

Curriculum

1st Semester

Course No.	Course Title	Contact hours		Credit hours		Pre-Req
		Th.	Lab.	Th.	Lab.	
EE 199	Basic Electrical and Electronics Engineering	3	3	3	1	----
ME 122L	Engineering Drawing	-	6	-	2	----
MME 101 & MME 101L	Introduction to Metallurgy and Materials	3	3	3	1	----
IS 101	Islamic and Pakistan Studies-I	3	-	3	-	----
MA 111	Applied Mathematics-I	3	-	3	-	----
	Total	12	12	12	4	
	Grand Total	24		16		

2nd Semester

Course No.	Course Title	Contact hours		Credit hours		Pre-Req
		Th.	Lab.	Th.	Lab.	
PHY 114	Applied Physics	2	3	2	1	----
CY 151	Material Chemistry-I	2	3	2	1	----
ME 100L	Workshop Practice	-	3	-	1	----
HU 111	Communication Skills	-	3	-	1	----
MME 102	Mechanics of Materials	2	-	2	-	----
MA 112	Applied Mathematics-II	3	-	3	-	----
MME 103	Industrial Safety and Environmental Engineering	3	-	3	-	----
	Total	12	12	12	4	
	Grand Total	24		16		

Curriculum

3rd Semester

Course No.	Course Title	Contact hours		Credit hours		Pre-Req
		Th.	Lab.	Th.	Lab.	
MME 201	Fuels and Furnaces	2	-	2	-	-----
MME 210 & MME 210L	Foundry Engineering	3	3	3	1	-----
IS 201	Islamic and Pakistan Studies-II	3	-	3	-	-----
MA 240	Numerical Analysis	2	3	2	1	-----
HU 221	Technical Writing & Presentation Skills	3	-	3	-	-----
MME 202	Applied thermodynamics	3	-	3	-	-----
	Total	16	6	16	2	
	Grand Total	22		18		

4th Semester

Course No.	Course Title	Contact hours		Credit hours		Pre-Req
		Th.	Lab.	Th.	Lab.	
MME 211 & MME 211L	Physical Metallurgy	3	3	3	1	-----
MME 203	Powder Metallurgy	3	-	3	-	-----
MME 204 & MME 204L	Polymeric Materials	3	3	3	1	-----
MME 205	Iron and Steel Making Processes	3	-	3	-	-----
MA 242	Engineering Statistics	3	-	3	-	-----
	Total	15	6	15	2	
	Grand Total	21		17		

Curriculum

5th Semester

Course No.	Course Title	Contact hours		Credit hours		Pre-Req
		Th.	Lab.	Th.	Lab.	
MME 311	Mechanical Behavior of Engineering Materials	3	-	3	-	----
MME 312 & MME 312L	Ceramic Materials	3	3	3	1	----
MME 301	Electrical and Magnetic Materials	3	-	3	-	----
MME 302	Non-Ferrous Extractive Metallurgy	3	-	3	-	----
MME 303 & MME 303L	Inspection and Quality Assurance	3	3	3	1	----
	Total	15	6	15	2	
	Grand Total	21		17		

6th Semester

Course No.	Course Title	Contact hours		Credit hours		Pre-Req
		Th.	Lab.	Th.	Lab.	
MME 304	Process Control and Instrumentation	2	-	2	-	----
MME 321 & MME 321L	Heat Treatment and Phase Transformation	3	3	3	1	MME 211
MME 305 & MME 305L	Welding and Joining of Materials	3	3	3	1	----
MME 306	Industrial and Financial management	3	-	3	-	----
MME 307L	Computational Methods in Materials Engineering	-	6	-	2	----
MME 308	Characterization of Engineering Materials	3	-	3	-	----
	Total	14	12	14	4	
	Grand Total	26		18		

Curriculum

Semester

Course No.	Course Title	Contact hours		Credit hours		Pre-Req
		Th.	Lab.	Th.	Lab.	
MME 420 & MME 420L	Solidification of Metals and Alloys	3	3	3	1	MME 210
MME 421	Metal Working Processes	3	-	3	-	MME 311
MME 422	Advance Ceramics	3	-	3	-	MME 312
MME 401	Nuclear Materials	2	-	2	-	-----
MME 402	Nano Materials	2	-	2	-	-----
MME 411	Final Project-I	-	9	-	3	-----
	Total	13	12	13	4	
	Grand Total	25		17		

8th Semester

Course No.	Course Title	Contact hours		Credit hours		Pre-Req
		Th.	Lab.	Th.	Lab.	
MME 403 & MME 403L	Composite Materials	3	2	3	1	-----
MME 404 & MME 404L	Corrosion and Corrosion Control	3	3	3	1	-----
MME 405	Surface Science and Engineering	2	-	2	-	-----
MME 406	Bio Materials	2	-	2	-	-----
MME 407	Vacuum Technology	2	-	2	-	-----
MME 412	Final Project-II	-	9	-	3	MME 411
	Total	12	14	12	5	
	Grand Total	26		17		

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