

List of electives, January-May 2021

Dept. of Mechanical Engineering

YES: CAN OPT;

NO: CANNOT OPT

CORE: COMPULSORY

Group	Course code	Course title	L-T-P-C	Open for						Instructor
				B. Tech.	MD	FT	MSE	CM	AP	
G-1 (E)	ME522	Convective Heat and Mass Transfer	3-0-0-6	YES	NO	CORE	NO	YES	YES	Amaresh Dalal
	ME615	Rotor Dynamics	3-0-0-6	YES	YES	NO	NO	YES	NO	R. Tiwari
	ME513	Physics of Deformation Processes	3-0-0-6	YES	YES	NO	CORE	NO	NO	R Ganesh Narayanan
G-2 (B)	ME607	Introduction to Composite Materials	3-0-0-6	YES	YES	NO	YES	YES	NO	D. Chakraborty
	ME628	Additive Manufacturing	2-0-2-6	YES	YES	NO	YES	NO	NO	Swarup Bag
	ME554	Rocket Propulsion	3-0-0-6	YES	NO	YES	NO	NO	CORE	U.K. Saha
	ME670	Advanced Computational Fluid Dynamics	3-0-0-6	YES	NO	YES	NO	YES	NO	G. Madhusudhana
G-3 (C)	ME621	Refrigeration and Air Conditioning	3-0-0-6	YES	NO	Yes	NO	NO	YES	P. Muthukumar
	ME657	Two Phase Flow and heat transfer	3-0-0-6	YES	NO	YES	NO	NO	YES	Manmohan Pandey
	ME541	Continuum Mechanics	3-0-0-6	YES	YES	YES	NO	CORE	YES	Sachin S.Gautam
G-4 (D1)	ME553	Gas Dynamics	3-0-0-6	YES	NO	YES	NO	YES	CORE	Bhaskar Kumar
	ME605	Fracture, Fatigue and Failure Analysis	3-0-0-6	YES	YES	NO	YES	YES	NO	K.S.R.K. Murthy
	ME612	Nuclear Energy: Concepts and Applications	3-0-0-6	YES	NO	YES	NO	NO	NO	D. N. Basu
	ME619	Fundamental of Microfluidics	3-0-0-6	YES	NO	YES	NO	YES	NO	Subhadeep Mandal
G-5 (A)	ME608	CAD/CAM	2-0-2-6	YES	YES	NO	YES	YES	NO	S. N. Joshi
	ME648	Viscous Fluid Flow	3-0-0-6	YES	NO	YES	NO	YES	YES	A. K. Dass
	ME683	Computational Gas Dynamics	3-0-0-6	YES	NO	YES	NO	YES	YES	Mankodi Tapan Krishnakumar
G-6 (G)	ME552	Aircraft Propulsion	3-0-0-6	YES	NO	YES	NO	NO	CORE	Vinayak Kulkarni
	ME542	Numerical Analysis	2-0-2-6	YES	YES	YES	NO	CORE	NO	A Banerjee
	ME511	Engineering Materials and Characterization	3-0-0-6	YES	YES	NO	CORE	NO	NO	Prasenjit Khanikar
G-8 (Open elective) (F)	ME671	Biomaterials: Design and Application		YES	YES	YES	YES	YES	YES	S. Kanagaraj
	ME674	Soft Computing in Engineering	3-0-0-6	YES	YES	YES	YES	YES	YES	Sukhomay Pal

Sl. No	Program	Number of electives	M.Tech. programmes: MD: Machine Design; FTE: Fluid-thermal Engineering; MSE: Manufacturing Science and Engineering; CM: Computational Mechanics; AP: Aerodynamics and Propulsion B. Tech students can also take the Open elective as departmental elective
	B. Tech (8 th Sem)	2	
	M. Tech (MD)	5	
	M. Tech (FT)	4	
	M. Tech (MSE)	2	
	M. Tech (CM)	3	
	M. Tech (AP)	2	