

B.Tech. INFORMATION TECHNOLOGY
Minimum Credits to be Earned 173.0

First Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
18IT101	ENGINEERING MATHEMATICS I	I,II,IV	a,b	3	1	0	4
18IT102	ENGINEERING PHYSICS I	I,II,III,IV	a,b,i	2	0	2	3
18IT103	ENGINEERING CHEMISTRY I	I,II,III,IV	a,b,g	2	0	2	3
18IT104	COMPUTER PROGRAMMING I	I,II,IV	a,b,d,m	2	0	2	3
18HS101	COMMUNICATIVE ENGLISH I	I,II,III,IV	i,j	1	0	2	2
18IT106	HARDWARE ASSEMBLING AND SOFTWARE TOOLS LABORATORY	I,II,III,IV	a,b,e	0	0	4	2
Total				10	1	12	17.0

Second Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
18IT201	ENGINEERING MATHEMATICS II	I,II,IV	a,b	3	1	0	4
18IT202	ENGINEERING PHYSICS II	I,II,III,IV	a,b,i	2	0	2	3
18IT203	ENGINEERING CHEMISTRY II	I,II,III,IV	a,b,g	2	0	2	3
18IT204	COMPUTER PROGRAMMING II	I,II,III,IV	a,b,c,d,e,m	2	0	2	3
	LANGUAGE ELECTIVE	-	-	-	-	-	2
18IT206	BASICS OF ELECTRICAL AND ELECTRONICS ENGINEERING	I,II,III,IV	a,b,c	2	0	2	3
18IT207	ENGINEERING GRAPHICS	I,II,III,IV	a,b,i	1	0	4	3
Total				12	1	12	21.0

Third Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
18IT301	ENGINEERING MATHEMATICS III	I,II,IV	a,b	3	1	0	4
18IT302	DIGITAL SYSTEM DESIGN	I,II,III,IV	a,b,c	3	1	0	4
18IT303	COMPUTER ORGANIZATION AND ARCHITECTURE	I,II,III,IV	a,b,c,h,i	3	0	0	3
18IT304	DATA STRUCTURES AND ALGORITHMS	I,II,III,IV	a,b,c,d	3	0	0	3
18IT305	OBJECT ORIENTED PROGRAMMING WITH CPP and JAVA	I,II,III,IV	b,c,e,m,n	2	0	2	3
18IT306	SOFTWARE ENGINEERING	I,II,III,IV	a,b,c,d,e,k,l	3	0	0	3
18IT307	DIGITAL SYSTEM DESIGN LABORATORY	I,II,IV	a,b	0	0	2	1
18IT308	DATA STRUCTURES AND ALGORITHMS LABORATORY	I,II,III,IV	a,b,c,d,f,i,m	0	0	2	1
18GE301	SOFT SKILLS - VERBAL ABILITY	-	-	2	0	0	0
Total				19	2	6	22.0

Fourth Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
18IT401	ENGINEERING MATHEMATICS IV	I,II,IV	a,b	3	1	0	4
18IT402	DATABASE MANAGEMENT SYSTEMS	I,II,III,IV	a,b,c,e,h	3	1	0	4
18IT403	WEB TECHNOLOGY	I,II,III,IV	a,b,c,e,m,n	2	0	2	3
18IT404	PRINCIPLES OF COMMUNICATION	I,II,III,IV	a,b,c	3	0	0	3
18IT405	SYSTEM SOFTWARE	I,II,III,IV	a,b,c,d	3	1	0	4
18IT406	COMPUTER NETWORKS	I,II,III,IV	a,b,c,d,e,k	3	0	0	3
18IT407	DATABASE MANAGEMENT SYSTEMS LABORATORY	I,II,III,IV	a,b,c,d,e,n	0	0	2	1
18IT408	COMPUTER NETWORKS LABORATORY	I,II,III,IV	a,b,c,k,l,m	0	0	2	1
18HS001	ENVIRONMENTAL SCIENCE	I,II,IV	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				
21IT501	CLOUD COMPUTING	-	-	3	0	0	3
18IT501	CLOUD COMPUTING	I,II,III,IV	a,c,d,e,i	3	0	0	3
18IT502	OPERATING SYSTEMS	I,II,III,IV	a,b,c	3	1	0	4
18IT503	COMPUTATIONAL THEORY AND COMPILERS	I,II,III,IV	a,b,c,l	3	1	0	4
18IT504	DIGITAL SIGNAL PROCESSING	I,II,III,IV	a,b,c	3	0	2	4
	PROFESSIONAL ELECTIVE I	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE II	-	-	-	-	-	3
18IT507	CLOUD COMPUTING LABORATORY	I,II,III,IV	a,b,c,m,n	0	0	2	1
18IT508	OPERATING SYSTEMS LABORATORY	I,II,III,IV	b,c,e,m	0	0	2	1
18GE501	SOFT SKILLS - APTITUDE I	-	-	0	0	2	0
Total				15	2	8	26.0

Sixth Semester

Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18HS003	PRINCIPLES OF MANAGEMENT	-	-	2	0	0	2
18IT602	ARTIFICIAL INTELLIGENCE	I,II,III,IV	a,b,c,d,e,f,i,l	3	1	0	4
18IT603	INFORMATION CODING TECHNIQUES	I,II,III,IV	a,b,c	3	1	0	4
18IT604	DATA MINING AND WAREHOUSING	I,II,III,IV	a,c,e,f,l	3	1	0	4
	PROFESSIONAL ELECTIVE III	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IV	-	-	-	-	-	3
18IT607	ARTIFICIAL INTELLIGENCE LABORATORY	I,II,III,IV	a,c,e,f,l	0	0	2	1
18IT608	DATA MINING AND WAREHOUSING LABORATORY	I,II,III,IV	a,b,c,d,e,j,n	0	0	2	1
18GE601	SOFT SKILLS-APTITUDE II	-	-	0	0	2	0
Total				11	3	6	22.0
Seventh Semester							
Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18HS002	PROFESSIONAL ETHICS IN ENGINEERING	-	-	2	0	0	2
18IT702	INTERNET OF THINGS	I,II,III,IV	a,b,c,k	3	0	2	4
18IT703	DESIGN AND ANALYSIS OF ALGORITHMS	I,II,III,IV	a,b,c,d	3	1	0	4
18IT704	INFORMATION SECURITY	I,II,III,IV	a,b,c,d,e,j,k,l	3	1	0	4
	PROFESSIONAL ELECTIVE V	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE VI	-	-	-	-	-	3
18IT707	DESIGN AND ANALYSIS OF ALGORITHMS LABORATORY	I,II,III,IV	a,b,c	0	0	2	1
18IT708	PROJECT WORK I	-	-	0	0	6	3
Total				11	2	10	24.0
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
18IT804	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				
CORE-THEORY							
18IT031	PROFESSIONAL READINESS FOR INNOVATION, EMPLOYABILITY AND ENTREPRENEURSHIP	-	-	3	0	0	3
LANGUAGE ELECTIVES							
18HSC01	CHINESE	-	-	1	0	2	2
18HSF01	FRENCH	I,II,IV	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							
18IT001	GAME PROGRAMMING	I,II,III,IV	a,b,c,d,e	3	0	0	3
18IT002	MOBILE APPLICATION DEVELOPMENT	I,II,III,IV	a,b,c,e	3	0	0	3
18IT003	INTERNET SECURITY AND COMPUTER FORENSICS	I,II,III,IV	b,c,f,h	3	0	0	3
18IT004	CRYPTOGRAPHY	I,II,III,IV	a,b,c,e,f,j,k	3	0	0	3
18IT005	PARALLEL PROGRAMMING USING OPENCL	I,II,III,IV	b,c,d,e	3	0	0	3
18IT006	DATA COMPRESSION	I,II,III,IV	a,b,c,d,e	3	0	0	3
18IT007	TEXT MINING	I,II,III,IV	a,b,c	3	0	0	3
18IT008	COMPUTER GRAPHICS	I,II,III,IV	a,b,c,d,e,f,i	3	0	0	3
18IT009	SOFTWARE TESTING	I,II,III,IV	a,b,c,d,e	3	0	0	3
18IT010	FUNDAMENTALS OF VIRTUALIZATION	I,II,III,IV	a,b,c,d,e	3	0	0	3
18IT011	MANAGEMENT INFORMATION SYSTEMS	I,II,III,IV	b,c,f,h	3	0	0	3
18IT012	MULTIMEDIA TOOLS AND APPLICATIONS	I,II,III,IV	a,b,c,e	3	0	0	3
18IT013	INFORMATION STORAGE MANAGEMENT	I,II,III,IV	a,b,c,e,f	3	0	0	3
18IT014	DEEP LEARNING	I,II,III,IV	a,b,c,d,e,l	3	0	0	3
18IT015	COMPUTER ANIMATION: ALGORITHMS AND TECHNIQUES	I,II,III,IV	a,b,c,e	3	0	0	3
18IT016	HIGH PERFORMANCE COMPUTING	I,II,III,IV	a,b,c	3	0	0	3
18IT017	SOCIAL NETWORK ANALYTICS	I,II,III,IV	a,b,d,e,f,j	3	0	0	3
18IT018	LINUX ADMINISTRATION	I,II,III,IV	a,b,c,e	3	0	0	3
18IT019	STREAMING ANALYTICS	I,II,III,IV	b,c,d	3	0	0	3
18IT020	PERVASIVE COMPUTING	I,II,III,IV	a,b,c,d,e	3	0	0	3
18IT021	STORAGE MANAGEMENT ESSENTIALS	I,II,III,IV	a,b,c,d,e	3	0	0	3

18IT022	CLOUD MANAGEMENT SERVICES	I,II,III,IV	a,b,c,d,e,h	3	0	0	3
18IT023	ENTERPRISE SOFTWARE SYSTEMS	I,II,III,IV	a,b,c,d,e,f,g,h, i,j,k,l,m,n	3	0	0	3
18IT024	DOCKER MANAGEMENT SERVICES	I,II,III,IV	c,d,e	3	0	0	3
18IT025	COMPUTER VISION AND IMAGE PROCESSING	I,II,III,IV	a,b,c,d,e	3	0	0	3
18IT026	WEB FRAMEWORKS	I,II,III,IV	a,c,e,m	3	0	0	3
18IT027	AGILE SOFTWARE DEVELOPMENT	I,II,III,IV	b,c,d,e,h	3	0	0	3
ONE CREDIT COURSES							
18IT0XA	ANGULAR JS	I,II,III,IV	a,c,e,k	1	0	0	1
18IT0XB	NODEJS	I,II,III,IV	a,b,c,d,e	1	0	0	1
18IT0XC	LARAVEL: A PHP FRAMEWORK	I,II,III,IV	a,b,d,e	1	0	0	1
18IT0XF	FULL STACK DEVELOPMENT-MEAN STACK	-	-	1	0	0	1
18IT0XG	ROBOTIC PROCESS AUTOMATION	-	-	1	0	0	1
18IT0XJ	JOOMLA WEB DEVELOPMENT	-	-	1	0	0	1
OPEN ELECTIVES							
18GE0C1	CORROSION SCIENCE AND ENGINEERING	I,II,III,IV	a,b,g	3	0	0	3
18GE0C2	ENERGY STORING DEVICES	I,II,IV	a,b	3	0	0	3
18GE0C3	POLYMER SCIENCE	I,II,III,IV	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
18IT0YA	DATABASE MANAGEMENT SYSTEMS	I,II,III,IV	a,c,d,e	3	0	0	3
18IT0YB	DATA STRUCTURES AND ALGORITHMS	I,II,III,IV	a,b,c,e,g	3	0	0	3
18IT0YC	DATA SCIENCES AND ANALYTICS	I,II,III,IV	a,b,c,d,e	3	0	0	3
18IT0YD	OBJECT ORIENTED PROGRAMMING	I,II,III,IV	a,b,c,d,e	3	0	0	3
18IT0YE	ARTIFICIAL INTELLIGENCE	I,II,III,IV	a,b,c,d,e,f,h,k	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	III	i	1	0	0	1
18GE0XD	VISUAL MEDIA AND FILM MAKING	I,II,III,IV	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	I,II,III,IV	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	III	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	III	i	1	0	0	1
ONE CREDIT COURSES							
18IT0XD	TABLEAU FOR BUSINESS INTELLIGENCE	I,II,III,IV	a,b,c,d	1	0	0	1
18IT0XE	BLOCKCHAIN	I,II,III,IV	a,b,c	1	0	0	1
18IT0XH	AGILE PROJECT METHODOLOGY SCRUM	-	-	1	0	0	1
18IT0XI	UIPATH	-	-	1	0	0	1
18IT0XK	DRUPAL WEB DEVELOPMENT	-	-	1	0	0	0
LANGUAGE ELECTIVES							
18HS201	COMMUNICATIVE ENGLISH II	I,II,III,IV	i,j	1	0	2	2
OPEN ELECTIVES							
18AE0YA	NON-DESTRUCTIVE TESTING	I,II,III,IV	b,c,d	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
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

