

B.Tech. COMPUTER TECHNOLOGY
Minimum Credits to be Earned 167.0

First Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
19CT101	ENGINEERING MATHEMATICS I	I,II	a,b	3	1	0	4
19CT102	ENGINEERING PHYSICS I	I,II,III	a,b,i	2	0	2	3
19CT103	ENGINEERING CHEMISTRY I	I,II	a,b,g	2	0	2	3
19CT104	COMPUTER PROGRAMMING	I,II	a,b,c,e	2	0	2	3
19HS101	COMMUNICATIVE ENGLISH I	I,II,III	i,j	1	0	2	2
19CT106	BASICS OF ELECTRICAL AND ELECTRONICS ENGINEERING	I,II,III	a,i	2	0	2	3
19CT107	PC HARDWARE AND TROUBLESHOOTING	I,II	a,b,e	0	0	2	1
Total				12	1	12	19.0

Second Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
19CT201	ENGINEERING MATHEMATICS II	I,II	a,b	3	1	0	4
19CT202	ENGINEERING PHYSICS II	I,II,III	a,b,i	2	0	2	3
19CT203	ENGINEERING CHEMISTRY II	I,II	a,b,g	2	0	2	3
19CT204	PROBLEM SOLVING AND PROGRAMMING USING PYTHON	I,II	a,b,c	3	0	2	4
	LANGUAGE ELECTIVE	-	-	-	-	-	2
19CT206	DIGITAL SYSTEM DESIGN	I,II	a,b,c	3	0	2	4
19CT207	ENGINEERING GRAPHICS	I,II,III	a,i,m	1	0	4	3
Total				14	1	12	23.0

Third Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
19CT301	ENGINEERING MATHEMATICS III	I,II	a,b	3	1	0	4
19CT302	COMPUTER ORGANIZATION AND ARCHITECTURE	I,II	a,b,c	3	0	0	3
19CT303	DATA STRUCTURES AND ALGORITHMS	I,II	a,b,c	3	0	0	3
19CT304	DATABASE TECHNOLOGY	I,II	a,b,c,e	3	0	0	3
19CT305	OPERATING SYSTEMS	I,II	a,c,e	3	1	0	4
19CT306	JAVA PROGRAMMING	I,II	a,b,c	2	0	4	4
19CT307	DATA STRUCTURES AND ALGORITHMS LABORATORY	I,II	e	0	0	4	2
19CT308	DATABASE TECHNOLOGY LABORATORY	I,II	a,b,c,e	0	0	4	2
18GE301	SOFT SKILLS - VERBAL ABILITY	-	-	2	0	0	0
Total				19	2	12	25.0

Fourth Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
19CT402	ANALYSIS OF ALGORITHMS	I,II	a,b,c	3	1	0	4
19CT403	THEORY OF COMPUTATION	I,II	a,b,c	3	1	0	4
19CT404	SOFTWARE ENGINEERING	I,II	a,b,c	3	0	0	3
19CT406	COMPUTER NETWORKS	I,II	e,g	3	0	2	4
18GE401	SOFT SKILLS-REASONING	-	-	2	0	0	0
18HS001	ENVIRONMENTAL SCIENCE	-	-	2	0	0	0
19CT401	PROBABILITY AND STATISTICS	I,II	a,b	3	1	0	4
19CT405	MICROPROCESSORS AND MICROCONTROLLERS	I,II	b,e	3	0	0	3
19CT407	MICROPROCESSORS AND MICROCONTROLLERS LABORATORY	I,II,III	a,b,c,e,g,h,i	0	0	4	2
Total				22	3	6	24.0

Fifth Semester

Code No.	Course	Objectives & Outcomes		L	T	P	C
		PEOs	POs				
19CT501	COMPILER DESIGN	I,II	b,c,e	3	1	0	4
19CT502	WEB TECHNOLOGY	I,II	a,c,e,f,m	2	0	0	2
19CT503	EMBEDDED SYSTEMS	I,II	a,c,d	3	0	2	4
19CT504	ARTIFICIAL INTELLIGENCE	I,II	a,b,c	3	0	0	3
	PROFESSIONAL ELECTIVE I	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE II	-	-	-	-	-	3
19CT507	WEB TECHNOLOGY LABORATORY	I,II	a,c,e,f,m	0	0	2	1
19CT508	ARTIFICIAL INTELLIGENCE LABORATORY	I,II	a,b,c	0	0	2	1
18GE501	SOFT SKILLS - APTITUDE I	-	-	0	0	2	0
Total				11	1	8	21.0

Sixth Semester

Code No.	Course	Objectives & Outcomes	L	T	P	C
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		Objectives &Outcomes					
		PEOs	POs				
18HS003	PRINCIPLES OF MANAGEMENT	-	-	2	0	0	2
19CT602	MACHINE LEARNING TECHNIQUES	-	-	2	1	0	3
19CT603	SECURITY IN COMPUTING	-	-	2	0	0	2
19CT604	PARALLEL AND DISTRIBUTED COMPUTING	-	-	3	0	0	3
	PROFESSIONAL ELECTIVE III	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE IV	-	-	-	-	-	3
19CT607	MACHINE LEARNING LABORATORY	-	-	0	0	2	1
19CT608	SECURITY LABORATORY	-	-	0	0	2	1
18GE601	SOFT SKILLS-APTITUDE II	-	-	0	0	2	0
Total				9	1	6	18.0
Seventh Semester							
Code No.	Course	Objectives &Outcomes		L	T	P	C
		PEOs	POs				
18HS002	PROFESSIONAL ETHICS IN ENGINEERING	-	-	2	0	0	2
19CT702	DATA SCIENCE	-	-	2	0	0	2
19CT703	BLOCKCHAIN TECHNOLOGY	-	-	2	0	0	2
19CT704	CLOUD COMPUTING TECHNIQUES	-	-	2	0	0	2
	PROFESSIONAL ELECTIVE V	-	-	-	-	-	3
	PROFESSIONAL ELECTIVE VI	-	-	-	-	-	3
19CT707	BLOCKCHAIN TECHNOLOGY LABORATORY	-	-	0	0	2	1
19CT708	CLOUD COMPUTING LABORATORY	-	-	0	0	2	1
19CT709	PROJECT WORK I	-	-	0	0	6	3
Total				8	0	10	19.0
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
19CT804	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							
21CT501	COMPILER DESIGN	-	-	3	1	0	4
21CT502	WEB TECHNOLOGY	-	-	3	1	0	4
21CT504	ARTIFICIAL INTELLIGENCE	-	-	3	0	0	3
CORE-LABORATORY							
21CT507	WEB TECHNOLOGY LABORATORY	-	-	0	0	2	1
21CT508	ARTIFICIAL INTELLIGENCE LABORATORY	-	-	0	0	2	1
LANGUAGE ELECTIVES							
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							
19CT008	SOFTWARE TESTING	-	-	3	0	0	3
19CT009	XML AND WEB SERVICES	-	-	3	0	0	3
19CT010	SOCIAL NETWORK ANALYSIS	-	-	3	0	0	3
19CT014	NOSQL DATABASE	-	-	3	0	0	3
19CT023	ETHICAL HACKING	-	-	3	0	0	3
19CT024	DATA MINING AND DATA WAREHOUSING	-	-	0	0	0	3
19CT026	HUMAN COMPUTER INTERACTION	-	-	3	0	0	3
19CT027	CYBER FORENSICS	-	-	3	0	0	3
21CT007	AGILE SOFTWARE DEVELOPMENT	-	-	3	0	0	3
21CT008	UI AND UX DESIGN	-	-	3	0	0	3
21CTH01	EXPLORATORY DATA ANALYSIS	-	-	2	0	2	3
21CTH02	RECOMMENDED SYSTEMS	-	-	3	0	0	3
ONE CREDIT COURSES							
19CT0XA	GRAPHQL USING REST API	-	-	1	0	0	1

19CT0XB	COMPUTER VISION	-	-	1	0	0	1
19CT0XC	GAME PROGRAMMING	-	-	1	0	0	1
SPECIAL COURSES							
21GE501	SOFT SKILLS A?? APTITUDE I	-	-	0	0	2	0
OPEN ELECTIVES							
	LANGUAGE ELECTIVE	-	-	3	0	0	3
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
18GE0XP	FM RADIO BROADCASTING TECHNOLOGY	-	-	1	0	0	1
DISCIPLINE ELECTIVES							
19CT020	OPEN SOURCE TECHNOLOGY	-	-	0	0	0	3
ONE CREDIT COURSES							
18CS0XF	SCRIPTING LANGUAGES	-	-	1	0	0	1
18CS0XG	RASPBERRY PI	-	-	1	0	0	1
18CS0XK	TENSOR FLOW	-	-	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

