

Details of Courses for Semester-II, 2020-21 (UG)

B.Tech Semester-II					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
NS103a	ODE & PDE	2-1-2-4	NS	LKB	
NS103b	Linear Algebr	2-1-2-4	NS	NKM+SSL	
NS104	Physics II	3-1-2-4	NS	AKK+ACM	
ES101	Basic Electronics	3-0-2-4	ECE	RP+TK	
DS101	Engineering Graphics	2-0-3-3	ME	TC+RS	
ES2	Innovation Theory and Practice	1-0-2-2		CS+EC+AKS	
HS102	Indian Culture, Ethics and Human Values	2-2-0-3	DS	JAMF	
B.Des Semester-II					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
DS106	Design Fundamentals 2	3-0-0-3	DS	VF	
DS107	Introduction to Ergonomics in Design	3-0-0-3	DS	PM	
DS109	Software Skills	0-0-3-2	DS	VF	
ES101	Basic Electronics	3-0-2-4	ECE	RP+TK	
DS101	Engineering Graphics	2-0-3-3	ME	TC+RS	
ES2	Innovation Theory and Practice	1-0-2-2		CS+EC+AKS	
Year Long Courses (common for B.Des. and B.Tech.)					
PC1	Professional Development Course	1	Common		

B.Tech Semester IV					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
DC4					
CS4	Language Theory	3-0-0-3	CSE	AS	125
EC4	Digital Signal Processing	3-0-2-4	ECE	VB	124
ME4	Engineering Materials and Characterization	3-0-0-3	ME	MZA	102
DC5					
CS5	Operating Systems	3-0-0-3	CSE	MKB	125
EC5	Control Systems	3-0-2-4	ECE	SKJ	124
ME5	Kinematics and Dynamics of Machines	3-1-2-4	ME	SM	102
DC6					
CS6	Design & Analysis of Algorithm	3-0-0-3	CSE	SKM	125
EC6a	AI and its application	2-0-0-2	ECE	IAA	124
EC6b	Architecture of Cellular Systems	2-0-0-2	ECE	AtulK	124
ME6	Manufacturing Technology	3-0-2-4	ME	RS	102
DC7					
CS7	Computer Network	3-0-0-3	CSE	VKJ	125
EC7	Analog Integrated Circuit	3-0-2-4	ECE	PS	124
ME7	Fluid Mechanics and Machines	3-1-2-4	ME	TC	102
OE2 (Choose any one course from below electives)					
OE2a	NoSQL Databases	2-0-2-3	CSE	KKB	44
OE2b	Discrete Structures	3-0-0-3	CSE	AO	54
OE2c	Digital System Design	3-0-0-3	ECE	PR	1+9
OE2d	Introduction to deep learning	3-0-0-3	ECE	AV	52
OE2e	Smart Manufacturing	3-0-0-3	ME	PT	51
OE2f	Fundamental of Robotics	3-0-0-3	ME	MS	38
OE2g	Packaging Design and Branding	3-0-0-3	DS	VF	11
OE2h	Interface Design	3-0-0-3	DS	VF	15
NS205e	Numerical Methods	3-0-0-3	NS	MKP	54
NS205f	OPTIMIZATION	3-0-0-3	NS	DM	60
IT workshop II					
IT1a	Embedded System Lab	0-0-2-2	CSE	ND+AG	125
IT1b	IT Workshop II	0-0-2-2	ECE	MSP+MDB	124
IT1c	IT Workshop II	0-0-2-2	ME	DSR	102
B.Des Semester-IV					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	
DS217	Design Research Including User Study	2-0-2-3	DS	PM	24

DS219	Material and Processes	2-0-2-3	DS	VF	24
DS220	Industrial Design 2	2-0-2-3	DS	AB	24
DS221	Communication Design 2	0-0-6-3	DS	TS	24
DS222	Design Project 2	3-0-2-4	ME	GUIDE	24
OE2 (Choose any one course from below electives)					
OE2a	NoSQL Databases	2-0-2-3	CSE	KKB	44
OE2b	Discrete Structures	3-0-0-3	CSE	AO	54
OE2c	Digital System Design	3-0-0-3	ECE	PR	1+9
OE2d	Introduction to deep learning	3-0-0-3	ECE	AV	52
OE2e	Smart Manufacturing	3-0-0-3	ME	PT	51
OE2f	Fundamental of Robotics	3-0-0-3	ME	MS	38
OE2g	Packaging Design and Branding	3-0-0-3	DS	VF	11
OE2h	Interface Design	3-0-0-3	DS	VF	15
NS205e	Numerical Methods	3-0-0-3	NS	MKP	54
NS205f	OPTIMIZATION	3-0-0-3	NS	DM	60
Year Long Courses (common for B.Des. and B.Tech.)					
PR_0	Discipline Project	0-0-0-2			
PC2	Professional Development Course	1-0-0-1	Placement	COMMON for all students	

B.Tech Semester VI					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
MN2	Fabrication Project	0-0-8-4			298
HS3	Ecology and Environment Science	2-0-0-2			298
OE4 (Choose any one course from below electives)					
OE4a	Network Security & Cryptography	3-0-0-3	CSE	ND	100
OE4b	Social Network Analysis	3-0-0-3	CSE	AS	15
OE4c	Power Electronics	3-0-0-3	ECE	PKP	34
OE4e	Computer Aided Manufacturing	3-0-0-3	ME	MS	60
OE6b	Machine Learning	3-0-0-3	CSE	KKB	35+11
OE4g	Electric Vehicle and Mobility	3-0-0-3	ME	TS	0
OE4h	Indian Philosophy and Literature in English	3-0-0-3	DS	MA	60
OE5 (Choose any one course from below electives)					
OE5a	Reinforcement Learning	3-0-0-3	CSE	MKB	33
OE5b	Image Processing	3-0-0-3	CSE	PK	69
OE5c	IC Fabrication	3-0-0-3	ECE	DPS	34
OE13b	Computer Vision with Deep Learning	3-0-0-3	CSE	PK	20
OE5e	Finite Element Methods for Mechanical Engineering	3-0-0-3	ME	SDP	38
OE5f	Biomaterials Science and Engineering	3-0-0-3	ME	HSN	48
OE5h	Communication Skills Management	3-0-0-3	DS	JAMF	51
OE6 (Choose any one course from below electives)					
OE6a	Introduction to Digital watermarking	3-0-0-3	CSE	DS	91
OE6b	Machine Learning	3-0-0-3	CSE	KKB	35
OE6d	Information Theory and Coding	3-0-0-3	ECE	AtulK	60
OE6e	NC-CNC Machine Tools and Programming	3-0-0-3	ME	PKJ	11+8
OE6f	Industry Internet of Things	2-0-2-3	ME	VKG	17+13
OE6g	Maintenance and Reliability	3-0-0-3	ME	HS	29
OE6h	IC Engine	3-0-0-3	ME	AM	51
IT workshop IV					
IT4a	Web and mobile App development	0-0-2-2	CSE	AG	98
IT4b	Cadence, Silvaco, Xylink, Sentaurus Tcad	0-0-2-2	ECE	DPS+NB	89
IT4c	IT Workshop	0-0-2-2	ME	AKS	86
B.Des Semester-VI					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
MN2	Fabrication Project	0-0-8-4			298
HS3	Ecology and Environment Science	2-0-0-2			298
DS328	Design Forecasting and Trend Research	3-0-0-3	DS	VF	20
OE (Choose any Three course from below elective)					
DS330a	Industrial Design	3-0-0-3	DS	VF	8
DS330b	Communication Design	3-0-0-3	DS	TS	12
DS346	Application of Renewable Energy Resources In Design	3-0-0-3	DS	AB	20
DS348	Traditional Media	3-0-0-3	DS	TS	20
Year Long Courses (Commonfor B.Des. and B.Tech.)					

OPR	Optional Project	0-0-0-2	
PC3	Professional Development Course	1-0-0-1	Placement

B.Tech Semester VIII					
Course Code	Course Name	L-T-P-C	Offered By Discipline	Instructor	No. of Student
OE13 (Choose any one course from below elective)					
OE13a	Deep Learning	3-0-0-3	CSE	AO	12
OE13b	Computer Vision with Deep Learning	3-0-0-3	CSE	PK	20
OE13c	Nano photonics and plasmonics	3-0-0-3	ECE	DKV	25
OE13e	Detection and Estimation Theory	3-0-0-3	ECE	MDB	11
OE13f	Design of Mechanical Systems	3-0-0-3	ME	AM	17
OE13g	Rapid Product Development Technologies	3-0-0-3	ME	KP	60
OEE14 (Choose any one course from below elective)					
OE14f	Compiler Design	3-0-0-3	CSE	SKM	11
CS609	Mobile and Wireless Networks	3-0-0-3	CSE	VKJ	10
OE14b	RF MEMS design	3-0-0-3	ECE	KD	48
OE14c	Design Optimization	3-0-0-3	ME	SA	17
OE14d	Virtual Instrumentation	2-0-2-3	ME	MZA	2+1
OE14e	Thermal Aspects in Manufacturing	3-0-0-3	ME	HS	59
	BTP	9			148
OR					
	Project-based Internship (15C)	15			
B.Des Semester-VIII					
Course Code	Course Name	Credit	Offered By Discipline	Instructor	
DS497	Design Seminar II	2	DS	Guide	22
DS499	Design Thesis II	15	DS	Guide	22
Year Long Courses (Common for B.Des. and B.Tech.)					
PC4	Professional Development Course	1-0-0-1	Placement		

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