

BACHELOR OF ACTUARIAL SCIENCE
SESSION 2019/2020
(145 CREDITS)

1. UNIVERSITY COURSES (22 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	-	4

2. CORE COURSES (83 CREDITS)

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

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

(II) PROGRAM CORE COURSES (75 CREDITS) [TP]

COURSE CODE	COURSE NAME	PRE-REQUISITE	CREDITS
LEVEL 1 (17 Credits)			
SIM1001	Basic Mathematics	-	4
SIM1002	Calculus I	-	4
SIN1002	Introduction to Worksheet	-	2
SIM1003	Calculus II	SIM1002	4
SIQ1001	Introduction to Accounting	-	3
LEVEL 2 (26 Credits)			
SIM2001	Advanced Calculus	SIM1003	4
SIN2002	Structured Programming	SIM1002	4
SIT1001	Probability and Statistics I	SIM1002	4
SIT2001	Probability and Statistics II	SIT1001	4
SIQ2001	Microeconomics	-	3
SIQ2002	Macroeconomics	-	3
SIQ2003	Financial Mathematics and Derivatives	SIM1002	4
LEVEL 3 (16 Credits)			
SIQ3001	Actuarial Mathematics I	SIQ2003	4
SIQ3002	Portfolio Theory and Asset Models	SIQ2003	4
SIQ3003	Actuarial Mathematics II	SIQ3001	4
SIQ3004	Mathematics of Financial Derivatives	SIQ2003	4
LEVEL 4 (16 Credits)			
SIQ3005	Life Insurance and Takaful	SIT2001	4
SIQ3006	Risk Theory	SIT2001 and SIQ2003	4
SIQ3007	Industrial Training	-	8

3. ELECTIVE COURSES (40 CREDITS)

(I) PROGRAM ELECTIVE COURSES (at least 31 CREDITS) [EP]

COURSE CODE	COURSE NAME	PRE-REQUISITE	CREDITS
SIN1003	Mathematical Methods I	SIM1002	4
SIM2002	Linear Algebra	SIM1001	4
SIN2001	Mathematical Methods II	SIN1003	4
SIN2003	Basic Operational Research	SIM1001	4
SIT2002	Further Mathematical Statistics	SIT2001	4
SIT2003	Stochastic Processes	SIT2001	4
SIT2004	Regression Analysis	SIT1001	4
SIN3015	Mathematical Science Project	SIM2002	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

SIT3010	Introduction to Data Mining	SIT2001	4
SIQ3008	Foundation of Islamic Finance	SIN2002	4
SIQ3009	Pension Mathematics	SIQ3001	4
SIQ3010	Survival Model	SIT2001	4

(II) FACULTY ELECTIVE COURSES (9 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

1. The exact number of courses (as shown above) that will be offered for any year may be different, depending on the availability of manpower.
2. Core courses under Bachelor of Science in Mathematics, Bachelor of Science in Applied Mathematics or Bachelor of Science in Statistics may also be taken by a student in Bachelor of Actuarial Science program as Program Elective Courses. Please refer to the relevant programs.
3. Actuarial students must take at least 110 of credits before undergoing the practical training (SIQ3007).
4. Actuarial students are also encouraged to take CIX2001 (Financial Management) and CIC2001 (Basic Corporate Finance) as Program Elective Courses.

Attention:

Courses with codes SIQ**** except SIQ2003 are exclusive for students in Bachelor of Actuarial Science.