

STRUKTUR KURSUS DAN JUMLAH KREDIT KEPERLUAN PROGRAM

Program ditawarkan : **Program Sarjana Muda Kejuruteraan Awam (ZK01)**

Jumlah keperluan kredit yang perlu dipenuhi untuk bergraduan adalah seperti mana jadual di bawah dan tempoh pengajian yang perlu diikuti adalah lapan (8) semester lazim. Pecahan kursus yang perlu diambil adalah seperti berikut:

KURSUS	KREDIT
Kursus Universiti: i. Kursus Teras Universiti ii. Elektif Universiti	28
Kursus Teras Program : i. Teras Program ii. Teras Fakulti	104
Kursus Elektif Program	6
JUMLAH KREDIT UNTUK BERGRADUAT	138

SENARAI KURSUS TERAS PROGRAM YANG PERLU DIPENUHI (86 KREDIT) :

CODE	COURSE	CREDIT
ECB 1152	Introduction to Electrical Engineering	2
ECB 1113	Applied Mechanics	3
ECB 1232	Engineering Geology	2
ECB 1213	Mechanics of Materials	3
ECB 1223	Fluid Mechanics	3
ECB 1253	Construction Materials and Technology	3
ECB 2153	Graphics and Engineering Drawings	3
ECB 2123	Engineering Hydrology	3
ECB 2223	Water Supply and Sewerage	3
ECB 2243	Geomatics	3
ECB 2233	Soil Mechanics	3
ECB 2113	Mechanics of Structures	3
ECB 2213	Structural Analysis	3
ECB 3133	Geotechnics	3
ECB 3143	Highway Engineering	3

ECB 3113	Reinforced Concrete Design I	3
ECB 3213	Reinforced Concrete Design II	3
ECB 3223	Hydraulics	3
ECB 3153	Civil Engineering Project Management	3
ECB 3243	Transportation Engineering	3
ECB 3233	Foundation Engineering	3
ECB 3354	Industrial Training	4
ECB 4113	Steel and Timber Structures Design	3
ECB 4162	Infrastructure Design Project (Capstone I)	2
ECB 4192	Final Year Project I	2
ECB 4123	Environmental Engineering	3
ECB 4153	Engineers in Community and Ethics	3
ECB 4262	Structural Design Project (Capstone II)	2
ECB 4252	Construction Contract, Estimation and Economics	2
ECB 4294	Final Year Project II	4

SENARAI KURSUS ELEKTIF PROGRAM (6 KREDIT) :

CODE	COURSE	CREDIT
ECB 5153	Military Engineers in Humanitarian and Peacekeeping Mission	3
ECB 5113	Introduction to Bridge Engineering	3
ECB 5123	Nuclear Biological and Chemical Contamination	3
ECB 5153	Advanced Construction Material and Technology For Military Application	3
ECB 5253	Damage Assesment, Maintenance and Rehabilitation	3
ECB 5213	Introduction To Military Explosive, Blast Loadings, and Demolition Method	3

**STRUKTUR KURIKULUM
SARJANA MUDA KEJURUTERAAN AWAM**

SEMESTER 1				SEMESTER 2			
Code	Course	Credit	Pre- Requisite	Code	Course	Credit	Pre- Requisite
LAN 1022	Malaysian Nationhood	2		DUS 2012	Military Law	2	
LAN 1012	Islamic and Asian Civilizations	2		LAN 1032	Ethnic Relation	2	
LEL 1012	English for Academic Writing	2		DUM 2062	Effective Leadership	2	
EFA 1103	Engineering Mathematics I (Calculus and Linear	3		EFA 1203	Engineering Mathematics II (Differential	3	
EFC 1103	Computing I (C and C++)	3		ECB1253	Construction Materials and Technology	3	
ECB1113	Applied Mechanics	3		ECB1213	Mechanics of Materials	3	ECB1113
ECB1152	Introduction to Electrical Engineering	2		ECB1223	Fluid Mechanics	3	
TOTAL		17		TOTAL		18	

SEMESTER 3				SEMESTER 4			
Code	Course	Credit	Pre-Requisite	Code	Course	Credit	Pre-Requisite
DUS 2022	Introduction to Strategic Studies	2		DUS 2052	Law of Armed Conflict	2	
ECB1232	Engineering Geology	2		DUS 1062	Military History	2	
LAN 1042	Basic Entrepreneurship	2		ECB2223	Water Supply and Sewerage	3	
ECB2113	Mechanics of Structures	3	ECB1213	ECB2243	Geomatics	3	
EFA 2203	Engineering Mathematics IIIB (CIS and OR)	3		ECB2233	Soil Mechanics	3	
ECB2153	Graphics and Engineering Drawings	3		ECB2213	Structural Analysis	3	ECB2113
ECB2123	Engineering Hydrology	3		LEL 1022	English for Oral Communication	2	
TOTAL		18		TOTAL		18	

SEMESTER 5				SEMESTER 6			
Code	Course	Credit	Pre-Requisite	Code	Course	Credit	Pre-Requisite
LFL1XX2	Foreign Language I	2		QKS 3621/ PLS xxxx/ QKx xxxx	Co-Curriculum	2	
EFC 1203	Computing II (Numerical methods and Engineering)	3		LFL 1XX2	Foreign Language II	2	
ECB 3133	Geotechnics	3	ECB2233	EFA 2213	Engineering Mathematics IV (Statistics)	3	
ECB 3143	Highway Engineering	3		ECB 3213	Reinforced Concrete Design	3	ECB3 113
ECB 3113	Reinforced Concrete Design I	3	ECB2113	ECB 3223	Hydraulics	3	ECB1 223
ECB 3153	Civil Engineering Project Management	3		ECB 3243	Transportation Engineering	3	
TOTAL		17		TOTAL		16	

SEMESTER 6 (INTER-SESI)			
Code	Course	Credit	Pre-Requisite
ECB 3354	Industrial Training	4	*
TOTAL		4	

* Memenuhi 60 jam kredit lulus

SEMESTER 7				SEMESTER 8			
Code	Course	Credit	Pre-Requisite	Code	Course	Credit	Pre-Requisite
ECB4113	Steel and Timber Structures Design	3		ECB4262	Structural Design Project (Capstone II)	2	ECB3213 ECB4113 ECB4162
ECB4123	Environmental Engineering	3		ECB4252	Construction Contract, Estimation and Economics	2	
ECB4162	Infrastructure Design project (Capstone I)	2	ECB211 3	ECB4294	Final Year Project II	4	ECB4192
ECB 3233	Foundation Engineering	3	ECB313 3	ECB4153	Engineers in Community and Ethics	3	
ECB4192	Final Year Project I	2	***	ECB5XX 3	Elective II	3	
ECB 5XX3	Elective I	3					
TOTAL		16		TOTAL		14	