

		Bachelor of Engineering in Materials 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	
Third Year	Fall	MM-304 - Heat Treatment of Materials			C4	C3	P3	C5						
		MM-311 - Computational Materials Science	C2	C4		C3	P3							
		MM-312 - Polymeric Materials	C3			P3		C4						
		XX-###- Social Sciences Elective*												
		EA-304 - Business Communication and Ethics							C3			A3 C6		
		MT-442 - Numerical Methods	C2	C3 C3										
		ES-110/ES-211 - Understanding of the holy Quran II/ Introduction to Ethics-II*												
	Spring	MM-316 - Materials Characterization & Analytical Techniques	C2	C4		C3								
		MM-313 - Electronic, Magnetic and Optical Materials	C2	C4	C5									
		MM-314 - Composite Materials	C4		C5									
		MM-315 - Instrumentation and Control				C5	C4							
		MM-303 - Inspection and Testing of Materials				C4	P3		C2					C5
		MM-301 - Corrosion: Protection & Prevention	C3	C4	C5		P3							
		XX-###- Foreign Language I*												
Fourth Year	Fall	MM-418 - Phase Transformations & Kinetics		C3									C4	C3
		MM-411 - Nanomaterials and Nanotechnology					C3	C3						C4
		MM-419 - Quality & Project Management					C3	C4						C5
		MM-421 - Surface Engineering		C6			C3							C4
		MM-410 - FYDP (Part-I) Materials Engineering Design Project		C	C			C	A	A	A	A		
		MM-###-Technical Elective I*												
		MM-###-Technical Elective-II*												
	Spring	XX-###- Foreign Language II*												
		MM-402 - Design and Selection of Materials					P3	C3			A4			C5
		PF-401 - Entrepreneurship						C2				A3		C3
		MM-422 - Biomaterials						C3	C4					C4
		MM-423 - Health, Safety & Environment							C3					A3
		MM-410 - FYDP (Part-II) Materials Engineering Design Project		C	C				A	C A	C A	C C	C C	C C
		MM-###-Technical Elective III*												
MM-###-Technical Elective IV*														
	Internship	C	C				A	A	A	A				

*Courses not mapped with individual PLO system.