03	Open Elective 04							DISCIPLI NE		
	12 (0-0-12)	4 (3-1-0)	4 (3-1-0)	3 (3-0-0)	3 (3-0-0)							1	27	200



B.Tech.-Metallurgical & Materials Engineering

	Overall minimum credit requir	ement									
		Institute Co	re(IC)	46	Course C	ode	Course Name	Credits	L	Т	P 9
		Programme Co	re(PC)	108	MTT30)3	Particulate Materials	4	3	1	0 (
		I	roject	12	MTT30)5	Non Ferrous Extractive Metallurgy	4	3	1	0 (
		Programme Electiv	ve(PE)	8	MTT30)7	Electrometallurgy & Corrosion	4	3	1	0 (
		Advance Electiv	ve(AE)	8	MTT30)9	Solid State Phase Transformations	4	3	1	0 (
		Open Electiv	re(OE)	12	MTT31	12	Mechanical Working of Metals	4	3	1	0 (
			CAS	2	MTT31	14	Polymeric & Ceramic Materials	4	3	1	0 (
		Dis	cipline	4	MTT31	16	Materials in Industry	4	3	1	0 (
		Total C	redits	200	MTT31	18	Heat Treatment	4	3	1	0 (
	Institute Core				MTT32	20	Steel Making	4	3	1	0 (
Course Code	Course Name	Credits L	T P	S				Total Cre	lits	1	108
CET101	Computer Aided Engineering Drawing		0 3	0			Project				
CET102	Environmental Science & Ecology	2 2	0 0	0	Course C	ode	Course Name	Credits			
CPP102	Programming Lab	1 0	0 2	0	MTD40)2	Major Project	12			12 (
CPT101	Computer Science & Programming	2 2	0 0	0				Total Cre	lits		12
CYP102	Chemistry Lab	1 0	0 2	0			Programme Elective				
CYT101	Chemistry	4 3	1 0	0	Course C		Course Name	Credits	L	T	P 5
ECP102	Electronics Engineering Lab	1 0	0 2	0	MTT40		Experimental Techniques	4	3		0 (
ECT101	Basic Electronics Engineering	4 3	1 0	0	MTT40)5	Fracture & Failure	4	3	1	0 (
EEP102	Electrical Engineering Lab	1 0	0 2	0	MTT41	13	Rapid Soldification & Mechanical Alloying	4	3	1	0 (
EET101	Basic Electrical Engineering	4 3	1 0	0	MTT41	19	Utilization of Metallurgical Wastes	4	3	1	0 (
HSP103	Language Laboratory	1 0	0 2	0	MTT42	21	Corrosion Science & Engineering	4	3	1	0 (
HST101	Technical Communication	2 1	2 0	0	MTT42	23	NDT & Quality Control	4	3	1	0 (
HST102	Basic Economics	3 2	1 0	0	MTT40)1	Physical Metallurgy of Non Ferrous Metals & Alloys	4	3	1	0 (
MAT101	Mathematics-I	4 3	1 0	0	MTT40)7	Comp <mark>osite Ma</mark> terials	4	3	1	0 (
MAT102	Mathematics-II	4 3	1 0	0	MTT40)9	Pollution & Environmental Management in Metallurgical Industries	4	3	1	0 (
MEP102	Workshop Practice	1 0	0 2	0	MTT41	11	Industrial Ceramic Materials	4	3	1	0 (
MET101	Basic Mechanical Engineering	4 3		0	MTT41		Automotive Materials	4	3		0 (
PHP102	Physics Lab	1 0		0	MTT41		Surface Coatings	4			0 (
PHT101	Physics	4 3		0			grame Electives from the above list in VII Semester				
		Total Credi	ts	46	7		- b				
	Programme Core						Advance Elective				
Course Code	Course Name	Credits L	T P	S.	Course C	code	Course Name	Credits	L	T	P 9
BMT499	Basic Management	4 3	1 0	0	MTT40)2	Physical Metallurgy of Alloy Steels & Cast Irons	4	3	1	0 (
MTP211			0 3	0	MTT40)4	Nuclear Materials	4	3	1	0 (
	Fuels and Furnaces	2 0			MTTAO						0 (
MTP213	Metallurgical & Instrumental Analysis	2 0	0 3	0	MTT40	727	Physical Metallurgy of special Purpose Alloys	4	3	1	0 (
		1/10	107	0	MTT40	727	Physical Metallurgy of special Purpose Alloys Advances in Extraction of Al, Cu and Zn	4 4	3		0 (
MTP213	Metallurgical & Instrumental Analysis	2 0 2 0	107	4/5	A .	08	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V	4	3	1	0 (
MTP213 MTP215 MTP222	Metallurgical & Instrumental Analysis Metallography Testing of Materials	2 0 2 0 2 0	0 3	0	MTT40 MTT41	08 10	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti	4 N 4	3	1	0 (
MTP213 MTP215 MTP222 MTP224	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing	2 0 2 0 2 0 2 0	0 3 0 3 0 3	0 0	MTT40 MTT41 MTT41	08 10 12	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design	4 N 4 4	3 3 3	1 1 1	0 0
MTP213 MTP215 MTP222 MTP224 MTP226	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining	2 0 2 0 2 0 2 0 2 0 2 0	0 3 0 3 0 3 0 3	0 0 0	MTT40 MTT41 MTT41	08 10 12	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti	4 N 4 4	3 3 3	1 1 1	0 0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy	2 0 2 0 2 0 2 0 2 0 2 0 2 0	0 3 0 3 0 3 0 3 0 3	0 0 0 0	MTT40 MTT41 MTT41	08 10 12	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design rance Electives from the above list in VIII Semester	4 N 4 4	3 3 3	1 1 1	0 0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0	0 3 0 3 0 3 0 3 0 3 0 3	0 0 0 0 0	MTT40 MTT41 MTT41 Any 2	08 10 12 2 Adv	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design rance Electives from the above list in VIII Semester Open Elective	4 N 4 4 of Total "8	3 3 3 3 Cred	1 1 1 lits	0 (
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0	0 3 0 3 0 3 0 3 0 3 0 3	0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C	08 10 12 2 Adv Code	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design rance Electives from the above list in VIII Semester Open Elective Course Name	4 N 4 4 of Total "8	3 3 3 3 3 Cred	1 1 dits	0 (0 (5"
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0	0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2	0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course Cours	08 10 12 2 Adv Code	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design rance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology	4 V 4 4 of Total "8 Credits 4	3 3 3 3 3 Cred	1 1 1 dits	0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0	0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 2	0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21	08 10 12 2 Adv Code 16	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design ance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology	4 V 4 4 of Total "8 Credits 4 4	3 3 3 3 3 Cred	1 1 dits T 1	0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0	0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 2	0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course Cou	08 10 12 2 Adv Code 16 17	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design ance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering	4 V 4 of Total "8 Credits 4 4 4	3 3 3 3 3 Cred	1 1 1 dits T 1 1	0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0	0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 2 0 2	0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21 MTT42 MTT42	08 10 12 2 Adv Code 16 17 21	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design ance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control	4 4 4 6 Credits 4 4 4 4	3 3 3 3 3 4 4 5 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	1 1 1 dits T 1 1 1	0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTP328	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 2 0	0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 2 0 2 0 2 4 0	0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course Cou	10 12 22 Adv 26 Adv 16 17 21 23	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design ance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control ectives (2 in each VII & VIII semester) from the list	4 4 4 6 Credits 4 4 4 4	3 3 3 3 3 4 4 5 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	1 1 1 dits T 1 1 1	0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 2 0 4 3	0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 2 0 2 0 2 4 0 1 0	0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course Cou	10 12 22 Adv 26 Adv 16 17 21 23	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Tance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control ectives (2 in each VII & VIII semester) from the list artments of Minimum "12 Credits"	4 4 4 6 Credits 4 4 4 4	3 3 3 3 3 4 4 5 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	1 1 1 dits T 1 1 1	0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0 (0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201 MTT201	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy Introduction to Physical Metallurgy	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 2 0 4 3 4 3	0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 2 0 2 0 2 4 0 1 0 1 0	0 0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21 MTT42 MT742 Any 4 Ope the other of	22 Adv Code 16 17 21 223 en Eleddepa	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Tance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control Pectives (2 in each VII & VIII semester) from the list rtments of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline	4 V 4 of Total "8 Credits 4 4 4 4 of courses	3 3 3 3 Crecc	1 1 1 1 1 1 1 1 1 1 1 1 1 red	0 (0 (0 (0 (0 (0 (0 (by
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201 MTT203 MTT205	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy Introduction to Physical Metallurgy Thermodynamics of Materials	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 2 0 4 3 4 3 4 3	0 3 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 0 2 0 2	0 0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course Cou	22 Adv Code 16 17 21 223 en Eleddepa	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Fance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control Sectives (2 in each VII & VIII semester) from the list of the section of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline Course Name	4 V 4 4 of Total "8 Credits 4 4 4 of courses	3 3 3 3 Crecc	1 1 1 1 1 1 1 1 1 1 1 1 1 red	0 (0 (0 (0 (0 (0 (0 (by
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201 MTT203 MTT205 MTT207	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy Introduction to Physical Metallurgy Thermodynamics of Materials Introduction to Engineering Materials	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 2 0 4 3 4 3 4 3	0 3 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 0 2 0 0 2 4 0 1 0 0 1 1 0 0 1 1 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21 MTT42 MT742 Any 4 Ope the other of	22 Adv Code 16 17 21 223 en Eleddepa	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Fance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control Sectives (2 in each VII & VIII semester) from the list of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline Course Name Creative Arts Society	Credits 4 4 of Courses Credits 2	3 3 3 3 Crecc	1 1 1 1 1 1 1 1 1 1 1 1 1 red	0 (0 (0 (0 (0 (0 (0 (by
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201 MTT203 MTT205 MTT207 MTT207	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy Introduction to Physical Metallurgy Thermodynamics of Materials Introduction to Engineering Materials Fuels, Furnaces & Refractories	2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 2 0 4 3 4 3 4 3 4 3	0 3 3 0 3 0 3 0 3 0 3 0 3 0 3 0 2 0 2 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21 MTT42 MT742 Any 4 Ope the other of	22 Adv Code 16 17 21 223 en Eleddepa	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Fance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control Sectives (2 in each VII & VIII semester) from the list of the section of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline Course Name	Credits 4 4 of Courses Credits 4 4 4 4 4 of Courses	3 3 3 4 Crec	1 1 1 1 1 1 1 1 1 1 T T T T T T T	P 5 0 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201 MTT203 MTT205 MTT207 MTT209 MTT212	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy Introduction to Physical Metallurgy Thermodynamics of Materials Introduction to Engineering Materials Fuels, Furnaces & Refractories Iron Making	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 2 0 4 3 4 3 4 3 4 3 4 3 4 3	0 3 3 0 3 0 3 0 3 0 3 0 3 0 0 2 0 0 2 0 0 2 1 0 0 1 0 0 1 0 1 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21 MTT42 MT742 Any 4 Ope the other of	22 Adv Code 16 17 21 223 en Eleddepa	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Fance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control Sectives (2 in each VII & VIII semester) from the list of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline Course Name Creative Arts Society	Credits 4 4 of Courses Credits 2	3 3 3 4 Crec	1 1 1 1 1 1 1 1 1 1 T T T T T T T	0 (0 (0 (0 (0 (0 (0 (by
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201 MTT201 MTT203 MTT205 MTT207 MTT209 MTT212 MTT214	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy Introduction to Physical Metallurgy Thermodynamics of Materials Introduction to Engineering Materials Fuels, Furnaces & Refractories Iron Making Transport Phenomenon	2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0 2 0 4 3 4 3 4 3 4 3 4 3 4 3 4 3	0 3 3 0 3 0 3 0 3 0 3 0 3 0 0 2 0 0 2 0 0 2 1 0 0 1 0 0 1 0 1 0 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21 MTT42 MT742 Any 4 Ope the other of	22 Adv Code 16 17 21 223 en Eleddepa	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Fance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control Sectives (2 in each VII & VIII semester) from the list of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline Course Name Creative Arts Society	Credits 4 4 of Courses Credits 4 4 4 4 4 of Courses	3 3 3 4 Crec	1 1 1 1 1 1 1 1 1 1 T T T T T T T	P 5 0 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201 MTT201 MTT203 MTT205 MTT207 MTT209 MTT212 MTT214 MTT216	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy Introduction to Physical Metallurgy Thermodynamics of Materials Introduction to Engineering Materials Fuels, Furnaces & Refractories Iron Making Transport Phenomenon Introduction to Nano Materials & Technology	2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0	0 3 3 0 3 0 3 0 3 0 3 0 3 0 0 2 0 2 0 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21 MTT42 MT742 Any 4 Ope the other of	22 Adv Code 16 17 21 223 en Eleddepa	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Fance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control Sectives (2 in each VII & VIII semester) from the list of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline Course Name Creative Arts Society	Credits 4 4 of Courses Credits 4 4 4 4 4 of Courses	3 3 3 4 Crec	1 1 1 1 1 1 1 1 1 1 T T T T T T T	P 5 0 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MTP213 MTP215 MTP222 MTP224 MTP226 MTP311 MTP313 MTP315 MTP322 MTP324 MTP326 MTP328 MTS401 MTT201 MTT201 MTT203 MTT205 MTT207 MTT209 MTT212 MTT214 MTT216 MTT218	Metallurgical & Instrumental Analysis Metallography Testing of Materials Mineral Processing Metal Joining Powder Metallurgy Foundry Electrometallurgy & Corrosion Mechanical Working of Metals Experimental Techniques Extractive Metallurgy Heat Treatment TRAINING SEMINAR Introduction to Extractive Metallurgy Introduction to Physical Metallurgy Thermodynamics of Materials Introduction to Engineering Materials Fuels, Furnaces & Refractories Iron Making Transport Phenomenon Introduction to Nano Materials & Technolog Mechanical Behaviour & Testing of Material	2 0 2 0 2 0 2 0 2 0 2 0 1 0 1 0 1 0 1 0	0 3 3 0 3 0 3 0 3 0 3 0 3 0 0 2 0 2 0 2	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MTT40 MTT41 MTT41 Any 2 Course C MTT21 MTT21 MTT42 MT742 Any 4 Ope the other of	22 Adv Code 16 17 21 223 en Eleddepa	Advances in Extraction of Al, Cu and Zn Non Ferrous Metallurgy of V, Ni, Mn, Mg, Mo, Co, Ta, V and Ti Alloy Design Fance Electives from the above list in VIII Semester Open Elective Course Name Introduction to Nano Materials & Technology Materials Science and Technology Corrosion Science & Engineering NDT & Quality Control Sectives (2 in each VII & VIII semester) from the list of Minimum "12 Credits" Creative Arts/ Sports/ NSS & Discipline Course Name Creative Arts Society	Credits 4 4 of Courses Credits 4 4 4 4 4 of Courses	3 3 3 4 Crec	1 1 1 1 1 1 1 1 1 1 T T T T T T T	P 5 0 (0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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