

8. Mapping of Curriculum to PLOs

Industrial & Manufacturing Engineering Courses		Program Learning Outcomes (PLOs)												
		PLO-1	PLO-2	PLO-3	PLO-4	PLO-5	PLO-6	PLO-7	PLO-8	PLO-9	PLO-10	PLO-11	PLO-12	
First Year	Fall	ME-101 Engineering Mechanics	C1	C3 C3		P1								
		ME-104 Workshop Practice				P3 P3		A4			A4			
		HS-105 Pakistan Studies / HS-127 Pakistan Studies for Foreigners							C2					C2
		MT-114 Calculus	C1	C2, C3										
		EE-122 Basic Electricity and Electronics	C1, C2	C3, C4										
	Spring	PH-122 Applied Physics	C2, P3	C3, C3										
		HS-111 Functional English										A3, C2 C6		
		IM-101 Computer Applications in Engineering	C5	C3			C3							C1
		IM-105 Thermofluids	C2			C4			C3					
		ME-111 Engineering Drawing	C2 P3				P3						C3	P4
Second Year	Fall	IM-203 Manufacturing Processes	C2			C4		C3						
		IM-208 Materials Engineering	C3					C3	C2					
		IM-209 Mechanics of Materials	C2	C4	C3									
		MT-252 Introduction to Probability and Statistics	C2	C1, P3										
		HS-205 Islamic Studies / HS-209 Ethical Behavior								C2, C2				
		HS-200 Community Service						A3						A2
	Spring	IM-211 Machine Design	C1		C3	C4								C3
		IM-212 Computer Aided Engineering Design	C2	C4	P3						A4			
		IM-213 Metrology and Quality Control	C3	P3								A3		
		MF-303 Applied Economics for Engineers	C2	C3						C2				
		MT-225 Linear Algebra & Ordinary Differential Equations	C2	C3										

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Third Year	Fall	IM-303 Production Management	C2			C4					P3		C3	
		IM-310 Tool Design	C2		C5		C3	C3						
		IM-312 Applied Thermofluids	C3	C4					C4					
		MT-333 Advanced Calculus & Fourier Analysis	C2	C3, C3										
		HS-304 Business Communication & Ethics								C3		A3, C6		
	Spring	IM-307 Advanced Manufacturing Processes	C2			C4			C3					
		IM-308 Operations Research	C3	C2			P3							
		IM-320 Modeling and Simulation	C2	C4			P3							
		IM-408 Automation & Robotics	C2	C3	P3									
		IM-411 Methods Engineering	C2					C4			P3		C3	
		HSK-1 Chinese Language												
Final Year	Fall	IM-402 Computer Aided Manufacturing	C3		P3		C2				C3			
		IM-405 Finite Element Analysis	C4	C3			P3							
		Elective Course												
		IM-416 Management Information Systems*												
		IM-418 Condition Monitoring*												
		IM-419 Project Management*												
		IM-421 Smart Manufacturing System*												
		IM-420 Basics of Additive Manufacturing*												
		IM-422 Ergonomics in Workplace Design*												
		MG-450 Principles of Supply Chain Management	C2		C5									C3
	IM-409 Final Year Design Project		C	C				C	A	A	A	A		
	HSK-2 Chinese Language													
	Spring	IM-413 Plant Engineering	C2			C3								C4
		IM-417 Health, Safety & Environment	C2						C3		P3			A3
		MG-481 Entrepreneurship								A3			C3	C2
MT-441 Advanced Mathematical Techniques		C3	C2, C3											
IM-409 Final Year Design Project			C	C					A	C,A	C,A	C	C	
		Internship	C	C				A		A	A			

* Elective – 1

** Elective – 2,

Elective – 3