

CURRICULUM STRUCTURE ACADEMIC SESSION 2026/2027
BACHELOR OF CHEMICAL ENGINEERING WITH HONOURS

TYPE	CATEGORY	100 LEVEL				200 LEVEL				300 LEVEL				400 LEVEL			
CORE	CHEMICAL ENGINEERING CORE	SEMESTER 1		SEMESTER 2		SEMESTER 1		SEMESTER 2		SEMESTER 1		SEMESTER 2		SEMESTER 1		SEMESTER 2	
		EMM101/3 Engineering Mechanics		EKC152/2 Chemical Engineering Drawing		EKC237/3 Fluid Flow for Chemical Engineering		EKC232/3 Engineers in Society		EKC339/4 Separation Processes		EKC314/3 Transport Phenomena		EKC487/4 Plant Design and Operation		EKC485/3 Engineering Economy	
		EUM113/3 Engineering Calculus		EUM114/3 Advanced Engineering Calculus		EKC233/3 Chemical Engineering Thermodynamics		EKC216/3 Process Heat Transfer		EKC336/3 Chemical Reaction Engineering		EKC346/3 Reactor Design and Analysis		EKC499/2 Final Year Project		EKC499/4 Final Year Project	
		EKC135/2 Organic Chemistry		EKC132/3 Analytical Chemistry		EKC245/3 Mathematical Methods for Chemical Engineering		EKC236/3 Mass Transfer		EKC361/4 Process Control and Dynamics		EKC368/4 Plant Safety					
		EKC113/3 Physical Chemistry		EKC122/4 Mass and Energy Balance		EKC271/3 Biotechnology for Engineers		EKC246/3 Computer Programming and Applications				EKC344/3 Process Design and Analysis					
		EKC131/2 Introduction to Chemical Engineering		EKC124/3 Material Science for Chemical Engineering		EKC235/3 Environmental Engineering & Management		EKC238/3 Project Management and Entrepreneurship									
	LAB	EML101/2 Engineering Practice						EKC298/2 Chemical Engineering Laboratory I		EKC397/2 Chemical Engineering Laboratory II		EKC396/2 Chemical Engineering Laboratory III					
		15		15		15		17		13		15		5		9	
	UNIVERSITY REQUIREMENTS	*WAR122/2 Integrity and Anti-Corruption		**LKM100/2 Bahasa Malaysia 1		LSP201/2 (Z) / LSP301/2 (Z) English Courses		LSP301/2 (U) / LHP Series/2 (U) English Courses		Co-curriculum/ Options (1 or 2 units)		*HFF226/2 Philosophy and Current Issues		Co-curriculum/ Options		Co-curriculum/ Options	
				**WAR123E/2 Integrity and Anti-Corruption								Co-curriculum/ Options (1 or 2 units)					
				*LKM400/2 Bahasa Malaysia IV		*SHE102/2 Aspirasi Negara Bangsa		**SHE104E/2 Malaysian Citra 2									
ELECTIVE				*WUS101/2 Entrepreneurship		**SHE103E/2 Malaysian Citra 1				EKC301/3 Nanomaterials for Engineering Applications		EKC302/3 Phytochemical Technology		EKC401/3 Bioreactor Engineering and Bioprocessing		EKC402/3 Biomolecules for Engineering Applications	
										EKC303/3 Sustainable Polymer Processing and Applications		EKC304/3 Process Intensification in Chemical Process		EKC403/3 Advanced Control Systems for Industrial Process		EKC404/3 Loss Prevention and Risk Management	
										EKC305/3 Renewable and Alternative Energy		EKC306/3 Wastewater Treatment and Resources Recovery		EKC405/3 Data Analytics in Chemical Engineering		EKC406/3 Petroleum & Gas Processing Engineering	
										EKC307/3 Semiconductor Manufacturing for Chemical Engineers							
OVERALL TOTAL FOR CONFERRAL OF DEGREE																	135

*Local Student Only

**International Student Only

Note: Local Student: 14U + 1 Option

International Student: 12U + 3 Options