SEM	Course Code	CourseName	Segment	Credits	Basket	Sem-total
		MSME 2025				
1	MS1990	Introduction to Materials Science and Engineering	1-2	1	BE	17
	MS1830	Physical Metallurgy	3-6	2	DC	
	MS1980	Fundamentals of Scientific Computing	1-4	2	BE	
	EP1108	Modern Physics		2	BS	
	EP1118	Maths for Physics		2	BS	
	ME2110	Mechanics of Solids	1-6	3	BE	
	LA1760	Communication Skills		2	LA/CA	
	MA1010	Calculus-I		1	BS	
	MA1020	Calculus-II		1	BS	
	CC1010	Introduction to Climate Change		1	BE	
2	MS1230	Physics of Solids	1-6	3	BE	15
	MS1940	Materials Chemistry	1-4	2	BS	
	MS1054	Digital Fabrication	1-6	2	BE	
	CY1031	Chemistry Laboratory		2	BS	
	EP1211	Physics Lab		2	BS	
	ID1050	Artificial Intelligence		1	BE	
	MA1060	Elementary Linear Algebra		1	BS	
	MA1070	Differential Equations		1	BS	
	LAxxxx	Liberal Arts Elective		1	LA/CA	
3	MS2330	Fundamentals of Extractive Metallurgy	1-4	2	DC	18
	MS2120	Ironmaking	5-6	1	DC	
	MS2110	Semiconductor Materials	3-6	2	DC	
	MS2860	Computational Methods in Materials Science	3-6	2	DC	
	MS2970	Materials Thermodynamics and Kinetics	1-6	3	DC	
	MS2930	Imaging in Materials Science	1-4	2	DC	
	MS2280	Transport Phenomena in Materials Processing	3-6	2	BE	
	MS2031	Microstructure and Properties Lab (physics of solids, semiconductor materials, metallography and imaging	1-6	2	DC	
	LAXXXX	Liberal Arts Elective		2	LA/CA	
4	MS2850	Phase Transformations	3-6	2	DC	16
	MS2870	Mechanical Behaviour of Materials	1-6	3	DC	
	MS2130	Steelmaking	1-4	2	DC	
	MS2960	Diffraction and Spectroscopy	1-4	2	DC	
	MS2041	Materials synthesis/extraction and characterization lab (1 Cr Ext. Met+Transport)+(1 Cr Diffraction+Spectroscopy+Mater. Synth.)	1-6	2	DC	
	BT1010	Introduction to Life Sciences		1	BS	
	FEXXXX	Free Elective		4	FE	
5	MS3XX3	Soft and Porous Materials	1-6	3	DC	19
	MS3890	Properties of Materials	3-6	2	DC	
	MS3410	Electrochemical Processing of Materials	1-4	2	DC	
	MS3150	Corrosion	5-6	1	DC	
	MS3363	Powder Metallurgy Processing	1-2	1	DC	
	MS3041	Mechanical behavior, deformation processing and heat treatment lab (1 Cr TMP + HT) + 1 Cr Mech. Behav.)	1-6	2	DC	
	MSxxxx	Departmental Elective	1-6	3	DE	
	LAxxxx	Liberal Arts Elective		2	LA/CA	
	FExxxx	Free Elective		3	FE	
6	MS4023	Electronic Structure and Atomistic Modeling	1-6	3	DC	20
	MS3950	Device Fabrication and Processing	1-6	3	DC	
	MS3XX0	Thermomechanical Processing	1-4	2	DC	
	MS3315/3305	Internship or Project or Department Elective	1-6	6	DE	
	LAxxxx	Liberal Arts Elective		2	LA/CA	
	FExxxx	Free Elective		4	FE	
7	MS4021	Functional device fabrication and electrohemical characterization lab (1 Cr Funct. Dev. Fab + 1 Cr ElectroChem/Corr.)	1-6	2	DC	13
	MS4410	Casting and Welding	1-6	3	DC	
	MSxxxx	Departmental Elective	1-6	8	DE	
8	MSxxxx	Departmental Elective	1-6	6	DE	10
	ID4000	Ethics and Values		1	LA/CA	
	FEXXXX	Free Elective	1-6	3	FE	
				Total		**128**