

MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY, JAMSHORO.
APPROVED CURRICULUM OF B.E. (METALLURGY & MATERIALS ENGINEERING)
FOR BATCHES 18MT & ONWARDS (SEMESTER SYSTEM)

Semester	S#	Course Code	Name of Subject	Credit Hour		Total Credit Hour
				Th	Pr	
FIRST	1	MT131	Introduction to Engineering Materials	3	0	3
	2	MT132	Applied Chemistry	3	0	3
	3	MT133	Applied Physics	3	0	3
	4	MTH108	Applied Calculus	3	0	3
	5	IS111	Islamic studies	2	0	2
		SS104	Ethics (For Non-Muslims)			
	6	PS106	Pakistan studies	2	0	2
	7	MT134	Basic Science Lab	0	1	1
		Total	16	1	17	
SECOND	1	MT135	Mineral Processing	2	0	2
	2	MT136	Engineering Drawing and CAD	2	1	3
	3	MTH125	Linear Algebra and Differential Equation	3	0	3
	4	ENG101	Functional English	3	0	3
	5	CS115	Introduction to Computing	2	1	3
	6	ME176	Workshop & Practice	0	2	2
	7	MT137	Mineral Processing Lab	0	1	1
			Total	12	5	17
THIRD	1	MT231	Materials Thermodynamics	3	0	3
	2	MT232	Physical Metallurgy-I	3	0	3
	3	EE214	Industrial Safety & Environmental Engineering	3	0	3
	4	ENG201	Communication Skills	3	0	3
	5	ES292	Instrumentation & Control	2	1	3
	6	MT233	Metallurgy and Materials Lab-1	0	1	1
			Total	14	2	16
FOURTH	1	MT234	Iron and Steel Making Technology	3	0	3
	2	MT235	Non Ferrous Metallurgy	3	0	3
	3	MT236	Mechanical Behaviour of Materials	3	0	3
	4	MT237	Engineering Ceramics & Glasses	3	0	3
	5	MTH215	Numerical Methods & Computation	3	1	4
	6	MT238	Metallurgy and Materials Lab-2	0	1	1
			Total	15	2	17

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Semester	S#	Course Code	Name of Subject	Credit Hour		Total Credit Hour
				Th	Pr	
FIFTH	1	MT331	Inspection and Testing of Materials	3	0	3
	2	MT332	Polymeric Materials	3	0	3
	3	MT333	Physical Metallurgy-II	3	0	3
	4	MT334	Advanced Steels	2	0	2
	5	ENG301	Technical Writing and Presentation Skill	2	0	2
	6	MTH317	Statistics & Probability	3	0	3
	7	MT335	Inspection and Quality Control Lab	0	1	1
			Total	16	1	17
SIXTH	1	MT336	Foundry Engineering	3	0	3
	2	MT337	Powder Metallurgy	2	0	2
	3	MT338	Manufacturing Processes	3	0	3
	4	MT339	Welding & other Joining Process	3	0	3
	5	MT340	Corrosion & Protection	3	0	3
	6	MT341	Composite Materials	2	0	2
	7	MT342	Metal Shaping and Joining Lab	0	1	1
	8	MT343	Electrochemistry and Corrosion Lab	0	1	1
			Total	16	2	18
SEVENTH	1	MT431	Heat Treatment Processes	3	0	3
	2	MT432	Advanced Materials & Nanotechnology	3	0	3
	3	MT433	Nuclear Metallurgy & Materials	2	0	2
	4	MT434	Research Methodology	2	0	2
	5	MT435	Metallurgical Plants and Quality Control	2	0	2
	6	MT435	Heat Treatment Lab	0	1	1
	7	MT436	Nanomaterials Synthesis Lab	0	1	1
	8	MT499	Project	0	3	3
			Total	12	5	17
EIGHTH	1	MT437	Fracture Mechanics and Failure Analysis	3	0	3
	2	MT438	Design and Selection of Materials	2	0	2
	3	MT439	Computational Materials Science	2	1	3
	4	MT440	Tribology and Surface Engineering	2	0	2
	5	INM491	Entrepreneurship and Marketing	3	0	3
	6	MT441	Failure Analysis Lab	0	1	1
	7	MT499	Project	0	3	3
			Total	12	5	17

*Duration one academic year: Requires literature survey and Preliminary work during this semester

$$17+17+16+17+17+18+17+17=136$$