

## STUDY SCHEME 2016-2020

Study Scheme 2016-2020					
Bachelor of Agricultural and Biosystems Engineering					
Department of Biological and Agricultural Engineering, Faculty of Engineering, Universiti Putra Malaysia					
SEMESTER I			SEMESTER II		
CODE	COURSES	CREDIT	CODE	COURSES	CREDIT
<b>YEAR 1</b>					
ECC3011	Engineering Mathematics I	3(3+0)	ECC3012	Engineering Mathematics II	3(3+0)
ECC3005	Computer Programming	3(2+1)	EMM3105	Dynamics	3(3+0)
EMM3518	Computer Aided Engineering Drawing	3(1+2)	EMM3213	Thermodynamics I	3(3+0)
EMM3103	Statics	3(3+0)	EAB3001	Workshop Management and Practice	1(0+1)
PRT2008	Agriculture and Man	2(2+0)	PRT3005	Crop Production System	3(3+0)
SKP2204	Ethnic Relations	2(2+0)	BBI2423	Academic Interaction and Presentation	3(2+1)
QKXXXXX	Co-curriculum with Credit	1(0+1)	QKXXXXX	Co-curriculum with Credit	1(0+1)
<b>TOTAL</b>		<b>17</b>	<b>TOTAL</b>		<b>17</b>
<b>YEAR 2</b>					
EEE3020	Electrical and Electronic Technology	3(2+1)	ECC3014	Engineering Statistics	3(3+0)
EMM3305	Fluid Mechanics I	3(3+0)	EAB3208	Agricultural Waste Management	3(2+1)
EMM3409	Strength of Materials I	3(3+0)	EAB3303	Hydrology	3(3+0)
EAB3216	Biosystems Environment	3(3+0)	EAB3514	Thermal and Fluid Machines	3(2+1)
EAB3312	Soil Engineering	3(2+1)	EAB3612	Biological System Instrumentation	3(2+1)
BBI2424	Academic Writing Skill	3(2+1)	SKP2203	Islamic Civilisation and Asian Civilisation	2(2+0)
<b>TOTAL</b>		<b>18</b>	<b>TOTAL</b>		<b>17</b>
<b>YEAR 3</b>					
EAB3210	Principles of Heat Transfer	3(3+0)	EAB3011	Analysis and Design of Structures	3(3+0)
EAB3304	Hydraulics	3(2+1)	EAB3212	Agricultural Process Engineering	3(2+1)
EAB3518	Machine Design	3(2+1)	EAB3316	Irrigation and Drainage Engineering	3(2+1)
EAB3614	Control System Engineering	3(3+0)	EAB3516	Plantation Machinery	3(2+1)
ECV3511	Geomatics Engineering	3(2+1)	SKP2101	Malaysian Nationhood	3(3+0)
EAB3214	Geographic Information System Technology	3(3+0)			
<b>TOTAL</b>		<b>18</b>	<b>TOTAL</b>		<b>15</b>
<b>YEAR 4</b>					
EAB4911	Industrial Training *	5(0+5)	EAB4949B	Bachelor's Project	4(0+4)
EAB4949A	Bachelor's Project	2(0+2)	EAB3014	Engineering Properties of Agricultural Materials	3(3+0)
EAB4947	Agricultural and Biosystems Engineering Design Project	4(0+4)	ECV3011	Engineers and Society	3(2+1)
EMM3610	Engineering Economic Analysis	3(3+0)	EABXXXX	Elective II **	3(3+0)
EABXXXX	Elective I **	3(3+0)	EABXXXX	Elective III ***	3(3+0)
<b>TOTAL</b>		<b>17</b>	<b>TOTAL</b>		<b>16</b>
<b>NOTA</b>				<b>TOTAL CREDIT</b>	
* EAB4911 Industrial training will be held for 10 weeks during the second semester break of the third year study period. ** Chosen optional elective courses *** Other than chosen optional elective courses				<b>135</b>	

## OPTIONAL ELECTIVE COURSES

SEMESTER I			SEMESTER II		
CODE	COURSES	CREDIT	CODE	COURSES	CREDIT
<b>POSTHARVEST AND ENVIRONMENT</b>					
EAB4205	Controlled environment	3(3+0)	EAB4214	Unit Operations	3(3+0)
EAB4211	Postharvest Engineering	3(3+0)	EAB4216	Postharvest System Design	3(3+0)
<b>SOIL AND WATER RESOURCES</b>					
EAB4314	Groundwater	3(3+0)	EAB4308	Soil Erosion and Conservation	3(3+0)
EAB4315	Aquaculture Engineering	3(3+0)	EAB4312	Land Management	3(3+0)
<b>AGRICULTURAL INFORMATICS</b>					
EAB4412	Intelligent Systems for Agricultural and Biosystems Engineering	3(3+0)	EAB4416	Precision Farming	3(3+0)
EAB4413	Remote Sensing Applications	3(3+0)	EAB4411	Agricultural System Modeling and Analysis	3(3+0)
<b>MECHANISATION AND AUTOMATION</b>					
EAB4515	Off-road Vehicles Engineering	3(3+0)	EAB4513	Design of Machine Components	3(3+0)
EAB4517	Fluid Power	3(3+0)	EAB4516	Automation in Agriculture	3(3+0)