B.E. ELECTRONICS AND COMMUNICATION ENGINEERING
Minimum Credits to be Earned 172.0

First Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EC101	ENGINEERING MATHEMATICS I	I,II	a,b,c	3	1	0	4
18EC102	ENGINEERING PHYSICS I	II,III	a,b,i	2	0	2	3
18EC103	ENGINEERING CHEMISTRY I	I,II,III	a,b,g	2	0	2	3
18EC104	COMPUTER PROGRAMMING I	I,II	a,b,c,e	2	0	2	3
18HS101	COMMUNICATIVE ENGLISH I	II,III	i,j,l	1	0	2	2
18EC106	ENGINEERING GRAPHICS	II,III	a,j	1	0	4	3
			Total	11	1	12	18.0

Second Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EC201	ENGINEERING MATHEMATICS II	II	a,b	3	1	0	4
18EC202	ENGINEERING PHYSICS II	II,III	a,b,i	2	0	2	3
18EC203	ENGINEERING CHEMISTRY II	II	a,b	2	0	2	3
18EC204	CIRCUIT ANALYSIS	I,II,III	a,b,e,m	3	1	0	4
	LANGUAGE ELECTIVE	-	-	-	-	-	2
18EC206	ANALOG ELECTRONICS I	I,II,III	a,b,c,d,m	3	0	0	3
18EC207	COMPUTER PROGRAMMING II	I,II,III	a,b,e,m,n	2	0	2	3
18EC208	BASIC ELECTRONICS LABORATORY	I,II,III	a,b,c,d,m	0	0	2	1
			Total	15	2	8	23.0

Third Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EC301	ENGINEERING MATHEMATICS III	II	a,b	3	1	0	4
18EC302	BASICS OF ELECTRICAL ENGINEERING	I,II,III	a,b,c,d,m	2	0	2	3
18EC303	DIGITAL LOGIC CIRCUIT DESIGN	I,II,III	a,b,c,d,e,m	3	1	0	4
18EC304	ANALOG ELECTRONICS II	I,II,III	a,b,c,d,e,m,n	3	1	0	4
18EC305	LINEAR INTEGRATED CIRCUITS	I,II,III	a,b,c,d,f,g,l,m	3	0	0	3
18EC306	DATA STRUCTURES AND ALGORITHMS	I,II,III	a,b,c,d,e,n	2	0	2	3
18EC307	ANALOG ELECTRONICS AND IC LABORATORY	I,II,III	a,b,c,e,m	0	0	2	1
18EC308	DIGITAL ELECTRONICS LABORATORY	I,II,III	a,b,c,d,i,k,m	0	0	2	1
18GE301	SOFT SKILLS - VERBAL ABILITY	-	-	2	0	0	0
			Total	18	3	8	23.0

Fourth Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EC401	PROBABILITY AND RANDOM PROCESS	II	a,b	3	1	0	4
18EC402	SIGNALS AND SYSTEMS	I,II,III	a,b,d,m	3	1	0	4
18EC403	ANALOG COMMUNICATION	I,II,III	a,b,c,d,g,h,j,m,n	3	0	0	3
18EC404	PRINCIPLES OF VLSI DESIGN	I,II,III	a,b,d,e,m	3	0	0	3
18EC405	ELECTROMAGNETIC FIELDS AND WAVEGUIDES	I,II,III	a,b,d,m	3	1	0	4
18EC406	MICROPROCESSORS AND MICROCONTROLLERS	I,II,III	b,c,d,e,l,m,n	3	0	0	3
18EC407	ANALOG COMMUNICATION LABORATORY	I,II,III	a,b,c,d,e,i,m	0	0	2	1
18EC408	MICROPROCESSORS AND MICROCONTROLLERS LABORATORY	I,II,III	a,b,c,d,m	0	0	2	1
18HS001	ENVIRONMENTAL SCIENCE	II	a,b	2	0	0	0
18GE401	SOFT SKILLS-REASONING	-	-	2	0	0	0
			Total	22	3	4	23.0

Fifth Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EC501	DIGITAL COMMUNICATION	I,II,III	a,b,g,h,j,m,n	3	1	0	4
18EC502	DIGITAL SIGNAL PROCESSING	I,II	a,b,c,d,e	3	1	0	4
18EC503	TRANSMISSION LINES AND ANTENNAS	I,II,III	a,b,c,d,e,f,m	3	1	0	4
18EC504	CONTROL SYSTEMS	I,II,III	a,b,c,d,i	3	1	0	4
	PROFESSIONAL ELECTIVE I	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE II	-	-	-	-	-	3
18EC507	DIGITAL SIGNAL PROCESSING LABORATORY	I,II,III	a,b,c,e,n	0	0	2	1
18EC508	DIGITAL COMMUNICATION AND ANTENNAS LABORATORY	I,II,III	a,b,c,d,e,f,g,k,m,n	0	0	2	1
18GE501	SOFT SKILLS - APTITUDE I	II	a,b	0	0	2	0

				Total	12	4	6	24.0

Sixth Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18HS003	PRINCIPLES OF MANAGEMENT	-	-	2	0	0	2
18EC602	COMPUTER NETWORKS AND PROTOCOLS	I,II,III	a,b,c,e,f,m,n	3	0	0	3
18EC603	DIGITAL VLSI SYSTEM DESIGN	I,II,III	a,b,c,d,m	3	0	0	3
18EC604	EMBEDDED SYSTEMS	I,II,III	a,b,c,e,m,n	3	0	2	4
	PROFESSIONAL ELECTIVE III	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IV	-	-	-	-	-	3
18EC607	COMPUTER NETWORKS LABORATORY	I,II,III	a,b,e,m,n	0	0	2	1
18EC608	VLSI DESIGN LABORATORY	I,II,III	b,c,d,e,m,n	0	0	2	1
18GE601	SOFT SKILLS-APTITUDE II	II	a,b	0	0	2	0
			Total	11	0	8	20.0

Seventh Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18HS002	PROFESSIONAL ETHICS IN ENGINEERING	-	-	2	0	0	2
18EC702	WIRELESS COMMUNICATION	I,II,III	a,b,c,d,f,g,m	3	0	2	4
18EC703	RF AND MICROWAVE ENGINEERING	I,II,III	a,b,c,m	3	1	0	4
18EC704	OPTICAL COMMUNICATION	I,II,III	a,b,c,d,m,n	3	0	0	3
	PROFESSIONAL ELECTIVE V	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE VI	-	-	-	-	-	3
18EC707	HIGH FREQUENCY COMMUNICATION LABORATORY	I,II,III	a,b,c,d,e,m	0	0	2	1
18EC708	PROJECT WORK I	I,II,III	a,b,c,d,e,f,g,h,i,j,k,l	0	0	6	3
			Total	11	1	10	23.0

Eight Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
	PROFESSIONAL ELECTIVE VII	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE VIII	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IX	-	-	-	-	-	3
18EC804	PROJECT WORK II	I,II,III	a,b,c,d,e,f,g,h,i,j,k,l	0	0	18	9
			Total	0	0	18	18.0

Electives

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				

CORE-THEORY

Code No.	Course	PEOs	POs	L	T	P	C
18EC046	PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY AND ENTREPRENEURSHIP	-	-	3	0	0	3

DISCIPLINE ELECTIVES

Code No.	Course	PEOs	POs	L	T	P	C
18EC039	BIO SIGNAL PROCESSING	I,II,III	a,b,d,e,f,n	3	0	0	3
18EC042	DATA ANALYTICS	I,II,III	a,b,c,d,f,g,n	3	0	0	3
18EC043	VHDL PROGRAMMING	I,II,III	a,b,c,d,m	3	0	0	3

ONE CREDIT COURSES

Code No.	Course	PEOs	POs	L	T	P	C
18EC0XB	ANN AND FUZZY LOGIC APPLICATIONS	I,II	b,c,d	1	0	0	1
18EC0XC	M2M TECHNIQUE FOR SMART CITIES	I,II	a,b,c,d	1	0	0	1
18EC0XG	RTOS MANAGEMENT	I,II	b,c	1	0	0	1
18EC0XH	LORA WAN IOT	I,II	b,c,d	1	0	0	1
18EC0XI	PCB DESIGN AND PROTOTYPE MAKING	I,II	b,c,d	1	0	0	1
18EC0XK	MATHEMATICAL MODELING OF A SYSTEM AND ITS RESPONSE	I,II	a,b,c,d	1	0	0	1
18EC0XL	BLOCK CHAIN TECHNOLOGIES FOR SMART CITIES	I,II	a,b,c,d	1	0	0	1
18EC0XM	DATA ACQUISITION SYSTEM DESIGN	I,II	a,b,c,d	1	0	0	1
18EC0XN	STM32 ARM CORTEX MICROCONTROLLER PROGRAMMING AND APPLICATIONS	I,II,III	d,e,f,g	1	0	0	1
18EC0XO	DIGITAL DESIGN AND VERIFICATION USING VERILOG	-	-	1	0	0	1
18EC0XP	MEANDER DIPOLE ANTENNA DESIGN FOR RFID TAGS	I,II,III	b,c,d,e,f,g	1	0	0	1

LANGUAGE ELECTIVES

Code No.	Course	PEOs	POs	L	T	P	C
18HS201	COMMUNICATIVE ENGLISH II	II,III	i,j	1	0	2	2

ONE CREDIT COURSES

Code No.	Course	PEOs	POs	L	T	P	C
18EC0XA	SIGNAL PROCESSING TECHNIQUES USING LABVIEW	I,II,III	d,e,f,g	1	0	0	1
18EC0XD	LABVIEW BASED MACHINE LEARNING	I,II,III	a,b,c,n	1	0	0	1
18EC0XE	EMBEDDED SYSTEM DESIGN FOR ROBOTICS	I,II,III	a,b,c,n	1	0	0	1
18EC0XF	INDUSTRIAL VISION INSPECTION SYSTEM	I,II	a,b,c,d	1	0	0	1

18EC0XJ	EMBEDDED COMMUNICATION PROTOCOLS	I,II	b,c,d	1	0	0	1
LANGUAGE ELECTIVES							
18HSH01	HINDI	-	-	1	0	2	2
18HSG01	GERMAN	-	-	1	0	2	2
18HSJ01	JAPANESE	II,III	j	1	0	2	2
18HSC01	CHINESE	-	-	1	0	2	2
18HSF01	FRENCH	II,III	j	1	0	2	2
OPEN ELECTIVES							
18GE0P1	NANOMATERIALS SCIENCE	-	-	3	0	0	3
18GE0P2	SEMICONDUCTOR PHYSICS AND DEVICES	-	-	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
18GE0C1	CORROSION SCIENCE AND ENGINEERING	I,II,III	a,b,g	3	0	0	3
18GE0C2	ENERGY STORING DEVICES	II	a,b	3	0	0	3
18GE0C3	POLYMER SCIENCE	I,II	a,b,c	3	0	0	3
MATHEMATICS ELECTIVES							
18GE0M1	GRAPH THEORY AND COMBINATORICS	-	-	3	0	0	3
18GE0M2	ALGEBRA AND NUMBER THEORY	-	-	3	0	0	3
18GE0M3	MATHEMATICAL FINANCE AND QUEUEING THEORY	-	-	3	0	0	3
ENTREPRENEURSHIP ELECTIVES							
18GE0E1	ENTREPRENEURSHIP DEVELOPMENT I	-	-	3	0	0	3
18GE0E2	ENTREPRENEURSHIP DEVELOPMENT II	-	-	3	0	0	3
DISCIPLINE ELECTIVES							
18EC001	ANALOG VLSI DESIGN	I,II,III	a,b,c,d,e,m	3	0	0	3
18EC002	IC DESIGN FOR DSP	I,II,III	a,b,c,d,m,n	3	0	0	3
18EC003	LOW POWER VLSI DESIGN	I,II,III	a,c,d,e,m	3	0	0	3
18EC004	VLSI VERIFICATION AND TESTING	I,II,III	a,b,c,d,m,n	3	0	0	3
18EC005	VLSI PHYSICAL DESIGN	I,II,III	a,b,c,d,m,n	3	0	0	3
18EC006	WAVELET TRANSFORMS AND APPLICATIONS	I,II,III	a,b,c,d,e,m	3	0	0	3
18EC007	VIRTUAL INSTRUMENTATION	I,II,III	a,b,c,d,e,n	3	0	0	3
18EC008	MACHINE VISION	I,II,III	a,b,c,d,f,g,m,n	3	0	0	3
18EC009	VLSI DIGITAL SIGNAL PROCESSING	I,II,III	a,b,c,d,m,n	3	0	0	3
18EC010	SPEECH SIGNAL PROCESSING	I,II,III	a,b,c,d,m	3	0	0	3
18EC011	STATISTICAL SIGNAL PROCESSING	I,II,III	a,b,c,d,e,g,h,m,n	3	0	0	3
18EC012	NEXT GENERATION NETWORKS	I,II,III	a,b,c,d,e,l,n	3	0	0	3
18EC013	CRYPTOGRAPHY AND NETWORK SECURITY	I,II,III	a,b,c,d,m	3	0	0	3
18EC014	SATELLITE COMMUNICATION	I,II,III	a,b,c,d,f,g,m,n	3	0	0	3
18EC015	NETWORK PROTOCOL ENGINEERING	I,II,III	a,b,c,d,e,m	3	0	0	3
18EC016	DATA COMMUNICATION AND NETWORKS	I,II,III	a,b,c,d,m	3	0	0	3
18EC017	ELECTRONIC PRODUCT DESIGN	I,II,III	a,b,c,d,e,m,n	3	0	0	3
18EC018	EMBEDDED NETWORKS AND PROTOCOLS	I,II,III	a,b,c,e,g,j,m,n	3	0	0	3
18EC019	REAL TIME OPERATING SYSTEMS	I,II,III	b,c,d,e,n	3	0	0	3
18EC020	INTERNET OF THINGS	I,II,III	a,b,c,d,n	3	0	0	3
18EC021	WIRELESS SENSOR NETWORKS	I,II,III	a,b,c,d,m,n	3	0	0	3
18EC022	ARM ARCHITECTURE AND PROGRAMMING	I,II,III	a,b,c,d,e,f,g,n	3	0	0	3
18EC023	FUZZY SYSTEMS AND APPLICATIONS	I,II,III	a,b,c,d,e,n	3	0	0	3
18EC024	MACHINE LEARNING TECHNIQUES	I,II,III	a,b,c,d,e,n	3	0	0	3
18EC025	ARTIFICIAL NEURAL NETWORKS AND APPLICATIONS	I,II,III	a,b,c,d,n	3	0	0	3
18EC026	INDUSTRIAL AUTOMATION	I,II,III	a,b,c,d,e,m,n	3	0	0	3
18EC027	DEEP LEARNING TECHNIQUES	I,II,III	a,b,c,d,e,n	3	0	0	3
18EC028	PATTERN RECOGNITION	I,II,III	a,b,c,d,e,f,l,m,n	3	0	0	3
18EC029	COMPUTER ARCHITECTURE	I,II	a,b,c,d,e	3	0	0	3
18EC030	AUTOMOTIVE ELECTRONICS AND NETWORKING	I,II,III	a,b,c,d,m	3	0	0	3
18EC031	MEDICAL ELECTRONICS AND INSTRUMENTATION	I,II	a,b,c,d	3	0	0	3
18EC032	CONSUMER ELECTRONICS	I,II,III	a,b,c,d,m,n	3	0	0	3
18EC033	NANO ELECTRONICS	I,II,III	a,b,c,d,e,f,g,h,i,j,k,l,m,n,o	3	0	0	3
18EC034	LIQUID CRYSTALS AND APPLICATIONS	I,II	a,b,c,e	3	0	0	3
18EC035	MEMS	I,II,III	a,b,c,d,m	3	0	0	3
18EC036	MEASUREMENT AND INSTRUMENTATION	I,II,III	a,b,c,d,e,f,h,m,n	3	0	0	3
18EC037	DIGITAL IMAGE PROCESSING	I,II,III	a,b,c,d,f,g,n	3	0	0	3
18EC038	MEDICAL IMAGE PROCESSING	I,II,III	a,b,c,d,e,l,m,n	3	0	0	3
18EC040	MIMO COMMUNICATION AND SPACE-TIME PROCESSING	I,II,III	a,b,d,f,m,n	3	0	0	3
18EC041	MULTIMEDIA SIGNAL PROCESSING	I,II,III	a,b,d,e,f,n	3	0	0	3
OPEN ELECTIVES							

18EC0YA	BASICS OF ANALOG AND DIGITAL ELECTRONICS	I,II,III	a,b,c,d,m	3	0	0	3
18EC0YB	AUTOMOTIVE ELECTRONICS	I,II,III	a,b,c,d,m,n	3	0	0	3
18EC0YC	PCB DESIGN AND PROTOTYPING	I,II,III	a,b,c,d,e,m,n	3	0	0	3
18EC0YD	MICROCONTROLLER PROGRAMMING	I,II,III	a,b,c,e,m	3	0	0	3
18EC0YE	ENGINEERING COMPUTATION WITH MATLAB	I,II	a,b,c,e	3	0	0	3
18EC0YF	BASICS OF HARDWARE DESCRIPTION LANGUAGES	I,II,III	a,b,c,d,n	3	0	0	3
18EC0YG	FUNDAMENTALS OF EMBEDDED SYSTEMS	I,II,III	a,b,c,d,e,m	3	0	0	3
18EC0YH	PRINCIPLES OF COMMUNICATION SYSTEMS	I,II,III	a,b,c,m	3	0	0	3
18EC0YI	ELECTRONIC PRODUCT DESIGN AND PACKAGING	I,II,III	a,b,c,d,m	3	0	0	3
18EC0YJ	PRINCIPLES OF COMPUTER COMMUNICATION AND NETWORKS	I,II,III	a,b,c,d,m	3	0	0	3
18AE0YA	NON-DESTRUCTIVE TESTING	-	-	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 MANAGEMENT FOOD INDUSTRY			3	0	0	3
18AG0YB	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
18CE0YC	ENVIRONMENTAL IMPACT ASSESSMENT	-	-	3	0	0	3
18CE0YD	BUILDING SERVICES	-	-	3	0	0	3
18CE0YE	INDUSTRIAL WASTE MANAGEMENT	-	-	3	0	0	3
18CE0YF	WEALTH FROM WASTE	-	-	3	0	0	3
18CE0YG	RISK AND SAFETY MANAGEMENT	-	-	3	0	0	3
18CE0YH	ENERGY SCIENCE AND ENGINEERING	-	-	3	0	0	3
18CE0YI	CONCEPTS OF REMOTE SENSING	-	-	3	0	0	3
18CS0YA	E-LEARNING TECHNIQUES	-	-	3	0	0	3
18CS0YB	SOFTWARE TESTING AND QUALITY ASSURANCE	-	-	3	0	0	3
18CS0YC	JAVA FUNDAMENTALS	-	-	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
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	-	-	3	0	0	3
18EI0YD	OPTOELECTRONICS AND LASER INSTRUMENTATION	-	-	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	-	-	3	0	0	3
18FT0YA	FASHION CRAFTS	-	-	3	0	0	3
18FT0YB	FASHION ACCESSORIES	-	-	3	0	0	3
18FT0YC	FASHION VISUAL MERCHANDISING	-	-	3	0	0	3
18FT0YD	INTERIOR DESIGN	-	-	3	0	0	3
18FT0YE	SURFACE EMBELLISHMENT	-	-	3	0	0	3
18GE01	BUSINESS ANALYTICS	-	-	3	0	0	3
18GE02	INDUSTRIAL SAFETY	-	-	3	0	0	3
18GE03	OPERATIONS RESEARCH	-	-	3	0	0	3
18GE04	COST MANAGEMENT OF ENGINEERING PROJECTS	-	-	3	0	0	3
18GE05	COMPOSITE MATERIALS	-	-	3	0	0	3
18GE06	WASTE TO ENERGY	-	-	3	0	0	3
18IT0YA	DATABASE MANAGEMENT SYSTEMS	-	-	3	0	0	3
18IT0YB	DATA STRUCTURES AND ALGORITHMS	-	-	3	0	0	3

Code	Course Name			L	T	P	C
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
ADDITIONAL ONE CREDIT COURSE							
18GE0XA	ETYMOLOGY	II,III	j	1	0	0	1
18GE0XB	GENERAL PSYCHOLOGY	II,III	h,i	1	0	0	1
18GE0XC	NEURO BEHAVIORAL SCIENCE	II,III	i	1	0	0	1
18GE0XD	VISUAL MEDIA AND FILM MAKING	I,II,III	f,g	1	0	0	1
18GE0XE	YOGA FOR HUMAN EXCELLENCE	II,III	h,i	1	0	0	1
18GE0XF	VEDIC MATHEMATICS	II	a,b	1	0	0	1
18GE0XG	HEALTH AND FITNESS	I,II,III	d,f,g,i	1	0	0	1
18GE0XH	CONCEPT, METHODOLOGY AND APPLICATIONS OF VERMICOMPOSTING	I,II	f	1	0	0	1
18GE0XI	BLOG WRITING	I,II,III	f,g,j	1	0	0	1
18GE0XJ	INTERPERSONAL SKILLS	I,II,III	g,i	1	0	0	1
18GE0XK	NEW AGE INNOVATION AND ENTREPRENEURSHIP	II,III	i	1	0	0	1
18GE0XL	NATIONAL CADET CORPS	I,II,III	g,i	1	0	0	1
18GE0XM	COMMUNITY SERVICE AND LEADERSHIP DEVELOPMENT	I,II,III	b,c,f,i	1	0	0	1
18GE0XN	DISRUPTIVE INNOVATION BASED STARTUP ACTIVITIES	I,III	g,h	1	0	0	1
18GE0XO	SOCIAL PSYCHOLOGY	I,II,III	f,g,i	1	0	0	1
18GE0XP	FM RADIO BROADCASTING TECHNOLOGY	I,II	a,b,c	1	0	0	1