

**CURRICULUM STRUCTURE FOR DUAL DEGREE HMA**

YEAR	SEM	TYPE	CODE	COURSE	SLT CREDIT	
YEAR 1	SEM 1	UNIVERSITY	ULE1310	FUNDAMENTALS OF ENGLISH LANGUAGE	0	
			UQB1**1	CO-CURRICULUM 1	1	
			BUM2123	APPLIED CALCULUS	3	
			ULG1613	GERMAN A1	3	
		PROGRAM	BKC1253	PHYSICAL CHEMISTRY	3	
			BKC1752	CHEMICAL ENGINEERING LAB I	2	
			BKC1243	ANALYTICAL CHEMISTRY	3	
		COMMON	BMM1563	STATICS	3	
	<b>TOTAL</b>					<b>18</b>
	SEM 2	UNIVERSITY	ULE1322	ENGLISH FOR ACADEMIC COMMUNICATION	2	
			UQ*2**1	CO-CURRICULUM 2	1	
			BUM2133	ORDINARY DIFFERENTIAL EQUATION	3	
			ULG1623	GERMAN A2	3	
		PROGRAM	BKC1333	THERMODYNAMICS	3	
			BKC2353	MATERIAL & ENERGY BALANCE	3	
			BKC2473	HEAT TRANSFER	3	
			BKC2433	MASS TRANSFER	3	
	<b>TOTAL</b>					<b>21</b>
	SHORT SEM	UNIVERSITY	ULG2633	GERMAN B1.1	3	
	<b>TOTAL</b>					<b>3</b>
	YEAR 2	SEM 3	UNIVERSITY	ULG2643	GERMAN B1.2	3
ULE2332				ENGLISH FOR TECHNICAL COMMUNICATION	2	
BUM2413				APPLIED STATISTICS	3	
PROGRAM			BKC2453	CHEMICAL REACTION ENGINEERING I	3	
			BKC1323	ORGANIC CHEMISTRY	3	
			BKC3463	UNIT OPERATION	3	
COMMON			KUK2142	ENGINEERING ECONOMICS	2	
			BEL1113	FUNDAMENTAL OF ELECTRICAL ENGINEERING	3	
<b>TOTAL</b>					<b>22</b>	
SEM 4		UNIVERSITY	ULG3653	GERMAN B2.1	3	
			ULE2342	ENGLISH FOR PROFESSIONAL COMMUNICATION	2	
		PROGRAM	BMM1133	MATERIAL SCIENCE	3	
			BKC2443	CHEMICAL ENGINEERING THERMODYNAMICS	3	
			BKC2732	CHEMICAL ENGINEERING LAB II	2	
			BKC3552	PROCESS SIMULATION & COMPUTER AIDED DESIGN	2	
			BKC3472	CHEMICAL REACTION ENGINEERING II	2	
		BKC3492	SEPARATION PROCESS	2		
COMMON		KUK3562	OCCUPATIONAL SAFETY & HEALTH	2		
<b>TOTAL</b>					<b>21</b>	
SHORT SEM		UNIVERSITY	ULG3663	GERMAN B2.2	3	
<b>TOTAL</b>					<b>3</b>	
YEAR 3	SEM 5	UNIVERSITY	UHS1022	SOFT SKILLS	2	
			UGE2002	TECHNOPRENEURSHIP	2	

YEAR	SEM	TYPE	CODE	COURSE	SLT CREDIT	
YEAR 4	SEM 6	PROGRAM	BKC3732	CHEMICAL ENGINEERING LAB III	2	
			BKC4914	PROCESS SYNTHESIS	4	
			BKC3433	PROCESS CONTROL & DYNAMIC	3	
			BKC4543	ENVIRONMENTAL ENGINEERING	3	
		COMMON	KUK2443	NUMERICAL METHODS & OPTIMIZATION	3	
			KUK3022	ENGINEERING IN SOCIETY	2	
		<b>TOTAL</b>				
	SEM 6	UNIVERSITY		UHC1012	FALSAFAH DAN ISU SEMASA	2
				UHC2022	PENGHAYATAN ETIKA DAN PERADABAN	2
		PROGRAM		BKC4792	CHEMICAL ENGINEERING LAB IV	2
				BKC4924	INTEGRATED DESIGN PROJECT	4
		COMMON		KUK4412	PROJECT MANAGEMENT	2
	<b>TOTAL</b>					<b>12</b>
	YEAR 4	SEM 7	PROGRAM	VTE	INTRODUCTION TO PROCESS ENGINEERING (E)	2
				BVT	BIOLOGICAL PROCESS ENGINEERING (E)	2
LVT				FOOD PROCESSING TECHNOLOGY (E)	1.33	
BPE				BIOREACTORS AND PERIPHERAL EQUIPMENT (E)	3.33	
REE				RENEWABLE ENERGIES (E)	2.7	
ST				FLUID MECHANICS	2.7	
DIG				DIGITALISATION / PROGRAMMING	1.3	
<b>TOTAL</b>					<b>15.33</b>	
SEM 8		PROGRAM		PS	INTERNSHIP SEMESTER (PS)	17.3
				BV	BLOCK COURSES	1.3
				KPS	INTERNSHIP SEMESTER COLLOQUIUM	1.3
<b>TOTAL</b>					<b>20.0</b>	
YEAR 5		SEM9	PROGRAM	BA	BACHELOR THESIS	8
	BK			BACHELOR THESIS COLLOQUIUM	2	
<b>TOTAL</b>					<b>10</b>	
<b>GRAND TOTAL</b>					<b>166.33</b>	