Mapping of courses with PLOs

Semester	Course Code	Course Title	Engineering Knowledge **A**	Problem Analysis **b**	Design and Development of Solutions **c**	Investigation **d**	Modern Tool Usage **e**	The Engineer and Society **f**	Environment and Sustainability **g**	Ethics **h**	Individual and Team Work **i**	Communication **j**	Project Management **k**	Lifelong Learning **l**
1	GSM-111	Calculus & Analytical Geometry	√	√										
	GSM-112	Applied Physics	√	√		√								
	GSM-113	Applied Chemistry	√						√					
	HSM-114	Functional English										√		
	CSM-115	Computer System & Programming	√				√							
	BME-116	Engineering Drawing & Graphics	√	√										
	BME-117	Engineering Mechanics-I	√	√										
	HSM-118	Introduction to Chinese Language										√		
2	BME-121	Computer Aided Drawing	√				√							
	BME-122	Engineering Materials	√	√					√					
	GSM-123	Linear Algebra & Ordinary Differential Equations	√	√										
	BME-124	Engineering Mechanics-II	√	√										
	BME-125	Workshop Practice	√								√			
	ISM-126	Arabic										√		
	BME-127	Thermodynamics-I	√	√					√					
3	HSM-231	Communication Skills								√		√		√
	BME-232	Mechanics of Materials-I	√	√										
	ISM-233	Pakistan Studies						√		√				
	BME-234	Thermodynamics-II		√		√			√					
	BEE-235	Electrical Engineering	√	√			√							
	GSM-236	Complex Variables and Transforms		√										
4	BEE-241	Electronics Engineering	√	√		√								
	GSM-242	Numerical Analysis	√	√			√							
	ISM-243	Islamic Studies/Ethics						√		√				
	BME-244	Mechanics of Materials-II	√	√		√								
	BME-245	Machine Design-I	√	√	√									

	BME-246	Fluid Mechanics-I	√	√											
5	BME-351	Fluid Mechanics-II	√	√		√									
	HSM-352	Health, Safety & Environment						√	√	√					
	BME-353	Machine Design-II		√	√										
	GSM-354	Applied Statistics	√	√						√					
	BME-355	Heat & Mass Transfer	√	√	√	√									
	BME-356	Manufacturing Processes	√	√											
6	HSM-361	Technical Report Writing & Presentation Skills						√				√		√	
	BME-362	Technical Elective-I													
	BME-363	Control Engineering	√	√	√	√									
	BME-364	Mechanics of Machines	√	√	√										
	BME-365	Heating, Ventilating and Air Conditioning	√		√				√						
	BME-366	Instrumentation, Measurement and Quality Control	√	√			√								
	BME-367	Internship/ Industrial Experience									√	√		√	
7	MSM-471	Engineering Economics	√	√	√		√						√		
	BME-472	Mechanical Vibrations	√	√	√	√									
	BME-473	Internal Combustion Engines	√	√					√						
	BME-474	Technical Elective-II													
	BME-475	Introduction to Finite Element Analysis	√	√			√								
	BME-476	Final Year Project-I	√	√	√		√				√	√	√	√	
8	BME-481	Technical Elective-III													
	MSM-482	Entrepreneurship	√								√		√		
	MSM-483	Management Elective													
	BME-484	Power Plants		√	√				√					√	
	BME-485	Final Year Project-II				√		√	√	√	√	√	√	√	