

<b>STUDY SCHEME (2016-2020)</b>					
<b>BACHELOR OF AGRICULTURAL AND BIOSYSTEMS ENGINEERING</b>					
Department of Biological and Agricultural Engineering					
Faculty of Engineering, Universiti Putra Malaysia					
<b>SEMESTER I</b>			<b>SEMESTER II</b>		
CODE	COURSES	CREDIT	CODE	COURSES	CREDIT
<b>YEAR 1</b>					
ECC3001	Engineering Mathematics I	3(3+0)	ECC3002	Engineering Mathematics II	3(3+0)
ECC3005	Computer Programming	3(2+1)	EMM3104	Dynamics	3(3+0)
EMM3518	Computer Aided Engineering Drawing	3(1+2)	EMM3213	Thermodynamics I	3(3+0)
EMM3103	Statics	3(3+0)	EAB3000	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>					
EEE3100	Electrical and Electronic Technology	3(2+1)	ECC3004	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)
EAB3206	Biosystems Environment	3(3+0)	EAB3504	Thermal and Fluid Machines	3(2+1)
EAB3302	Soil Engineering	3(2+1)	EAB3602	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)	EAB3010	Analysis and Design of Structures	3(3+0)
EAB3304	Hydraulics	3(2+1)	EAB3212	Agricultural Process Engineering	3(2+1)
EAB3508	Machine Design	3(2+1)	EAB3306	Irrigation and Drainage Engineering	3(2+1)
EAB3604	Control System Engineering	3(3+0)	EAB3506	Plantation Machinery	3(2+1)
ECV3511	Geomatics Engineering	3(2+1)	SKP2101	Malaysian Nationhood	3(3+0)
<b>TOTAL</b>		<b>15</b>	<b>TOTAL</b>		<b>15</b>
<b>YEAR 4</b>					
EAB4901	Industrial Training *	5(0+5)	EAB4949B	Bachelor's Project	4(0+4)
EAB4949A	Bachelor's Project	2(0+2)	EAB3004	Engineering Properties of Agricultural Materials	3(3+0)
EAB4946	Agricultural and Biosystem Engineering Design Project	3(0+3)	ECV3001	Engineers and Society	3(2+1)
EABXXXX	Elective I	3(3+0)	EABXXXX	Elective III	3(3+0)
EABXXXX	Elective II	3(3+0)			
<b>TOTAL</b>		<b>16</b>	<b>TOTAL</b>		<b>13</b>
<b>NOTE</b>			<b>TOTAL CREDIT</b>		
			<b>128</b>		

\* EAB4901 Industrial Training will be held for 10 weeks during the second semester break of the third year study period.

## OPTIONAL ELECTIVE COURSES

All students are compulsory to choose one of four options offered in the final year of study and choose 3 courses of which option is selected. List of courses are as follows:

SEMESTER I			SEMESTER II		
CODE	COURSES	CREDIT	CODE	COURSES	CREDIT
<b>POSTHARVEST AND ENVIRONMENT</b>					
EAB4204	Controlled Environment	3(3+0)	EAB4214	Unit Operations	3(3+0)
EAB4210	Postharvest Engineering	3(3+0)	EAB4216	Postharvest System Design	3(3+0)
<b>SOIL AND WATER RESOURCES</b>					
EAB4314	Groundwater	3(3+0)	EAB4304	Aquacultural Engineering	3(3+0)
EAB4308	Soil Erosion and Conservation	3(3+0)	EAB4312	Land Management	3(3+0)
<b>AGRICULTURAL INFORMATICS</b>					
EAB4412	Intelligent Systems for Agricultural and Biosystems Engineering	3(3+0)	EAB4402	Remote Sensing Applications	3(3+0)
EAB4414	Geographic Information System Technology	3(3+0)	EAB4416	Precision Farming	3(3+0)
<b>MECHANISATION AND AUTOMATION</b>					
EAB4504	Off-Road Vehicles Engineering	3(3+0)	EAB4502	Design of Machine Components	3(3+0)
EAB4514	Fluid Power	3(3+0)	EAB4516	Automation in Agriculture	3(3+0)