

SCHOOL OF MATERIALS SCIENCE AND TECHNOLOGY

INDIAN INSTITUTE OF TECHNOLOGY, (BHU) VARANASI

COURSES DETAILS FOR IDD PROGRAMME SESSION: 2022-23

IDD Part - I, Semester I, Odd Sem.: 2022-23

Sl. No.	Courses Code	Courses Name	Credits	Contact Hrs/ Week
1	PHY 102	Physics - II: Introduction to Engineering Electromagnetics	13	3-1-2
2	CY 101	Chemistry - I	10	2-1-2
3	MA 102	Engineering Mathematics - II	11	3-1-0
4	CSO 101	Computer Programming	13	3-1-2
5	ME 105	Manufacturing Practice-I	3	0-0-3
6	ME 104	Engineering Drawing	6	1-0-3

IDD Part - I, Semester II, Even Sem.: 2022-23

1	CY 102	Chemistry - II	13	3-1-2
2	MA 101	Engineering Mathematics – I	11	3-1-0
3	ME 103	Engineering Thermodynamics	11	3-1-0
4	MS 101	Introduction to Engineering Materials	9	3-0-0
5	MS 102	Practices in Materials Science and Technology	6	1-0-3
6	ME 106	Manufacturing Practice – II	3	0-0-3
7	H103	Development of Societies	8	2-1-0
	H104	History and Civilization		

IDD Part - II, Semester III, Odd Sem.: 2022-23

1	EO 102	Fundamentals of Electronics and Instrumentation Engineering	13	3-1-2
2	PHY 201	Quantum Physics	11	3-1-0
3	MS 201	Phase Diagrams and Phase Transformations	9	3-0-0
4	MS 221	Crystallography & Crystal Structures	9	3-0-0
5	MS 251	Microstructure of Engineering Materials (Lab)	3	0-0-3
6	MS 252	Diffraction Studies (Lab)	3	0-0-3

7	H 105	Philosophy	8	2-1-0
	H 106	Education and Self		
IDD Part - II, Semester IV, Even Sem.: 2022-23				
1	MA 203	Mathematical Methods	11	3-1-0
2	MO 102	Transport Phenomenon	11	3-1-0
3	CHI 312	Quantum Chemistry	9	3-0-0
4	MS 202	Polymeric Materials	9	3-0-0
5	MS 204	Metal and Alloys	9	3-0-0
6	MS 253	Polymer Synthesis and Characterization (Lab)	3	0-0-3
7	MS 291	Exploratory Project	5	0-0-5
IDD Part - III, Semester V, Odd Sem.: 2022-23				
1	MS 311	Polymer Processing	9	3-0-0
2	MS 331	Physical Behaviour of Materials	9	3-0-0
3	MS 321	Materials Characterization	9	3-0-0
4	MS 304	Synthesis and Processing of Engineering Materials	9	3-0-0
5	OE -1	Open Elective	9	3-0-0
6	MS 351	Polymer Processing of Polymers (Lab)	3	0-0-3
7	MS 352	Materials Synthesis (Lab)	3	0-0-3
IDD Part - III, Semester VI, Even Sem.: 2022-23				
1	MS 332	Industrial Polymers	9	3-0-0
2	MS 431	Advanced Ceramics	9	3-0-0
3	CHI 322	Electro Chemistry and Surface Phenomena	9	3-0-0
4	OE-2	Open Elective	9	3-0-0
5	MS 353	Materials Characterization Techniques (Lab)	3	0-0-3
6	MS 392	UG Project	10	0-0-10
7	HULM	Humanites/Language & Management Course	9	3-0-0
IDD Part - IV, Semester VII, Odd Sem.: 2022-23				
1	MS 432	Mechanical Behaviour of Materials	9	3-0-0
2	MS 532	Magnetism & Magnetic Materials	9	3-0-0

3	OE-3	Open Elective	9	3-0-0
4	MS 451	Mechanical Characterizations of Materials	3	0-0-3
5	MS 491	UG Project - II	10	0-0-10
6	LM	Language & Management Course	9	3-0-0
IDD Part - IV, Semester VIII, Even Sem.: 2022-23				
1	MS 402	Composite Materials	9	3-0-0
2	MS 504	Organic Electronics & Organic Conductors	9	3-0-0
3	MS 505	Energy Materials	9	3-0-0
4	OE-4	Open Elective	9	3-0-0
5	LM	Language & Management Course	9	3-0-0
6	MS 492	Thesis	10	0-0-10
IDD Part - V, Semester IX, Odd Sem.: 2022-23				
1	MS 533	Nanostructured Materials	9	3-0-0
2	OE -5	Open Elective	9	3-0-0
3	OE -6	Open Elective	9	3-0-0
4	LM	Language & Management Course	9	3-0-0
5	MS 591	Thesis	20	0-0-20
IDD Part - V, Semester X, Even Sem.: 2022-23				
1	MS 592	Thesis	50	–