BACHELOR OF SCIENCE IN STATISTICS
SESSION 2019/2020
(127 CREDITS)

1. UNIVERSITY COURSES (20 CREDITS)

COURSE CODE	COURSE NAME	PRE-REQUISITE	CREDITS
GLTxxxx	Communication in English	-	6
GKN/GKR/GKV	Co-curriculum	-	2
GIG1001/ GLT1017	The Islamic and Asian Civilization (TITAS)/ Basic Malay Language (only for international students)	-	2
GIG1002/ GIG1006	Ethnic Relations/ Introduction to Malaysia (only for international students)	-	2
GIG1003	Basic Entrepreneurship Culture	-	2
GIG1004	Information Literacy	-	2
GIG1005	Social Engagement	-	2
GIXxxxx	External Faculty Elective Course	-	2

2. CORE COURSES (72 CREDITS)

(I) FACULTY CORE COURSES (8 CREDITS) [TF]

COURSE CODE	COURSE NAME	PRE-REQUISITE	CREDITS
SIX1001	Introduction to Science and Technology Studies	-	3
SIX1002	Ethics and Safety	-	2
SIX1004	Statistics	-	3

(II) PROGRAM CORE COURSES (64 CREDITS) [TP]

COURSE CODE	COURSE NAME	PRE-REQUISITE	CREDITS
LEVEL 1 (24 Credits)			
SIM1001	Basic Mathematics	-	4
SIM1002	Calculus I	-	4
SIM1003	Calculus II	SIM1002	4
SIN1001	Introduction to Computing	-	2
SIN1002	Introduction to Worksheet	-	2
SIN1003	Mathematical Methods I	SIM1002	4
SIT1001	Probability and Statistics I	SIM1002	4
LEVEL 2 (36 Credits)			
SIM2001	Advanced Calculus	SIM1003	4
SIM2002	Linear Algebra	SIM1001	4
SIN2001	Mathematical Methods II	SIN1003	4
SIN2002	Structured Programming	SIM1002	4
SIT2001	Probability and Statistics II	SIT1001	4
SIT2002	Further Mathematical Statistics	SIT2001	4
SIT2003	Stochastic Processes	SIT2001	4
SIT2004	Regression Analysis	SIT1001	4
SIT2005	Data Analysis I	SIT1001	4
LEVEL 3 (4 Credits)			
SIT3001	Introduction to Probability Theory	SIM2001 and SIT2002	4

3. ELECTIVE COURSES (35 CREDITS)

(I) PROGRAM ELECTIVE COURSES (at least 28 CREDITS) [EP]

COURSE CODE	COURSE NAME	PRE-REQUISITE	CREDITS
SIT2006	Non-parametric Statistics	SIT1001	4
SIN3014	Industrial Training	SIM2002	5
SIN3015	Mathematical Science Project	SIM2002	4
SIT3002	Introduction to Multivariate Analysis	SIT2001	4
SIT3003	Computer Intensive Methods in Statistics	SIT2001	4
SIT3004	Applied Stochastic Processes	SIT2003	4
SIT3005	Time Series and Forecasting Methods	SIT2001	4
SIT3006	Further Topics in Regression Analysis	SIT2001 and SIT2004	4
SIT3007	Data Analysis II	SIT2001 and SIT2005	4
SIT3008	Introduction to Survey Sampling	SIT2001	4
SIT3009	Statistical Process Control	SIT2001	4
SIT3010	Introduction to Data Mining	SIT2001	4
SIT3011	Bioinformatics	SIT2001	4
SIT3012	Design and Analysis of Experiments	SIT1001 and SIT2004	4
SIT3013	Analysis of Failure and Survival Data	SIT2001	4

SIT3014	Introduction to Bayesian Statistics		SIT2001	4

(II) FACULTY ELECTIVE COURSES (7 CREDITS) [EF]
* Courses Offered by Other Institute/Department within the Faculty of Science
* Refer to the Faculty Elective Courses lists other than from the Institute of Mathematical Sciences but within the Faculty of Science

Institute/Department	Course Code	Course Title	Credits
Institute of Biological Sciences	SIX1006	Malaysian Flora	3
	SIX1007	Malaysian Fauna	3
	SIX1008	Bio Computing	2
Department of Chemistry	SIX1009	Basic Chemistry	2
Department of Geology	SIX1010	Earth's Ecosystem	2
Department of Physics	SIX1011	Contemporary Physics	2
Department of Science and Technology Studies	SIX1012	Logical Thinking in Science	3

The exact number of elective courses of department offered in each year may be different, depending on the availability of manpower. Core courses in Bachelor of Science in Mathematics or Bachelor of Science in Applied Mathematics may also be taken as elective courses of department for this program. Only SIQ2003 in Bachelor of Actuarial Science may be taken as an elective course of department for this program. Please refer to the respective programs.

Attention:
1. Students who wish to specialize in Bachelor of Science in Statistics must take at least 20 credits from courses with codes SIT3*** (not including SIN3014) listed in this program.
2. Students who wish to take SIN3014 or SIN3015 must pass at least 80 course credits listed in this program.