B.E. ELECTRICAL AND ELECTRONICS ENGINEERING
Minimum Credits to be Earned 170.0

First Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EE101	ENGINEERING MATHEMATICS I	-	a,b,c	3	1	0	4
18EE102	ENGINEERING PHYSICS I	-	a,b,i	2	0	2	3
18EE103	ENGINEERING CHEMISTRY I	-	a,b,e	2	0	2	3
18EE104	COMPUTER PROGRAMMING I	-	a,b,c,m	2	0	2	3
18HS101	COMMUNICATIVE ENGLISH I	-	i,j	1	0	2	2
18EE106	ENGINEERING PRACTICES LABORATORY	-	a,b,c,i	0	0	4	2
			Total	10	1	12	17.0

Second Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EE201	ENGINEERING MATHEMATICS II	-	a,b	3	1	0	4
18EE202	ENGINEERING PHYSICS II	-	a,b,i	2	0	2	3
18EE203	ENGINEERING CHEMISTRY II	-	a,b	2	0	2	3
18EE204	BASICS OF CIVIL AND MECHANICAL ENGINEERING	-	a,g	3	0	0	3
	LANGUAGE ELECTIVE	-	-	-	-	-	2
18EE206	ELECTRIC CIRCUIT ANALYSIS	-	a,b,d,e	3	0	2	4
18EE207	ENGINEERING GRAPHICS	-	a,i	1	0	4	3
			Total	14	1	10	22.0

Third Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EE301	ENGINEERING MATHEMATICS III	-	a,b,m	3	1	0	4
18EE302	ELECTRON DEVICES AND CIRCUITS	-	a,b,c,m,n	3	0	0	3
18EE303	ELECTRICAL MACHINES I	-	a,b,d,m,n	3	1	0	4
18EE304	ELECTROMAGNETIC THEORY	-	a,b,m,n	3	1	0	4
18EE305	POWER GENERATION SYSTEMS	-	a,b,f,g,m,n	3	0	0	3
18EE306	COMPUTER PROGRAMMING II	-	a,b,c,m	3	0	2	4
18EE307	ELECTRICAL MACHINES I LABORATORY	-	c,d,m,n	0	0	2	1
18EE308	ELECTRON DEVICES AND CIRCUITS LABORATORY	-	a,b,c,i,j,m,n	0	0	2	1
18GE301	SOFT SKILLS - VERBAL ABILITY	-	-	2	0	0	0
			Total	20	3	6	24.0

Fourth Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EE401	GRAPH THEORY AND PROBABILITY	-	a,b,m	3	1	0	4
18EE402	DIGITAL LOGIC CIRCUITS	-	a,b,c,d,e,m,n	3	1	0	4
18EE403	TRANSMISSION , DISTRIBUTION AND UTILIZATION	-	a,b,m,n	3	0	0	3
18EE404	ELECTRICAL MACHINES II	-	a,b,m,n	3	1	0	4
18EE405	INTEGRATED CIRCUITS AND APPLICATIONS	-	a,b,c,m,n	3	0	0	3
18EE406	PYTHON PROGRAMMING	-	a,b,d	2	0	2	3
18EE407	ELECTRICAL MACHINES II LABORATORY	-	a,b,d,i,m,n	0	0	2	1
18EE408	DIGITAL AND INTEGRATED CIRCUITS LABORATORY	-	a,c,e,i,m,n	0	0	2	1
18HS001	ENVIRONMENTAL SCIENCE	-	a,b	2	0	0	0
18GE401	SOFT SKILLS-REASONING	-	-	2	0	0	0
			Total	21	3	6	23.0

Fifth Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18EE501	POWER SYSTEM ANALYSIS	-	a,b,d,m	3	1	0	4
18EE502	CONTROL SYSTEMS	-	a,b,c,d,m,n	3	1	0	4
18EE503	MEASUREMENT AND INSTRUMENTATION	-	a,b,m,n	3	0	2	4
18EE504	POWER ELECTRONICS	-	a,b,c,m,n	3	0	0	3
	PROFESSIONAL ELECTIVE I	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE II	-	-	-	-	-	3
18EE507	POWER SYSTEM SIMULATION LABORATORY	-	a,e,m	0	0	2	1
18EE508	CONTROL SYSTEMS LABORATORY	-	a,b,c,d,i,m,n	0	0	2	1
18GE501	SOFT SKILLS - APTITUDE I	-	-	0	0	2	0
			Total	12	2	8	23.0

Sixth Semester

Code No.	Course	Objectives &Outcomes	L	T	P	C

		PEOs	POs				
18HS003	PRINCIPLES OF MANAGEMENT	-	-	2	0	0	2
18EE602	MICROCONTROLLERS BASED SYSTEM DESIGN	-	a,c,m,n	3	0	0	3
18EE603	DIGITAL SIGNAL PROCESSING	-	a,b,c,e,m,n	3	1	0	4
18EE604	POWER SYSTEM PROTECTION AND SWITCH GEAR	-	a,b,f,m,n	3	0	0	3
	PROFESSIONAL ELECTIVE III	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IV	-	-	-	-	-	3
18EE607	MICROCONTROLLERS BASED SYSTEM DESIGN LAB	-	a,c,e,i,m,n	0	0	2	1
18EE608	POWER ELECTRONICS LABORATORY	-	a,c,d,i,m,n	0	0	2	1
18GE601	SOFT SKILLS-APTITUDE II	-	-	0	0	2	0
			Total	11	1	6	20.0

Seventh Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18HS002	PROFESSIONAL ETHICS IN ENGINEERING	-	-	2	0	0	2
18EE702	EMBEDDED SYSTEMS	-	b,c,e,g,m,n	3	0	0	3
18EE703	ELECTRICAL MACHINE DESIGN	-	a,b,c,e,m,n	3	1	0	4
18EE704	SOLID STATE DRIVES	-	a,b,c,d,m,n	3	0	2	4
	PROFESSIONAL ELECTIVE V	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE VI	-	-	-	-	-	3
18EE707	EMBEDDED SYSTEMS LABORATORY	-	a,c,e,m,n	0	0	2	1
18EE708	PROJECT WORK I	-	-	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
18EE804	PROJECT WORK II	-	-	0	0	18	9
			Total	0	0	18	18.0

Electives

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
LANGUAGE ELECTIVES							
18HSC01	CHINESE	-	-	1	0	2	2
18HSF01	FRENCH	-	j	1	0	2	2
18HSG01	GERMAN	-	-	1	0	2	2
18HSH01	HINDI	-	-	1	0	2	2
18HSJ01	JAPANESE	-	-	1	0	2	2
DISCIPLINE ELECTIVES							
18EE001	ADVANCED POWER SEMICONDUCTOR DEVICES	-	a,b,c,m,n	3	0	0	3
18EE002	SPECIAL ELECTRICAL MACHINES	-	a,b,m,n	3	0	0	3
18EE003	HIGH VOLTAGE ENGINEERING	-	a,d,m,n	3	0	0	3
18EE004	POWER SYSTEM CONTROL	-	a,b,c,e,m	3	0	0	3
18EE005	POWER QUALITY	-	a,b,c,e,m,n	3	0	0	3
18EE006	ENERGY STORAGE SYSTEMS	-	a,g,m,n	3	0	0	3
18EE007	POWER PLANT INSTRUMENTATION AND CONTROL	-	a,b,e,m,n	3	0	0	3
18EE008	INDUSTRIAL ELECTRONICS	-	a,b,c,d,m,n	3	0	0	3
18EE009	VLSI DESIGN	-	a,b,c,m,n	3	0	0	3
18EE010	ARTIFICIAL INTELLIGENCE TECHNIQUES	-	a,b,d,m,n	3	0	0	3
18EE011	COMPUTER AIDED DESIGN OF ELECTRICAL APPARATUS	-	a,b,c,m,n	3	0	0	3
18EE012	BIO MEDICAL INSTRUMENTATION	-	a,e,f,m,n	3	0	0	3
18EE013	ADVANCED CONTROL SYSTEMS	-	a,b,m,n	3	0	0	3
18EE014	ELECTRICAL AND HYBRID VEHICLES	-	a,b,c,m,n	3	0	0	3
18EE015	SMART GRID TECHNOLOGIES	-	a,e,m	3	0	0	3
18EE016	FLEXIBLE AC TRANSMISSION SYSTEMS	-	a,b,c,m,n	3	0	0	3
18EE017	ILLUMINATION ENGINEERING	-	a,b,c,m,n	3	0	0	3
18EE018	ENERGY AUDITING	-	a,b,g,m,n	3	0	0	3
18EE019	RENEWABLE ENERGY SOURCES	-	c,f,g,n	3	0	0	3
18EE027	SIGNALS AND SYSTEMS	-	a,b,e,m,n	3	0	0	3
18EE028	WIND AND SOLAR ENERGY CONVERSION SYSTEM	-	-	3	0	0	3
18EE029	INTEGRATION OF SCIENCE AND TECHNOLOGY IN INDUSTRY 4.0	-	a,b,c,d,e,m	3	0	0	3
18EE031	POWER SYSTEM FOR ELECTRIC VEHICLE	-	a,b,c,m,n	3	0	0	3

ONE CREDIT COURSES							
18EE0XA	EMBEDDED CONTROL OF ELECTRIC DRIVES	-	a,c,d	0	0	0	1
18EE0XB	DESIGN OF EMBEDDED SYSTEM FOR DC MOTOR CONTROL	-	a,b,c,d	0	0	0	1
18EE0XC	INDUSTRIAL AUTOMATION	-	a,e,f,g,k	0	0	0	1
18EE0XD	QUALITY MANAGEMENT SYSTEM	-	-	0	0	0	1
18EE0XE	PRODUCT LIFECYCLE MANAGEMENT	-	g,k	0	0	0	1
18EE0XF	APPLICATIONS OF SYNCHRONOUS GENERATOR IN INDUSTRIES	-	a,c,d,e	0	0	0	1
18EE0XG	REACTIVE POWER MANAGEMENT AND ENERGY STORAGE DEVICES	-	a,c,d	0	0	0	1
18EE0XH	SUBSTATION DESIGN	-	a,b	0	0	0	1
18EE0XI	DESIGN OF GRID TIED SOLAR PV SYSTEM	-	-	0	0	0	1
18EE0XJ	DESIGN OF INDOOR AND OUTDOOR LIGHTING USING DIALUX	-	a,c,d,e	0	0	0	1
OPEN ELECTIVES							
18EE0YA	ENERGY CONSERVATION AND MANAGEMENT	-	a,b,g,i,k	3	0	0	3
18EE0YB	ELECTRICAL SAFETY	-	f,g,m,n	3	0	0	3
18EE0YC	INDUSTRIAL DRIVES AND CONTROL	-	b,c,e,m,n	3	0	0	3
18GE0C1	CORROSION SCIENCE AND ENGINEERING	-	a,b,g	3	0	0	3
18GE0C2	ENERGY STORING DEVICES	-	a,b	3	0	0	3
18GE0C3	POLYMER SCIENCE	-	a,b,c	3	0	0	3
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
ADDITIONAL ONE CREDIT COURSE							
18GE0XA	ETYMOLOGY	-	-	1	0	0	1
18GE0XB	GENERAL PSYCHOLOGY	-	-	1	0	0	1
18GE0XC	NEURO BEHAVIORAL SCIENCE	-	i	1	0	0	1
18GE0XD	VISUAL MEDIA AND FILM MAKING	-	b,f	1	0	0	1
18GE0XE	YOGA FOR HUMAN EXCELLENCE	-	-	1	0	0	1
18GE0XF	VEDIC MATHEMATICS	-	-	1	0	0	1
18GE0XG	HEALTH AND FITNESS	-	-	1	0	0	1
18GE0XH	CONCEPT, METHODOLOGY AND APPLICATIONS OF VERMICOMPOSTING	-	-	1	0	0	1
18GE0XI	BLOG WRITING	-	f,g,j	1	0	0	1
18GE0XJ	INTERPERSONAL SKILLS	-	-	1	0	0	1
18GE0XK	NEW AGE INNOVATION AND ENTREPRENEURSHIP	-	-	1	0	0	1
18GE0XL	NATIONAL CADET CORPS	-	g,i	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	-	i	1	0	0	1
18GE0XP	FM RADIO BROADCASTING TECHNOLOGY	-	-	1	0	0	1
DISCIPLINE ELECTIVES							
18EE020	AUTOMOTIVE ELECTRONICS	-	a,c,e,m	3	0	0	3
18EE021	COMPUTER NETWORKING	-	a,b,c,m	3	0	0	3
18EE022	INTERNET OF THINGS	-	a,b,c,d,e,m	3	0	0	3
18EE023	DIGITAL IMAGE PROCESSING	-	c,d,e,m,n	3	0	0	3
18EE024	COMMUNICATION ENGINEERING	-	a,b,c,m	3	0	0	3
18EE025	AUTOMATION AND CONTROL	-	a,b,c,m	3	0	0	3
18EE026	SIGNALS AND SYSTEMS	-	a,b,m	3	0	0	3
18EE030	ELECTRIC VEHICLE CHARGING TECHNOLOGY	-	a,b,c,m	3	0	0	3
LANGUAGE ELECTIVES							
18HS201	COMMUNICATIVE ENGLISH II	-	i,j	1	0	2	2
OPEN ELECTIVES							
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
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
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
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