

<b>BACHELOR OF SCIENCE IN STATISTICS ACADEMIC SESSION 2021/2022 (134 CREDITS)</b>			
<b>UNIVERSITY COURSES (12 CREDITS)</b>			
<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>CREDITS</b>	
GIG1012 / GLT1017*	Philosophy and Current Issues (local students) / Basic Malay Language (*only for international students)	2	
GIG1013	Appreciation of Ethics and Civilisations	2	
GIG1003	Basic Entrepreneurship Enculturation	2	
GKA/GKI/GKK/ GKP/GKS/GKU	Co-Curriculum	2	
GLTxxxx	English Course (subject to MUET bands)	4	
<b>CORE COURSES (76 CREDITS)</b>			
<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUISITE</b>	<b>CREDITS</b>
<b>LEVEL 1 (26 Credits)</b>			
SIX1015	Science, Technology and Society	-	2
SIM1001	Basic Mathematics	-	4
SIM1002	Calculus I	-	4
SIM1003	Calculus II	SIM1002	4
SIT1001	Probability and Statistics I	SIM1002	4
SIT1002	Statistical Programming	-	4
SIT1003	Analysis of Data and Statistical Report Writing	-	4
<b>LEVEL 2 (28 Credits)</b>			
SIM2001	Advanced Calculus	SIM1003	4
SIM2002	Linear Algebra	SIM1001	4
SIT2001	Probability and Statistics II	SIT1001	4
SIT2007	Foundations of Data Science	SIT1001	3
SIT2008	Further Mathematical Statistics	SIT2001	4
SIT2009	Regression Analysis	SIT1001	4
SIT2010	Stochastic Processes	SIT2001	3
SIT2011	Statistics and Community	SIT1003	2
<b>LEVEL 3 (22 Credits)</b>			
SIT3005	Time Series and Forecasting Methods	SIT2001	4
SIT3015	Introduction to Multivariate Analysis	SIT2001	3
SIT3016	Generalized Linear Models	SIT2001 and SIT2009	4
SIT3017	Statistical Learning and Data Mining	SIT2007	3
SIT3021	Industrial Training	SIT3017	8

<b>ELECTIVE COURSES (46 CREDITS)</b>			
<b>(I) PROGRAM ELECTIVE COURSES (at least 38 CREDITS)</b>			
<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>PRE-REQUISITE</b>	<b>CREDITS</b>
SIM2010	Numerical Computation	SIM1003	4
SIM2012	Basic Operations Research	SIM1001	4
SIQ1001	Introduction to Accounting	-	3
SIQ2001	Microeconomics	-	3
SIQ2002	Macroeconomics	-	3
SIQ2003	Financial Mathematics and Derivatives	SIM1002	4
SIT3003	Computer Intensive Methods in Statistics	SIT2001	4
SIT3004	Applied Stochastic Processes	SIT2010	4
SIT3008	Introduction to Survey Sampling	SIT2001	4
SIT3009	Statistical Process Control	SIT2001	4
SIT3012	Design and Analysis of Experiments	SIT1001 and SIT2009	4
SIT3013	Analysis of Failure and Survival Data	SIT2001	4
SIT3018	Non-Parametric Statistics	SIT1001	4
SIT3019	Introduction to Bayesian Statistics	SIT2001	4
SIT3020	Python for Data Science	SIT3017	4
SIT3022	Probability Theory	SIM2001 and SIT2008	4
SIT3023	Statistical Laboratory	SIT1002 and SIT2007	3
SIT3024	Statistical Consultancy and Data Analysis	SIT3021	3
SIT3025	Statistical Science Project	SIT1002 and SIT2007	4
The exact number of program elective courses offered in each year may differ			
<b>(II) ELECTIVE UNIVERSITY COURSES (8 CREDITS)</b>			
<b>Student Holistic Empowerment [SHE]</b>			
Choose one course from each cluster			
<b>Cluster</b>	<b>Cluster Title</b>	<b>Credits</b>	
Cluster 1	Thinking Matters: Mind and Intellect	2	
Cluster 2	Emotional, Physical and Spiritual Intelligence: Heart, Body and Soul	2	
Cluster 3	Technology/Artificial Intelligence and Data Analytics: I-Techie	2	
Cluster 4	Global Issues and Community Sustainability: Making The World A Better Place	2	

**LIST OF COURSES ACCORDING TO SEMESTER  
(PLANNING OF COURSES)  
BACHELOR OF SCIENCE IN STATISTICS**

COMPONENT	YEAR 1				TOTAL CREDITS
	SEMESTER 1		SEMESTER 2		
	COURSE	CREDIT	COURSE	CREDIT	
University Courses	GLT <sup>xxxx</sup>	2	GLT <sup>xxxx</sup>	2	8
	GIG1012 / GLT1017*	2	GIG1013	2	
Core Courses	SIT1002	4	SIM1003	4	26
	SIM1001	4	SIT1001	4	
	SIM1002	4	SIT1003	4	
			SIX1015	2	
Elective Courses	Student Holistic Empowerment (SHE) Cluster 1	2			2
<b>TOTAL CREDITS</b>		<b>18</b>		<b>18</b>	<b>36</b>

\*only for international students

COMPONENT	YEAR 2				TOTAL CREDITS
	SEMESTER 1		SEMESTER 2		
	COURSE	CREDIT	COURSE	CREDIT	
University Courses	GIG1003	2			2
Core Courses	SIM2001	4	SIT2008	4	31
	SIM2002	4	SIT2010	3	
	SIT2001	4	SIT2009	4	
	SIT2007	3	SIT3015	3	
	SIT2011	2			
Elective Courses	Student Holistic Empowerment (SHE) Cluster 2	2	Student Holistic Empowerment (SHE) Cluster 3	2	8
			Elective Course 1	4	
<b>TOTAL CREDITS</b>		<b>21</b>		<b>20</b>	<b>41</b>

COMPONENT	YEAR 3				TOTAL CREDITS
	SEMESTER 1		SEMESTER 2		
	COURSE	CREDIT	COURSE	CREDIT	
University Courses	GKA/GKI/GKK/ GKP/GKS/GKU	2			2
Core Courses	SIT3005	4	SIT3021	8	19
	SIT3016	4			
	SIT3017	3			
Elective Courses	Elective Course 2	4			6
	Student Holistic Empowerment (SHE) Cluster 4	2			
<b>TOTAL CREDITS</b>		<b>19</b>		<b>8</b>	<b>27</b>

COMPONENT	YEAR 4				TOTAL CREDITS
	SEMESTER 1		SEMESTER 2		
	COURSE	CREDIT	COURSE	CREDIT	
Elective Courses	Elective Course 3	4	Elective Course 7	4	30
	Elective Course 4	4	Elective Course 8	4	
	Elective Course 5	4	Elective Course 9	4	
	Elective Course 6	3	Elective Course 10	3	
<b>TOTAL CREDITS</b>		<b>15</b>		<b>15</b>	<b>30</b>