

Details of Courses for Semester-II, 2022-23 (UG)

B.Tech Semester-II

Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
NS103a	Mathematics II	3-2-0-4	NS	MKP+LKB+DM	other then CSE
NS103b	Mathematics II	3-2-0-4	NS	BG+SSL+NKM	for CSE only
NS1004	Physics II	3-1-2-4	NS	AKK + NRJ + ACM	
HS1002	Indian Culture, Ethics and Human Values	2-2-0-3	LA	MA+JAMF	
DS1005	Engineering Graphics	2-0-3-3	ME	TC+PKJ	for CSE only
ES1002	Basic Electronics	3-0-2-4	ECE	PS+KD	other then CSE
ES1002	Basic Electronics (Lab) Tentative		ECE	KD*+AtulK+PS+AK	
ES1003	Innovation Theory and Practice	1-0-2-2	IA		

B.Des Semester-II

Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
DS1006	Design Fundamentals 2	3-0-0-3	DS	VF	
DS1007	Introduction to Ergonomics in Design	3-0-0-3	DS	SP	
DS1008	Software Skills	0-0-3-2	DS	VF	
ES1002	Basic Electronics	3-0-2-4	ECE	PS+KD	other then CSE
ES1002	Basic Electronics (Lab) Tentative		ECE	KD*+AtulK+PS+AK	other then CSE
ES1003	Innovation Theory and Practice	1-0-2-2	IA		
HS1002	Indian Culture, Ethics and Human Values	2-2-0-3	LA	MA+JAMF	

Year Long Courses (common for B.Des. and B.Tech.)

PC1002	Professional Development Course	1	Placement Cell		
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B.Tech Semester IV

Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
DC4					
CS2009	IOT and Embedded Systems	3-0-2-4	CSE	MS	247
EC2005	Digital Signal Processing	3-0-2-4	ECE	SNS	127
ME2005	Engineering Materials and Characterization	3-0-0-3	ME	KP	58
SM2005	Engineering Materials and Characterization	3-0-0-3	SM	RS	48
DC5					
CS2006	Operating Systems	3-0-0-3	CSE	AV	248
EC2006	Control Systems	3-0-2-4	ECE	PKP	126
ME2006	Kinematics and Dynamics of Machines	3-1-2-4	ME	SM	58
SM2006	Kinematics and Dynamics of Machines	3-1-2-4	SM	TS	48
DC6					
CS2007	Design & Analysis of Algorithm	3-0-0-3	CSE	ACP	251
EC207a	AI and its application	2-0-0-2	ECE	IAA	126
EC207b	Architecture of Cellular Systems	2-0-0-2	ECE	AtulK	126
ME2007	Manufacturing Technology	3-0-2-4	ME	HS	58
SM2007	Cyber Physical Production Systems	2-0-2-3	SM	VKG	48
DC7					
CS2008	Computer Network	3-0-0-3	CSE	ND	251
EC2008	Analog Integrated Circuit	3-0-2-4	ECE	NB	136
ME2008	Fluid Mechanics and Machines	3-1-2-4	ME	TC	58
EC2006	Control Systems	3-0-2-4	ECE	PKP+SKJ (LAB)	223
OE2 (Choose any one course from below electives)					
OE2C02	Discrete Structures	3-0-0-3	CSE	AO	31
OE2C03	Language Theory	3-0-0-3	CSE	AS	65
OE2E03	Digital System Design	3-0-0-3	ECE	PR	70
OE2E04	Introduction to deep learning	3-0-0-3	ECE	AV	20
OE2E05	Antenna Theory and Design	3-0-0-3	ECE	MSP	13
OE2D05	Packaging Design and Branding	2-0-2-3	DS	VF	98
OE2D06	Interface Design	2-0-2-3	DS	VF	100
OE2M06	Fundamental of Robotics	3-0-0-3	ME	MS	59
OE2S09	Management Concept and Technology	3-0-0-3	SM	CD	69
NS2001	Biology for Engineers	2-0-0-2	LA	MA	521
IT workshop II					
IT2C02	NoSQL Database Lab	0-0-2-2	CSE	KKB	248
IT2E02	IT Workshop II	0-0-2-2	ECE	BM	126

IT2M02	IT Workshop II	0-0-2-2	ME	AKS	58
IT2S02	IT Workshop II	0-0-2-2	SM	AKS	48
B.Des Semester-IV					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	
DS2009	Design Research Including User Study	2-0-2-3	DS	PM	47
DS2011	Industrial Design 2	2-0-2-3	DS	AB	47
DS2012	Communication Design 2	0-0-6-3	DS	TSG	47
DS2013	Design Project 2	3-0-2-4	DS	GUIDE	47
ME2002	Manufacturing Process	3-0-2-4	ME	PT	47
OE2 (Choose any one course from below electives)					
OE2C02	Discrete Structures	3-0-0-3	CSE	AO	31
OE2C03	Language Theory	3-0-0-3	CSE	AS	65
OE2E03	Digital System Design	3-0-0-3	ECE	PR	70
OE2E04	Introduction to deep learning	3-0-0-3	ECE	AV	20
OE2E05	Antenna Theory and Design	3-0-0-3	ECE	MSP	13
OE2D05	Packaging Design and Branding	2-0-2-3	DS	VF	98
OE2D06	Interface Design	2-0-2-3	DS	VF	99
OE2M06	Fundamental of Robotics	3-0-0-3	ME	MS	59
OE2S09	Management Concept and Technology	3-0-0-3	SM	CD	69
Year Long Courses (common for B.Des. and B.Tech.)					
PR2002	Discipline Project	0-0-0-2			534
PC2002	Professional Development Course	1-0-0-1	Placement	COMMON for all students	534

B.Tech Semester VI					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
DS3014	Fabrication Project	0-0-8-4			514
HS3004	Ecology and Environment Science	2-0-0-2	LA	MA	514
OE4 (Choose any one course from below electives)					
OE2C09	Graph Theory	3-0-0-3	CSE	DS	100
OE3C38	Parallel Algorithms	3-0-0-3	CSE	MKB	52
OE3C39	Selected Topics in Data Science	3-0-0-3	CSE	AS	48
OE3E30	Fibre Optics	3-0-0-3	ECE	RKJ	72
OE3D12	Communication Skills Management	3-0-0-3	LA	JAMF	79
OE3D20	Industrial Design	3-0-0-3	DS	VF	99
OE3M31	Machine Learning	3-0-0-3	SM	SA	30
ME8017	Electric Vehicle and Mobility	3-0-0-3	ME	TS	5
OE5 (Choose any one course from below electives)					
CS8009	Image Processing	3-0-0-3	CSE	PK	62
CS8010	Introduction to Digital watermarking	3-0-0-3	CSE	DS	100+7
OE3C37	Neuromorphic Engineering	3-0-0-3	CSE	MKB	33
OE3E09	IC Fabrication	3-0-0-3	ECE	DPS	39
OE3E32	Biomedical Instrumentation	3-0-0-3	ECE	VB	79
OE3D06	Indian Philosophy and Literature in English	3-0-0-3	LA	MA	77
OE3D38	Human Computer Interaction	2-0-2-3	DS	PM	44
ME5D03	Finite Element Methods for Mechanical Engineering	3-0-0-3	ME	MZA	12
ME8016	NC-CNC Machine Tools and Programming	3-0-0-3	SM	HS	33
OE6 (Choose any one course from below electives)					
CS8011	Machine Learning	3-0-0-3	CSE	KKB	103
OE4C18	Data Clustering	3-0-0-3	CSE	SKM	14
OE3E15	Information Theory and Coding	3-0-0-3	ECE	MDB	75
OE3E35	Speech processing	3-0-0-3	ECE	AV	44
OE3M18	Maintenance and Reliability	3-0-0-3	ME	AM	71
OE3M26	Computer-Aided Design (CAD)	3-0-0-3	SM	PT	34
OE3D21	Communication Design	3-0-0-3	DS	VF	85
OE3D23	Traditional Media	3-0-0-3	DS	VF	70
IT workshop IV					
IT3C03	Web and mobile App development	0-0-3-2	CSE	AG	248
IT3E03	Cadence, Silvaco, Xylink, Sentaurus Tcad	0-0-3-2	ECE	PS+NB	122
IT3M03	IT Workshop	0-0-3-2	ME	DSR	54
IT3S03	IT Workshop	0-0-3-2	ME	DSR	36

B.Des Semester-VI					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student

DS3014	Fabrication Project	0-0-8-4			514
HS3004	Ecology and Environment Science	2-0-0-2	LA	MA	514
DS3015	Design Forecasting and Trend Research	3-0-0-3	DS	VF	54

OE4 (Choose any one course from below electives)

OE2C09	Graph Theory	3-0-0-3	CSE	DS	100
OE3C38	Parallel Algorithms	3-0-0-3	CSE	MKB	100
OE3C39	Selected Topics in Data Science	3-0-0-3	CSE	AS	45
OE3E30	Fibre Optics	3-0-0-3	ECE	RKJ	79
OE3D12	Communication Skills Management	3-0-0-3	LA	JAMF	80
OE3D20	Industrial Design	3-0-0-3	DS	VF	95
OE3M31	Machine Learning	3-0-0-3	SM	SA	45
ME8017	Electric Vehicle and Mobility	3-0-0-3	ME	TS	4+1

OE5 (Choose any one course from below electives)

CS8009	Image Processing	3-0-0-3	CSE	PK	62
CS8010	Introduction to Digital watermarking	3-0-0-3	CSE	DS	105
OE3C37	Neuromorphic Engineering	3-0-0-3	CSE	MKB	39
OE3E09	IC Fabrication	3-0-0-3	ECE	DPS	36
OE3E32	Biomedical Instrumentation	3-0-0-3	ECE	VB	80
OE3D06	Indian Philosophy and Literature in English	3-0-0-3	LA	MA	80
OE3D38	Human Computer Interaction	2-0-2-3	DS	PM	73
ME5D03	Finite Element Methods for Mechanical Engineering	3-0-0-3	ME	MZA	12
ME8016	NC-CNC Machine Tools and Programming	3-0-0-3	SM	HS	32

OE6 (Choose any one course from below electives)

CS8011	Machine Learning	3-0-0-3	CSE	KKB	103
OE4C18	Data Clustering	3-0-0-3	CSE	SKM	38
OE3E15	Information Theory and Coding	3-0-0-3	ECE	MDB	79
OE3E35	Speech processing	3-0-0-3	ECE	AV	66
OE3M18	Maintenance and Reliability	3-0-0-3	ME	AM	80
OE3M26	Computer-Aided Design (CAD)	3-0-0-3	SM	PT	69
OE3D21	Communication Design	3-0-0-3	DS	VF	72
OE3D23	Traditional Media	3-0-0-3	DS	VF	50

Year Long Courses (Common for B.Des. and B.Tech.)

PR3003	Optional Project	0-0-0-2			514
PC3003	Professional Development Course	1-0-0-1	Placement		514

B.Tech Semester VIII

Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
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OE13 (Choose any one course from below elective)

CS8013	Mobile and Wireless Network	3-0-0-3	CSE	VKJ	19+8
CS8005	Research Methods in Computer Science	3-0-0-3	CSE	AG	6+3
EC8025	Wavelet and Filter Bank	3-0-0-3	ECE	AK	7+2
EC8023	Modern Radar System	3-0-0-3	ECE	TK	40
ME8001	Research Methodology	3-0-0-3	ME	HSN	53
ME8011	Mechanic of Composite Materials and Applications	3-0-0-3	ME	SDP	19+3

OEE14 (Choose any one course from below elective)

CS8015	Computer Vision with Deep Learning	2-0-2-3	CSE	PK	6+7
CS8018	Blockchain	3-0-0-3	CSE	AO	10+5
EC8021	Fundamentals of 5G and beyond 5G Mobile Network	3-0-0-3	ECE	RKJ	64
EC8024	Neural Network and Fuzzy Logic	3-0-0-3	ECE	IAA	6+4
ME8020	Advanced Materials	3-0-0-3	ME	JKT	40
ME8019	Robotics and Intelligent Systems	3-0-0-3	ME	VKG	19+1

EMF Course

	Human-Computer Interaction	1		Prof. Takemura	17
	Human Sensing	1			17
	Solid State Energy Storage System: Modern Research Trend	1			17

BTP4001	BTP	9			
OR					
PR4001	Project-based Internship (15C)	15			

B.Des Semester-VIII

Course Code	Course Name	Credit	Offered By Discipline	Instructor	No. of Student
DS497	Design Seminar II	2	DS	GUIDE	23
DS499	Design Thesis II	15	DS	GUIDE	23

Year Long Courses (Common for B.Des. and B.Tech.)

PC4004	Professional Development Course	1-0-0-1	Placement		
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DC Discipline Core (All students of that discipline should register for the course)
Those who have already done the course can not take the course