Note Persist Semester		B.E. BIOMEDICAL EN	IGINEERING					
Code No.		Minimum Credits to be	Earned 169.0					
Code No.	First Semester							
PEGS	Code No	Course	Objective	s &Outcomes		_		l c
1998H002 ENGINEERING PHYSICS IJIIII.V ab.b.	Code No.	Course	PEOs	POs	-	'	'	`
1998M103 PAGRINEERING CHEMISTRY	19BM101	ENGINEERING MATHEMATICS I	I,III	a,b	3	1	0	4
1989H09 PROGRAMMING LANGUAGE	19BM102	ENGINEERING PHYSICS	I,II,III,IV	a,b,i	2	0	2	3
198M106 ENGINEERING GRAPHICS 1.80 1 0 1 1 0 1 1 1 1	19BM103		I,III	a,b,c,e	2	0	2	3
Total 10 1 10 10 10 10 10 10						_		3
Code No.	19BM106	ENGINEERING GRAPHICS	I,III					3
Code No. Course				Total	10	1	10	16.0
PEOS POS L T P PEOS POS L T P PEOS POS DILI, T P PEOS POS DISPRIZED POS DISPRIZED DILI, DI	Second Semes	ster						
1998/201	Code No.	Course	Objective	s &Outcomes	L	lт	lρ	l c
198M202			PEOs	POs				
1988/203	19BM201	ENGINEERING MATHEMATICS II	I,III	a,b	3	1	0	4
198M204 RECTRIC CIRCUIT ANALYSIS I.III a.b.c 3 1 0 0 1 1 1 1 1 1 1				a,b,c,e,f,m,n,o		0	-	3
LANGUAGE ELECTIVES			· · · · · · · · · · · · · · · · · · ·	· .				3
198M206 PROGRAMMING LANGUAGE II	19BM204		1,111	a,b,c				4
198M207 ENGINEERING PRACTICES LABORATORY	(00) (00)		-	-				2
Total 13 2 8	19BM206	PROGRAMMING LANGUAGE II	1,111		2	0	2	3
Total 13 2 8	19BM207	ENGINEERING PRACTICES LABORATORY	I,II,III,IV		0	0	4	2
Third Semester				-	13	2	8	21.0
Total Peos Pos P	Third Semeste	r						
Total Peos Pos P			Objective	s & Outcomes				
198M301 ENGINEERING MATHEMATICS III I.III J.b.c.J. 3	Code No.	Course			L	Т		С
198M302 SENSORS AND MEASUREMENTS								
19BM303			,					4
198M304 ELECTRON DEVICES AND CIRCUITS I,II,II,II,IV a,b,c,e,f,I,m,n, 3 1 0							_	4
19BM305 SIGNALS AND SYSTEMS	1981/1303	HUMAN ANATOMY AND PHYSIOLOGY	1,111,11		3	0	0	3
19BM306 HOSPITAL SYSTEM MANAGEMENT	19BM304	ELECTRON DEVICES AND CIRCUITS	I,II,III,IV		3	1	0	4
19BM307 SENSORS AND MEASUREMENTS LABORATORY I.III,III,III,III,III,III,III,III,III,I	19BM305	SIGNALS AND SYSTEMS	1,111	a,b,d,m	3	1	0	4
19BM307 SENSORS AND MEASUREMENTS LABORATORY I,II,III,IV a,b,c,d,e,f,g,h, 0 0 2 2 19BM308 ELECTRON DEVICES AND CIRCUITS LABORATORY I,III,III,IV a,b,c,d,e,f,g,h, 0 0 2 2 18GE301 SOFT SKILLS - VERBAL ABILITY 2 2 0 0 0 0 2 18GE301 SOFT SKILLS - VERBAL ABILITY 2 2 0 0 0 0 0 0 0 0	1000000	HOSDITAL SYSTEM MANACEMENT	1 11 111 177	a,c,d,e,f,g,h,i,j	2		0	3
198M307 SENSORS AND MEASUREMENTS LABORATORY I,II,III,IV I,I,m,n,o 0 0 2 2 18G8301 SOFT SKILLS - VERBAL ABILITY - - 2 2 0 0 0 0 0 0 0 0	196101306	HOSPITAL STSTEM MANAGEMENT	1,11,111,11	,k,l,m,n,o	3	U	U	3
19BM308 ELECTRON DEVICES AND CIRCUITS LABORATORY I,III,IV a,b,c,d,l,m,n 0 0 2 2 0 0 0 18GE301 SOFT SKILLS - VERBAL ABILITY -	19BM307	SENSORS AND MEASUREMENTS LABORATORY	I,II,III,IV		0	0	2	1
18GE301 SOFT SKILLS - VERBAL ABILITY	10RM308	ELECTRON DEVICES AND CIRCUITS LABORATORY	1 111 11/		0	0	2	1
Total 20 4 4 4			-	-				0
Code No. Course Dijectives & Outcomes L T P				Total			4	24.0
PEOS POS	Fourth Semest	er						
PEOS POS			Objective	s & Outcomes				Ī
19BM401 ENGINEERING MATHEMATICS IV I,III a,b 3 1 0 19BM402 ANALOG AND DIGITAL ELECTRONICS I,III,IIV a,b,c,m,n 3 1 0 19BM403 BIOSIGNAL PROCESSING I,II,III,IIV a,b,c,d,e,f,m,n a,b,c,d,e,f,m,n	Code No.	Course			L	Т	Р	C
19BM402 ANALOG AND DIGITAL ELECTRONICS I,III,IIV a,b,c,m,n 3 1 0	10011101							
19BM403 BIOSIGNAL PROCESSING I,II,III,IV a,b,c,d,e,f,m,n o o o o o o o o o							-	4
19BM404 BIOMEDICAL INSTRUMENTATION I,II,III,IV a,b,c,d,e,f,m,n 3 0 0 19BM405 BIOCHEMISTRY, PATHOLOGY AND MICROBIOLOGY I,II,III,IV a,b,c,d,e,f,I 2 0 2 19BM406 PYTHON PROGRAMMING I,II,III,IV a,b,c,d,e,f,I 2 0 2 19BM407 BIOSIGNAL PROCESSING LABORATORY I,II,III,IV a,b,c,d,e,f,I 2 0 2 19BM408 BIOCHEMISTRY AND PHYSIOLOGY LABORATORY I,II,III,IV a,b,c,d,e,f,g,h, o o o 2 18GE401 SOFT SKILLS-REASONING I a 2 0 0 18HS001 ENVIRONMENTAL SCIENCE I,III a,b 2 0 0 Fifth Semester Total 21 3 6 Fifth Semester Total 21 3 6 Fighs POs I,III,IV a,b,c,d,m,n 3 1 0 19BM501 BIO CONTROL SYSTEM I,III,IV a,b,c,d,e,f,g,h, o o o o o o o o o o o o o o o o o o	19BM402	ANALOG AND DIGITAL ELECTRONICS			3	1	U	4
19BM405 BIOMEDICAL INSTRUMENTATION 1,11,111,11 0,0 3 0 0 19BM405 BIOCHEMISTRY, PATHOLOGY AND MICROBIOLOGY 1,11,111,11 1,111,11 1,111,11 1,111,11	19BM403	BIOSIGNAL PROCESSING	I,II,III,IV		3	1	0	4
19BM405 BIOCHEMISTRY, PATHOLOGY AND MICROBIOLOGY I,II,III,IIV a,c,i,I,m,n,o 3 0 0 0 19BM406 PYTHON PROGRAMMING I,II,III,IIV a,b,c,d,e,f,I 2 0 2 2 19BM407 BIOSIGNAL PROCESSING LABORATORY I,II,III,IV a,b,c,d,e,f,m,n 0 0 2 19BM408 BIOCHEMISTRY AND PHYSIOLOGY LABORATORY I,II,III,IV a,b,c,d,e,f,g,h, i,I,m,n 0 0 2 18GE401 SOFT SKILLS-REASONING I a 2 0 0 0 18HS001 ENVIRONMENTAL SCIENCE I,III a,b 2 0 0 0 0 0 0 0 0 0	40004404	DIOMEDICAL INICTRUMENTATION	1 11 111 157	a,b,c,d,e,f,m,n	2	_	0	3
19BM406				, -	3	U	U	3
19BM407 BIOSIGNAL PROCESSING LABORATORY I,II,III,IV a,b,c,d,e,f,m,n 0 0 2				a,c,i,l,m,n,o		_	_	3
19BM408 BIOCHEMISTRY AND PHYSIOLOGY LABORATORY I,II,III,IV I,II,III,IV I,II,III,IV I,II,III,IV I,II,III,IV I,III,III,IV I,II,III,IV I,III,III,IV I,IIIIII,IV I,IIII,III	19BM406	PYTHON PROGRAMMING	I,II,III,IV		2	0	2	3
19BM408 BIOCHEMISTRY AND PHYSIOLOGY LABORATORY I,II,III,IV a,b,c,d,e,f,g,h, i,I,m,n 0 0 2 18GE401 SOFT SKILLS-REASONING I a 2 0 0 18HS001 ENVIRONMENTAL SCIENCE I,III a,b 2 0 0 Total 21 3 6 Fifth Semester Code No. Course Dijectives & Outcomes L T P 19BM501 BIO CONTROL SYSTEM I,III,IV a,b,c,d,m,n 3 1 0 19BM502 DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS I I,II,III,IV a,b,c,d,e,f,g,h, i,k,l,m,n,o 3 0 0 19BM503 BIOMATERIALS AND ARTIFICIAL ORGANS I,II,III,IIV b,c,d,f,g,m,n,o 3 0 0 19BM504 MICROCONTROLLERS I,III a,b,c,d,e 3 1 0	19BM407	BIOSIGNAL PROCESSING LABORATORY	I,II,III,IV		0	0	2	1
19BM408 BIOCHEMISTRY AND PHYSIOLOGY LABORATORY 1,11,111,111 1,1,111,111 1,1,111,11				,				
18HS001 ENVIRONMENTAL SCIENCE I,III a,b 2 0 0	19BM408	BIOCHEMISTRY AND PHYSIOLOGY LABORATORY	I,II,III,IV	_	0	0	2	1
Total 21 3 6	18GE401	SOFT SKILLS-REASONING	I	а	2	0	0	0
Fifth Semester Code No. Course Objectives &Outcomes L T P 19BM501 BIO CONTROL SYSTEM I,III,IV a,b,c,d,m,n 3 1 0 19BM502 DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS I I,II,III,IV a,b,c,d,e,f,g,h,i,k,l,m,n,o 3 0 2 19BM503 BIOMATERIALS AND ARTIFICIAL ORGANS I,II,III,IV b,c,d,f,g,m,n,o 3 0 0 19BM504 MICROCONTROLLERS I,III a,b,c,d,e 3 1 0	18HS001	ENVIRONMENTAL SCIENCE	I,III	a,b	2	0	0	0
Code No. Course Objectives &Outcomes L T P 19BM501 BIO CONTROL SYSTEM I,III,IV a,b,c,d,m,n 3 1 0 19BM502 DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS I I,II,III,IV a,b,c,d,e,f,g,h,i,k,l,m,n,o 3 0 2 19BM503 BIOMATERIALS AND ARTIFICIAL ORGANS I,II,III,IV b,c,d,f,g,m,n,o 3 0 0 19BM504 MICROCONTROLLERS I,III a,b,c,d,e 3 1 0				Total	21	3	6	23.0
Code No. Course PEOs POs L T P 19BM501 BIO CONTROL SYSTEM I,III,IV a,b,c,d,e,f,g,h, i,k,l,m,n,o 3 1 0 19BM502 DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS I I,II,III,IV a,b,c,d,e,f,g,h, i,k,l,m,n,o 3 0 2 19BM503 BIOMATERIALS AND ARTIFICIAL ORGANS I,II,III,IV b,c,d,f,g,m,n,o 3 0 0 19BM504 MICROCONTROLLERS I,III a,b,c,d,e 3 1 0	Fifth Semester						_	
PEOS POS	Contact	Objectives &Outcomes						
19BM501 BIO CONTROL SYSTEM I,III,IV a,b,c,d,m,n 3 1 0 19BM502 DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS I I,II,III,IV a,b,c,d,e,f,g,h,i,k,l,m,n,o 3 0 2 19BM503 BIOMATERIALS AND ARTIFICIAL ORGANS I,II,III,IV b,c,d,f,g,m,n,o 3 0 0 19BM504 MICROCONTROLLERS I,III a,b,c,d,e 3 1 0	Code No.	Course	PFOs	•		T	P	C
19BM502 DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS I I,II,III,IV a,b,c,d,e,f,g,h,i,k,l,m,n,o 3 0 2 19BM503 BIOMATERIALS AND ARTIFICIAL ORGANS I,II,III,IV b,c,d,f,g,m,n,o 3 0 0 19BM504 MICROCONTROLLERS I,III a,b,c,d,e 3 1 0	19BM501	BIO CONTROL SYSTEM		= =	3	1	0	4
19BM503 BIOMATERIALS AND ARTIFICIAL ORGANS I,II,III,IV i,k,I,m,n,o 3 0 2 19BM503 BIOMATERIALS AND ARTIFICIAL ORGANS I,II,III,IV b,c,d,f,g,m,n,o 3 0 0 19BM504 MICROCONTROLLERS I,III a,b,c,d,e 3 1 0								<u> </u>
19BM504 MICROCONTROLLERS I,III a,b,c,d,e 3 1 0	19BM502	DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS I	[1,11,111,1V		3	0	2	4
	19BM503	BIOMATERIALS AND ARTIFICIAL ORGANS		b,c,d,f,g,m,n,o	3	0	0	3
PROFESSIONAL ELECTIVE I	19BM504		I,III	a,b,c,d,e	3	1	0	4
			-	-	-	-	-	3
PROFESSIONAL ELECTIVE II		PROFESSIONAL ELECTIVE II	-	-	-	-	-	3

19BM507	DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS LABORATORY	I,II,III,IV	a,b,c,d,e,f,h,i, k,m	0	0	2	1
19BM508	MICROCONTROLLERS AND IOT LABORATORY	I,II,III,IV	a,b,c,d,e,f,i,k,l, m,n,o	0	0	2	1
18GE501	SOFT SKILLS - APTITUDE I	-	-	0	0	2	0
	•		Total	12	2	8	23.0
Sixth Semest	er				•		
Code No.	Course	Objective	s &Outcomes	L	Т	Р	С
Code No.	Odulse	PEOs	POs	-	'	-	`
18HS003	PRINCIPLES OF MANAGEMENT	-	-	2	0	0	2
19BM602	IMAGE PROCESSING	I,II,III,IV	a,b,c,m,n,o	3	1	0	4
19BM603	DIAGNOSTIC AND THERAPEUTIC EQUIPMENTS II	I,II,III,IV	a,b,c,m,n,o	3	0	1	4
19BM604	PATTERN RECOGNITION TECHNIQUES	I,II,III,IV	a,b,c,e,m,n,o	3	1	0	4
19BM607	IMAGE PROCESSING LABORATORY	I,II,III,IV	a,b,c,m,n,o	0	0	2	1
19BM608	HOSPITAL TRAINING	I,II,IV	g,h,i,j	0	0	2	1
18GE601	SOFT SKILLS-APTITUDE II	-	-	0	0	2	0
	PROFESSIONAL ELECTIVE III	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IV	-	-	-	-	-	3
			Total	11	2	7	22.0
Seventh Sem	ester						
Code No.	Course	Objective	s &Outcomes	L	т	P	l c
00001101	Goulos	PEOs	POs	_	l '	1	ľ
18HS002	PROFESSIONAL ETHICS IN ENGINEERING	-	-	2	0	0	2
19BM702	REHABILITATION ENGINEERING	I,II,III,IV	a,b,c,h,i,j,l,m,n	3	0	0	3
19BM703	BIOMECHANICS	ı	а	3	1	0	4
19BM704	MEDICAL INFORMATICS	1,11,111,1V	a,b,c,e,h,i,j,l,m	3	0	0	3
.02		.,.,,.	,n				
	PROFESSIONAL ELECTIVE V	-	-	-		-	3
40014707	PROFESSIONAL ELECTIVE VI		-	-	-	-	3
19BM707 19BM708	BIOMECHANICS LABORATORY PROJECT WORK I	<u> </u>	а	0	0	2 6	3
1901/1/06	PROJECT WORKT	-	Total	11	1	8	22.0
Eight Semest	or .		Total	11	'		22.0
Light Comest							
Code No.	Course	Objective	ectives &Outcomes		Т	Р	c
		PEOs	POs	<u> </u>			
19BM804	PROJECT WORK II	I,II,III,IV	a,b,c,d,e,f,g,h,	0	0	18	9
	PROFESSIONAL ELECTIVE VII		i,j,k,l	-	 	<u> </u>	3
	PROFESSIONAL ELECTIVE VIII				<u> </u>	<u> </u>	3
	PROFESSIONAL ELECTIVE IX	-	-		-		3
	,		Total	0	0	18	18.0
Electives							
		Objective	s &Outcomes				Т
Code No.	Course			L	Т Т	Р	C
LANGUAGE	TI FOTIVEO	PEOs	POs				
18HS201	COMMUNICATIVE ENGLISH II			1	0	2	2
18HSC01	CHINESE	- II	- i	1	0	2	2
18HSF01	FRENCH	li	li li	1	0	2	2
18HSG01	GERMAN	ii	 	1	0	2	2
18HSJ01	JAPANESE	II	li l	1	0	2	2
19HSC01	CHINESE	II	- [j	1	0	2	2
19HSF01	FRENCH	II	j	1	0	2	2
19HSG01	GERMAN	II	ij i	1	0	2	2
19HSH01	HINDI	II	j	1	0	2	2
19HSJ01	JAPANESE	II,IV	i,j,k	1	0	2	2
DISCIPLINE E	LECTIVES						
19BM001	BRAIN COMPUTER INTERFACE	I,II,III,IV	a,b,c,d,e,m,n, o	3	0	0	3
19BM002	ARTIFICIAL INTELLIGENCE	I,II,III,IV	a,b,c,d,m,n,o	3	0	0	3
19BM003	VIRTUAL REALITY IN MEDICINE	I,II,III,IV	a,b,c,m,n,o	3	0	0	3
19BM004	MEDICAL ROBOTICS	I,II,III,IV	a,b,c,l,m,n,o	3	0	0	3
19BM005	ADVANCED MEDICAL IMAGE ANALYSIS	I,II,III,IV	a,b,c,m,n,o	3	0	0	3
19BM006	COMPUTATIONAL NEUROSCIENCE	I,II,III,IV	a,b,c,f,l,m,n,o	3	0	0	3
19BM007 19BM008	ELECTRO MAGNETIC INTERFERENCE AND COMPATIBILITY EMBEDDED AND REAL TIME SYSTEMS	I,II,III,IV	a,b,c,d,f,h,m,n a,b,c,d,e,m,n,	3	0	0	3
I SDIVIUUS	FINDED AND VEYT HIME 9191EM9	I,II,III,IV	0	٥	I	U	l ³
19BM009	VLSI DESIGN	I,II,III,IV	a,b,c,m,n,o	3	0	0	3

10PM010	NAMO EL ECTÓNICO	II II III IV	0 h 0 m n 0	2	0	0	2	
19BM010	NANO ELECTONICS	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM011	ERGONOMICS	I,II,III,IV	a,b,d,f,m,n,o	3	0	0	3	
19BM012	FINITE ELEMENT ANALYSIS	I,II,III,IV	a,b,c,d,m,n,o	3	0	0	3	
19BM013	BIO-FLUID DYNAMICS	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM014	CARDIOVASCULAR ENGINEERING	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM015	PHYSIOLOGICAL MODELING	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM016	TISSUE ENGINEERING	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM017	PROSTHETIC AND ORTHITIC DEVICES	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM018	MEDICAL OPTICS	I,II,III,IV	a,b,m,n,o	3	0	0	3	
19BM019	FIBER OPTICS AND LASER INSTRUMENTSIN MEDICINE	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM020	BIOMETRIC SYSTEMS	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM021	WEARABLE SYSTEMS	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
	BODY AREA NETWORKS				-	_		
19BM022		I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM023	TELEMEDICINE AND MEDICAL IOT	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM024	MEDICAL EQUIPMENTS MAINTENANCE AND TROUBLESHOOTING	I,II,III,IV	a,b,c,m,n,o	3	0	0	3	
19BM025	MEDICAL WASTE MANAGEMENT	I,II,III,IV	a,b,f,m	3	0	0	3	
19BM026	MEDICAL ETHICS AND STANDARDS	I,II,III,IV	a,b,c,h,m,n	3	0	0	3	
19BM027	MEDICAL DEVICE DESIGN	I,III,IV	a,b,n	3	0	0	3	
19BM028	VIRTUAL INSTRUMENTATION	I,II,III,IV	a,l,m,n,o	3	0	0	3	
ENTREPRENE	URSHIP ELECTIVES							
18GE0E1	ENTREPRENEURSHIP DEVELOPMENT I	I-	I-	3	0	0	3	
18GE0E1	ENTREPRENEURSHIP DEVELOPMENT II	1 11 111 117	cobiklo	3	0	0	3	
		I,II,III,IV	c,e,h,j,k,l,o	J	U	U	l 3	
ONE CREDIT (I						
	3D PRINTING	I,II,III,IV	a,b,c,m,n,o	1	0	0	1	
19BM0XB	BIOMIMETICS	I,II,III,IV	a,b,c,h,m,n	1	0	0	1	
19BM0XD	INTRODUCTION TO HEALTHCARE SYSTEMS ENGINEERING	I,II,III,IV	a,b,d,f,n	1	0	0	1	
19BM0XE	HEALTH INFORMATICS AND MEDICAL TECHNOLOGY	1-	-	1	0	0	1	
MATHEMATIC	S ELECTIVES	•						
18GE0M1	GRAPH THEORY AND COMBINATORICS	1,111	a,b	3	0	0	3	
18GE0M2	ALGEBRA AND NUMBER THEORY	1,111	a,b	3	0	0	3	
18GE0M3	MATHEMATICAL FINANCE AND QUEUEING THEORY	1,111		3	0	0	3	
	112 2 2	1,111	a,b	3	U	U	3	
OPEN ELECTI			_			_		
18GE0C1	CORROSION SCIENCE AND ENGINEERING	ļ-	-	3	0	0	3	
18GE0C2	ENERGY STORING DEVICES	-	-	3	0	0	3	
18GE0C3	POLYMER SCIENCE	-	-	3	0	0	3	
18GE0P1	NANOMATERIALS SCIENCE	-	-	3	0	0	3	
18GE0P2	SEMICONDUCTOR PHYSICS AND DEVICES	1-	-	3	0	0	3	
18GE0P3	APPLIED LASER SCIENCE	-	-	3	0	0	3	
18GE0P4	BIO-PHOTONICS	-	-	3	0	0	3	
18GE0P5	PHYSICS OF SOFT MATTER	-	-	3	0	0	3	
1002013	THI GIOG OF GOTT WATTER		a b a d a k m	, ,	0	0	l J	
19BM0YA	AMBULANCE AND EMERGENCY MEDICAL SERVICE MANAGEMENT	I,III,IV	a,b,c,d,e,k,m,	3	0	0	3	
19BM0YB	HOSPITAL AUTOMATION	I,II,III,IV	a h c m n o	3	0	0	3	
	ONE CREDIT COURSE	1,11,111,11	a,b,c,m,n,o	3	U	U		
	ETYMOLOGY	-	-	1	0	0	1	
18GE0XB	GENERAL PSYCHOLOGY	-	-	1	0	0	1	
18GE0XC	NEURO BEHAVIORAL SCIENCE	-	-	1	0	0	1	
18GE0XD	VISUAL MEDIA AND FILM MAKING	II,IV	i	1	0	0	1	
18GE0XE	YOGA FOR HUMAN EXCELLENCE	-	-	1	0	0	1	
18GE0XF	VEDIC MATHEMATICS	1-	-	1	0	0	1	
18GE0XG	HEALTH AND FITNESS	1-	-	1	0	0	1	
	CONCEPT, METHODOLOGY AND APPLICATIONS OF	+						
18GE0XH	VERMICOMPOSTING	-	-	1	0	0	1	
18GE0XI	BLOG WRITING	1-	-	1	0	0	1	
18GE0XJ	INTERPERSONAL SKILLS	 -	1_	1	0	0	1	
		 	ļ ⁻					
18GE0XK	NEW AGE INNOVATION AND ENTREPRENEURSHIP	ļ-	-	1	0	0	1	
18GE0XL	NATIONAL CADET CORPS	-	-	1	0	0	1	
18GE0XM	COMMUNITY SERVICE AND LEADERSHIP DEVELOPMENT	-	-	1	0	0	1	
18GE0XN	DISRUPTIVE INNOVATION BASED STARTUP ACTIVITIES	-	-	1	0	0	1	
18GE0XO	SOCIAL PSYCHOLOGY	-	-	1	0	0	1	
18GE0XP	FM RADIO BROADCASTING TECHNOLOGY	-	-	1	0	0	1	
LANGUAGE E	LECTIVES		1					
18HSH01	IHINDI	I II	li	1	0	2	2	
ONE CREDIT COURSES								
		11 11 111 117	0 0 0 0 0		_ ^	_	1	
19BM0XC	MEDICAL EQUIPMENTS TROUBLESHOOTING AND CALIBRATION	I,II,III,IV	a,b,c,n,o	1	0	0	1	
CORE-LABOR				_				
19HS101	COMMUNICATIVE ENGLISH I	-	-	1	0	2	2	
LANGUAGE E	LECTIVES							

19HS201	COMMUNICATIVE ENGLISH II	1-	I -	1	0	2	2
OPEN ELECTI					, ,	_	
18AE0YA	NON-DESTRUCTIVE TESTING	1-	1-	3	0	0	3
18AE0YB	SMART MATERIALS	 -	-	3	0	0	3
18AE0YC	FUNDAMENTALS OF AIRCRAFT ENGINEERING	-	-	3	0	0	3
18AG0YA	ENTREPRENEURSHIP DEVELOPMENT AND FOOD QUALITY	-	-	3	0	0	3
18AG0YB	MANAGEMENT FOOD INDUSTRY HUMAN ENGINEERING AND SAFETY IN AGRICULTURE	-	_	3	0	0	3
18AG0YC	ENERGY MANGEMENT IN AGRICULTURE	+	-	3	0	0	3
18AG0YD	FARM MECHANISATION	+	-	3	0	0	3
18AU0YA	AUTOMOTIVE ENGINEERING	+		3	0	0	3
18AU0YB	VEHICLE CONTROL SYSTEMS	+		3	0	0	3
18AU0YC	PUBLIC TRANSPORT MANAGEMENT	+		3	0	0	3
18AU0YD	TECHNOLOGIES FOR GREEN MOBILITY	+	_	3	0	0	3
18AU0YE	TROUBLE SHOOTING AND MAINTENANCE OF AUTOMOBILES	+		3	0	0	3
18BT0YA	BIOFUELS	+		3	0	0	3
18BT0YB	MUSHROOM CULTIVATION AND VERMICOMPOSTING	+		3	0	0	3
18BT0YC	FORENSIC TECHNOLOGY	-		3	0	0	3
18CE0YA	GREEN BUILDINGS	-		3	0	0	3
18CE0YB	DISASTER PREPAREDNESS AND PLANNING	-	-	3	0	0	3
18CEOYC	ENVIRONMENTAL IMPACT ASSESSMENT	-	-	3	0	0	3
18CE0YC	BUILDING SERVICES	╀	ļ-	3	0	0	3
		╀	ļ-		·		
18CE0YE	INDUSTRIAL WASTE MANAGEMENT	+	<u> </u>	3	0	0	3
18CE0YF	WEALTH FROM WASTE	+	-	3	0	0	3
18CE0YG	RISK AND SAFETY MANAGEMENT	<u> </u>	-	3	0	0	3
18CE0YH	ENERGY SCIENCE AND ENGINEERING	<u> </u>	-	3	0	0	3
18CE0YI	CONCEPTS OF REMOTE SENSING	<u> </u>	ļ-	3	0	0	3
18CS0YA	E-LEARNING TECHNIQUES	-	-	3	0	0	3
18CS0YB	SOFTWARE TESTING AND QUALITY ASSURANCE	<u>-</u>	-	3	0	0	3
18CS0YC	JAVA FUNDAMENTALS	<u>-</u>	-	3	0	0	3
18CS0YD	NETWORK ENGINEERING AND MANAGEMENT	-	-	3	0	0	3
18CS0YE	AGENT BASED INTELLIGENT SYSTEMS	-	-	3	0	0	3
18CS0YF	E-BUSINESS	-	-	3	0	0	3
18CS0YG	KNOWLEDGE DISCOVERY IN DATABASES	-	-	3	0	0	3
18CS0YH	SOCIAL NETWORK ANALYSIS CONCEPTS	-	-	3	0	0	3
18CS0YI	OPERATING SYSTEM CONCEPTS	-	-	3	0	0	3
18CS0YJ	OBJECT ORIENTED PROGRAMMING	-	-	3	0	0	3
18EC0YA	BASICS OF ANALOG AND DIGITAL ELECTRONICS	-	-	3	0	0	3
18EC0YB	AUTOMOTIVE ELECTRONICS	-	-	3	0	0	3
18EC0YC	PCB DESIGN AND PROTOTYPING	-	-	3	0	0	3
18EC0YD	MICROCONTROLLER PROGRAMMING	-	-	3	0	0	3
18EC0YE	ENGINEERING COMPUTATION WITH MATLAB	-	-	3	0	0	3
18EC0YF	BASICS OF HARDWARE DESCRIPTION LANGUAGES	-	-	3	0	0	3
18EC0YG	FUNDAMENTALS OF EMBEDDED SYSTEMS	-	-	3	0	0	3
18EC0YH	PRINCIPLES OF COMMUNICATION SYSTEMS	-	-	3	0	0	3
18EC0YI	ELECTRONIC PRODUCT DESIGN AND PACKAGING	-	-	3	0	0	3
18EC0YJ	PRINCIPLES OF COMPUTER COMMUNICATION AND NETWORKS	-	-	3	0	0	3
18EE0YA	ENERGY CONSERVATION AND MANAGEMENT	-	-	3	0	0	3
18EE0YB	ELECTRICAL SAFETY	-	-	3	0	0	3
18EE0YC	INDUSTRIAL DRIVES AND CONTROL		-	3	0	0	3
18EI0YA	PROGRAMMABLE LOGIC CONTROLLERS	-	-	3	0	0	3
18EI0YB	SENSOR TECHNOLOGY	-	-	3	0	0	3
18EI0YC	FUNDAMENTALS OF VIRTUAL INSTRUMENTATION	1-	-	3	0	0	3
18EI0YD	OPTOELECTRONICS AND LASER INSTRUMENTATION	1-	-	3	0	0	3
18FD0YA	TRADITIONAL FOODS	-	-	3	0	0	3
18FD0YB	FOOD LAWS AND REGULATIONS	-	-	3	0	0	3
18FD0YC	POST HARVEST TECHNOLOGY OF FRUITS AND VEGETABLES	1-	i -	3	0	0	3
18FT0YA	FASHION CRAFTS	1-	i -	3	0	0	3
18FT0YB	FASHION ACCESSORIES	1-	i -	3	0	0	3
18FT0YC	FASHION VISUAL MERCHANDISING	1-	-	3	0	0	3
18FT0YD	INTERIOR DESIGN	1-	-	3	0	0	3
18FT0YE	SURFACE EMBELLISHMENT	1-	i -	3	0	0	3
18GE01	BUSINESS ANALYTICS	1-	 -	3	0	0	3
18GE02	INDUSTRIAL SAFETY	1-	 -	3	0	0	3
18GE03	OPERATIONS RESEARCH	1-	-	3	0	0	3
18GE04	COST MANAGEMENT OF ENGINEERING PROJECTS	 -	 -	3	0	0	3
18GE05	COMPOSITE MATERIALS	1-	-	3	0	0	3
18GE06	WASTE TO ENERGY	1-	-	3	0	0	3
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18IT0YA	DATABASE MANAGEMENT SYSTEMS	-	-	3	0	0	3
18IT0YB	DATA STRUCTURES AND ALGORITHMS	-	-	3	0	0	3
18IT0YC	DATA SCIENCES AND ANALYTICS	-	-	3	0	0	3
18IT0YD	OBJECT ORIENTED PROGRAMMING	-	-	3	0	0	3
18IT0YE	ARTIFICIAL INTELLIGENCE	-	-	3	0	0	3
18ME0YA	INDUSTRIAL PROCESS ENGINEERING	-	-	3	0	0	3
18ME0YB	SAFETY ENGINEERING	-	-	3	0	0	3
18ME0YC	MAINTENANCE ENGINEERING	-	-	3	0	0	3
18ME0YD	BASICS OF NON-DESTRUCTIVE TESTING	-	-	3	0	0	3
18ME0YE	DIGITAL MANUFACTURING	-	-	3	0	0	3
18ME0YF	WORK STUDY AND ERGONOMICS	-	-	3	0	0	3
18ME0YG	METROLOGY IN INDUSTRY	-	-	3	0	0	3
18ME0YH	PLANT LAYOUT AND MATERIAL HANDLING	-	-	3	0	0	3
18ME0YI	CONCEPTS OF ENGINEERING DESIGN	-	-	3	0	0	3
18ME0YJ	OIL HYDRAULICS AND PNEUMATICS	-	-	3	0	0	3
18ME0YK	ENERGY AUDITING AND MANAGEMENT	-	-	3	0	0	3
18ME0YL	LEAN SIX SIGMA	-	-	3	0	0	3
18ME0YM	HEATING VENTILATION AND AIRCONDITIONING	-	-	3	0	0	3
18TT0YA	YARN AND FABRIC MANUFACTURE	-	-	3	0	0	3
18TT0YB	COLOURATION OF TEXTILES	-	-	3	0	0	3
18TT0YC	TEXTILES IN ENGINEERING APPLICATION	-	-	3	0	0	3
18TT0YD	GENERAL TEXTILE TECHNOLOGY	-	-	3	0	0	3