B.E. INFORMATION SCIENCE AND ENGINEERING
Minimum Credits to be Earned 196.0

First Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
19IS101	ENGINEERING MATHEMATICS I	I,II	a,b	3	1	0	4
19IS102	ENGINEERING PHYSICS I	I,II,III	a,b,i	2	0	2	3
19IS103	ENGINEERING CHEMISTRY I	I,II	a,b,g	2	0	2	3
19IS104	COMPUTER PROGRAMMING	I,II	a,b,c	2	0	2	3
19HS101	COMMUNICATIVE ENGLISH I	-	-	1	0	2	2
19IS106	BASICS OF ELECTRICAL AND ELECTRONICS ENGINEERING	I,II	a,b,c,d,l	2	0	2	3
			Total	12	1	10	18.0

Second Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
19IS201	ENGINEERING MATHEMATICS II	I,II	a,b	3	1	0	4
19IS202	ENGINEERING PHYSICS II	I,II,III	a,b,i	2	0	2	3
19IS203	ENGINEERING CHEMISTRY II	I,II	a,b,g	2	0	2	3
19IS204	PROBLEM SOLVING AND PROGRAMMING USING PYTHON	I,II	a,b,c	3	0	2	4
	LANGUAGE ELECTIVE	-	-	-	-	-	2
19IS206	DIGITAL SYSTEM DESIGN	I,II	a,b,c	3	0	2	4
19IS207	ENGINEERING GRAPHICS	I,II,III	a,i	1	0	4	3
			Total	14	1	12	23.0

Third Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
19IS301	PROBABILITY AND STATISTICS	I,II	a,b	3	1	0	4
19IS302	COMPUTER ARCHITECTURE	I,II	a,b,c	3	0	0	3
19IS303	DATA STRUCTURES AND ALGORITHMS	I,II	a,b,c	3	0	0	3
19IS304	OBJECT ORIENTED PROGRAMMING	I,II	a,b,c,e	2	0	2	3
19IS305	DATABASE MANAGEMENT SYSTEMS	I,II	a,b,c,e	3	0	0	3
19IS306	WEB TECHNOLOGY	I,II	a,c,e,f	2	0	2	3
19IS307	DATA STRUCTURES AND ALGORITHMS LABORATORY	I,II	e,m	0	0	4	2
19IS308	DATABASE MANAGEMENT SYSTEMS LABORATORY	I,II	a,b,c,e,m,n	0	0	4	2
18GE301	SOFT SKILLS - VERBAL ABILITY	-	-	2	0	0	0
			Total	18	1	12	23.0

Fourth Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
19IS401	FORMAL LANGUAGES AND AUTOMATA THEORY	I,II	a,b,c	3	1	0	4
19IS402	DESIGN AND ANALYSIS OF ALGORITHMS	I,II	a,b,c	3	0	0	3
19IS403	OPERATING SYSTEMS	I,II	a,b,e	3	0	0	3
19IS404	JAVA PROGRAMMING	I,II	a,b,c	3	0	0	3
19IS405	INFORMATION STORAGE AND RETRIEVAL	I,II	a,c,e	3	0	0	3
19IS406	SOFTWARE ENGINEERING	I,II	a,b,c	3	0	0	3
19IS407	OPERATING SYSTEMS LABORATORY	I,II	a,b,e	0	0	4	2
19IS408	JAVA PROGRAMMING LABORATORY	I,II	a,b,c	0	0	4	2
18HS001	ENVIRONMENTAL SCIENCE	-	-	2	0	0	0
18GE401	SOFT SKILLS-REASONING	-	-	2	0	0	0
			Total	22	1	8	23.0

Fifth Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
21IS501	COMPILER DESIGN	-	-	3	1	0	4
21IS502	MICROPROCESSORS AND MICROCONTROLLER	-	-	3	0	2	4
21IS503	DATA MINING	-	-	3	0	0	3
21IS504	COMPUTER NETWORKS	-	-	3	0	0	3
21IS507	DATA MINING LABORATORY	-	-	0	0	4	2
21IS508	COMPUTER NETWORKS LABORATORY	-	-	0	0	4	2
21IS038	OPEN STACK ESSENTIALS	-	-	3	0	0	3
21IS041	DIGITAL MARKETING	-	-	3	0	0	3
21GE501	SOFT SKILLS A?? APTITUDE I	-	-	0	0	2	0
19IS501	COMPILER DESIGN	I,II	b,c,e	3	1	0	4
19IS502	MICROPROCESSORS AND MICROCONTROLLER	I,II	a,e	3	0	2	4
19IS503	DATA MINING	I,II	a	3	0	0	3

19IS504	COMPUTER NETWORKS	I,II	e,g	3	0	0	3
	PROFESSIONAL ELECTIVE I	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE II	-	-	-	-	-	3
19IS507	DATA MINING LABORATORY	I,II	a	0	0	4	2
19IS508	COMPUTER NETWORKS LABORATORY	I,II	e,g	0	0	4	2
18GE501	SOFT SKILLS - APTITUDE I	-	-	0	0	2	0
	Total			30	2	24	48.0

Sixth Semester

Code No.	Course	Objectives &Outcomes PEOs	Objectives &Outcomes POs	L	T	P	C
18HS003	PRINCIPLES OF MANAGEMENT	-	-	2	0	0	2
19IS602	BIG DATA ANALYTICS	I,II	a,b,c,d,e	3	0	0	3
19IS603	CLOUD INFRASTRUCTURE AND SERVICES	I,II	c,e	3	0	0	3
19IS604	VISUALIZATION TECHNIQUES	I,II	c,e	3	0	0	3
	PROFESSIONAL ELECTIVE III	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IV	-	-	-	-	-	3
19IS607	CLOUD INFRASTRUCTURE AND SERVICES LABORATORY	I,II	c	0	0	4	2
19IS608	VISUALIZATION TECHNIQUES LABORATORY	I,II	c,e	0	0	4	2
18GE601	SOFT SKILLS-APTITUDE II	-	-	0	0	2	0
	Total			11	0	10	21.0

Seventh Semester

Code No.	Course	Objectives &Outcomes PEOs	Objectives &Outcomes POs	L	T	P	C
18HS002	PROFESSIONAL ETHICS IN ENGINEERING	-	-	2	0	0	2
19IS702	MACHINE LEARNING	-	-	3	0	0	3
19IS703	INTERNET OF THINGS	-	-	3	0	0	3
19IS704	INFORMATION SECURITY	-	-	3	0	0	3
	PROFESSIONAL ELECTIVE V	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE VI	-	-	-	-	-	3
19IS707	MACHINE LEARNING LABORATORY	-	-	0	0	4	2
19IS708	PROJECT WORK I	-	-	0	0	6	3
	Total			11	0	10	22.0

Eight Semester

Code No.	Course	Objectives &Outcomes PEOs	Objectives &Outcomes POs	L	T	P	C
	PROFESSIONAL ELECTIVE VII	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE VIII	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IX	-	-	-	-	-	3
19IS804	PROJECT WORK II	-	-	0	0	18	9
	Total			0	0	18	18.0

Electives

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

LANGUAGE ELECTIVES

Code No.	Course	PEOs	POs	L	T	P	C
18HS201	COMMUNICATIVE ENGLISH II	-	-	1	0	2	2
18HSC01	CHINESE	-	-	1	0	2	2
18HSF01	FRENCH	-	-	1	0	2	2
18HSG01	GERMAN	-	-	1	0	2	2
18HSH01	HINDI	-	-	1	0	2	2
18HSJ01	JAPANESE	-	-	1	0	2	2

DISCIPLINE ELECTIVES

Code No.	Course	PEOs	POs	L	T	P	C
19IS001	AGILE SOFTWARE DEVELOPMENT	I,II	a,b,c	3	0	0	3
19IS002	COMPUTATIONAL INTELLIGENCE	I,II	a,b,c	3	0	0	3
19IS003	SOCIAL NETWORK ANALYSIS	I,II	a,b,c,d,e,f	3	0	0	3
19IS004	INFORMATION CODING TECHNIQUES	I,II	a,b,c	3	0	0	3
19IS005	DIGITAL MARKETING	I,II	b,d,e	3	0	0	3
19IS006	OPEN SOURCE SOFTWARE	I,II	b,g	3	0	0	3
19IS007	COMPUTER VISION	I,II	a,b,c	3	0	0	3
19IS008	NATURAL LANGUAGE PROCESSING	I,II	a,b,c,d,m	3	0	0	3
19IS009	COMPUTER GRAPHICS	I,II	a,b,c,d	3	0	0	3
19IS010	ROBOTICS PROCESS AUTOMATION	I,II	c,d,e,f	3	0	0	3
19IS011	STREAMING ANALYTICS	I,II	b,c,d	3	0	0	3
19IS012	DATA COMPRESSION	I,II	a,b,c,d,e	3	0	0	3
19IS013	EMBEDDED SYSTEMS	I,II	a,c,d	3	0	0	3
19IS014	OPEN STACK ESSENTIALS	I,II	b,c,d,n	3	0	0	3

Code	Title			L	T	P	C
19IS015	DEEP LEARNING	I,II	a,b,d,e,m	3	0	0	3
19IS017	INFORMATION STORAGE AND MANAGEMENT	-	-	3	0	0	3
19IS0YA	WEB PROGRAMMING	I,II	a,c,e,f	3	0	0	3
ONE CREDIT COURSES							
18CS0XL	STATISTICAL ANALYSIS USING R	-	-	0	0	0	1
18IT0XC	LARAVEL: A PHP FRAMEWORK	-	-	1	0	0	1
19IS0XC	PROJECT MANAGEMENT TOOLS AND TECHNIQUES	I,II	e	1	0	0	1
19IS0XD	GAME PROGRAMMING	I,II	e	1	0	0	1
19IS0XE	SALESFORCE APP BUILDER FUNDAMENTALS	I,II	e	1	0	0	1
OPEN ELECTIVES							
18GE0C1	CORROSION SCIENCE AND ENGINEERING	-	-	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	-	-	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	-	-	1	0	0	1
18GE0XD	VISUAL MEDIA AND FILM MAKING	-	-	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	-	-	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	-	-	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
ONE CREDIT COURSES							
19IS0XA	FULL STACK DEVELOPMENT	I,II	c,e	1	0	0	1
19IS0XB	GRAPHICAL PROCESSING UNIT PROGRAMMING	I,II	c,e	1	0	0	1
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
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
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