

B.Sc. Mechanical Engineering

Year 1									
Semester 1				Credit Hours		Semester 2			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours			
		Th	Pr			Th	Pr		
HU-111L	Communication Skills	0	1	IS-1XX	Islamic Studies	3	0		
MA-113	Calculus and Analytic Geometry	3	0	ME-131(22)	Materials and Manufacturing-I	3	1		
PHY-119	Engineering Physics	2	0	ME-124(22)	Engineering Mechanics-II	2	0		
XX- & XX-L	Application of Information & Communication Technologies	2	1	HU-221L	Technical Writing & Presentation Skills	0	1		
ME-111	Thermodynamics-I	3	1	MA-225	Differential Equations and Transforms	3	0		
ME-121(22)	Engineering Graphics and Drawing	1	1	EE-	Basic Electrical Machines	1	0		
ME-123(22)	Engineering Mechanics-I	2	0	XX-	Civics & Community Engagement	2	0		
QT-101	Translation of Holy Quran-I	1	0	ME-100L	Workshop Practice	0	1		
				ME-122(22)L	Engineering Mechanics	0	1		
Year 2									
Semester 3				Credit Hours		Semester 4			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours			
		Th	Pr			Th	Pr		
IS-2XX	Ideology & Constitution of Pakistan	3	0	ME-272	Engineering Project Management	2	0		
ME-231(22)	Materials and Manufacturing-II (ME-131(22))	2	1	ME-212	Thermodynamics-II (ME-111)	3	1		
ME-251L	Computer Aided Drawing	0	1	ME-213(22)	Fluid Mechanics-II (ME-211(22))	3	1		
ME-221	Mechanics of Materials-I	3	1	ME-222	Mechanics of Materials-II (ME-221)	3	1		
ME-211(22)	Fluid Mechanics-I	3	1	MA-241	Applied Engineering Statistics	2	0		
HU-003	International Language	0	0	ME-273L	Engineering Entrepreneurship	0	1		
CS-103	Introduction to Computer Programming for Data Science	2	1	QT-201	Translation of Holy Quran-II	1	0		
Year 3									
Semester 5				Credit Hours		Semester 6			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours			
		Th	Pr			Th	Pr		
ME-321(22)	Mechanics of Machines	3	1	ME-342	Robotics and Automation (ME-341(22))	2	1		
ME-312(22)	Heat and Mass Transfer	2	1	ME-382	Engineering Data Analytics & AI	2	1		
ME-341(22)	Instrumentation and Control	2	0	ME-323 (22)	Machine Design II (ME-322(22))	2	0		
ME-322(22)	Machine Design -I	3	0	ME-352L	Computer Aided Design-II	0	1		
ME-351L	Computer Aided Design -I	0	1	ME-332	Metrology and Quality Assurance (MA-241)	2	0		
ME-381aL	Health Safety & Industrial Environment	0	1	ME-361(22)	Energy Resources and Utilization	2	0		
ME-399L	Semester Design Project	0	1	ME-353a	Numerical Analysis for Mechanical Engineers	2	1		
QT-301	Translation of Holy Quran-III	1	0	ME-371a	Professional Ethics in Engineering Practices	1	0		
Year 4									
Semester 7				Credit Hours		Semester 8			
Course No	Subject (Pre-requisites)	Credit Hours		Course No	Subject (Pre-requisites)	Credit Hours			
		Th	Pr			Th	Pr		
ME-415(22)	Power Plants Engineering (ME-212)	2	0	ME-461	Energy Conservation & Management	2	0		
ME-478	Engineering Economics	2	0	ME-464L	Energy & Power Systems	0	1		
ME-453a	Computational Engineering (ME-353a)	2	1	ME-412(22)	Refrigeration and Air Conditioning (ME-312(22))	2	1		
ME-411	IC Engine (ME-212)	2	1	ME-421(22)	Mechanical Vibrations (ME-321(22))	3	1		
ME-496L	FYDP-I	0	3	ME-472	Supply Chain Management	2	0		
ME-4xx	Elective-I	2	0	ME-497L	FYDP- II (ME-496L)	0	3		
QT-401	Translation of Holy Quran-IV	1	0	ME-4xx	Elective-II	2	0		
ME-471	Production and Operations Management	2	0						