

BACHELOR OF SCIENCE IN APPLIED GEOLOGY ACADEMIC SESSION 2021/2022 (134 CREDITS)			
UNIVERSITY COURSES (14 CREDITS)			
COURSE CODE	COURSE NAME		CREDIT
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 Culture		2
GKA/GKI/GKK/ GKP/GKS/GKU	Co-Curriculum		4
GLTxxxx	English Course (subject to MUET bands)		4
CORE COURSES (80 CREDITS)			
COURSE CODE	COURSE NAME	PRE-REQUISITE	CREDIT
LEVEL 1 (22 CREDITS)			
SIX1015	Science, Technology and Society		2
SIX1016	Statistics		3
SIC1006	Computer Programming for Science		3
SII1001	Introduction to the Earth		2
SII1002	Earth Surface Processes		2
SII1003	Geological Structures and Maps		3
SII1004	Mineralogy		3
SII1005	Fundamental of Field Geology		2
SII1006	Safety and Geological Code of Practice		2
LEVEL 2 (36 CREDITS)			
COURSE CODE	COURSE	PRE-REQUISITE	CREDIT
SII2002	Applied Geology Field Course	SII1005	8
SII2003	Structural Geology	SII1003	3
SII2004	Sedimentology	SIG1002	4
SII2005	Igneous and Metamorphic Petrology	SII1004	3
SII2006	Paleontology	SII1001, SII1002	3
SII2007	Introduction to Geophysics	SII1001, SII1002	3
SII2008	Geology and Community	SII1002, SII1002	3
SII2009	Geochemistry	SII1001, SII1004	3
SII2010	GIS Applications in Geosciences	SII1003	3
SII2011	Geology Laboratory Analytical Techniques	SII1004	3

<b>LEVEL 3 (22 CREDITS)</b>			
<b>COURSE CODE</b>	<b>COURSE</b>	<b>PRE-REQUISITE</b>	<b>CREDIT</b>
SII3009	Mineral Resources	SII1004	3
SII3010	Geology Research Project	SIG2002, SII2011	8
SII3011	Geology of Malaysia	SII1001	3
SII3012	Industrial Attachment	SII2002, SII2011	8
<b>ELECTIVE COURSES (40 CREDITS)</b>			
<b>(I) PROGRAMME ELECTIVE COURSES (32 CREDIT)</b>			
<b>COURSE CODE</b>	<b>COURSE</b>	<b>PRE-REQUISITE</b>	<b>CREDIT</b>
SII2012	Geological Data Analysis	SIX1016	3
SII2013	Marine Geology	SII1002	2
SII2014	Karst Geomorphology and Conservations	SII1002	2
SII2015	Climate Change and Adaptation	SII1002	3
SII2016	Engineering Geology	SII1003	3
SII2017	Earth Water Resources	SII1002	3
SII2018	Environmental Geology	SII1001	3
SII3013	Advanced Geophysics	SII2007	3
SII3014	Geohazards	SII1001	3
SII3015	Quaternary Geology	SII1002	3
SII3016	Stratigraphic Methods	SII2004	3
SII3017	Geology of South East Asia	SII1001	2
SII3018	Petroleum Geology	SII2004	4
SII3019	Organic Petrology	SII2004	3
SII3020	Industrial Minerals	SII3009	2
SII3021	Tectonics and Earth History	SII2006	2
SII3022	Mineral and Mining Exploration	SII2009	3
SII3023	Geological Site Investigation	SII2016	2
SII3024	Unconventional Oil and Gas Resources	SII2004	3
SIM1001	Basic Mathematics		4
SIM1002	Calculus 1		4
<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	

**Str**

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

Year	Component	Semester I			Semester II		
		Code	Course	Credit	Code	Course	Credit
1	University Courses	GIG1012/ GLT1017	Philosophy and Current Issues (Local Student)/ Basic Malay Language (only for international students)	2	GKA/GKI/ GKK/ GKP/ GKS/GKU 1001	Co-curriculum	2
		GIG1013	Appreciation of Ethics and Civilisations	2	GIG1003	Basic Entrepreneurship Culture	2
		GLTXXX	English Language	2	GLTXXX	English Language	2
	Core Courses	SIX1016	Statistics	3	SIX1015	Science, Technology and Society	2
		SII1001	Introduction to the Earth	2	SIC1006	Computer Programming for Science	3
		SII1002	Earth Surface Processes	2	SII1004	Mineralogy	3
		SII1003	Geological Structures and Maps	3	SII1005	Fundamental of Field Geology	2
					SII1006	Safety and Geological Code of Practice	2
	Elective Courses		Student Holistic Empowerment (SHE) Cluster 1: Thinking Matters: Mind & Intellect	2			
	Total Credit			18			18

Year	Component	Semester I			Semester II		
		Code	Course	Credit	Code	Course	Credit
2	University Courses	GKA/GKI/ GKK/ GKP/ GKS/GKU 1001	Co-Curriculum	2			
	Core Courses	SII2002	Applied Geology Field Course	4	SII2002	Applied Geology Field Course	4
		SII2003	Structural Geology	3	SII2006	Paleontology	3
		SII2004	Sedimentology	4	SII2008	Environmental Geology	3
		SII2005	Igneous and Metamorphic Petrology	3	SII2009	Geochemistry	3
		SII2007	Introduction to Geophysics	3	SII2010	GIS Applications in Geosciences	3
					SII2011	Geology Laboratory Analytical Techniques	3
	Elective courses						
	<b>Total Credit</b>	<b>19</b>			<b>19</b>		

Year	Component	Semester I			Semester II		
		Code	Course	Credit	Code	Course	Credit
3	University Courses						
	Core Courses	SII3009	Mineral Resources	3	SII3010	Geology Research Project	4
		SII3011	Geology of Malaysia	3			
	Elective courses		<i>Student Holistic Empowerment (SHE) Cluster 2: Emotional &amp; Spiritual Intelligence: Heart &amp; Soul</i>	2		<i>Student Holistic Empowerment (SHE) Cluster 3: Technology/ Artificial Intelligence and Data Analytics: I-technie</i>	2
			Program Elective	10		Program Elective	12
	<b>Total Credit</b>	<b>18</b>			<b>18</b>		

Year	Component	Semester I			Semester II		
		Code	Course	Credit	Code	Course	Credit
4	University Courses						
	Core Courses	SII3010	Geology Research Project	4	SII3012	Industrial Attachment	8
	Elective courses		<i>Student Holistic Empowerment (SHE) Cluster 4: Global Issue and Community Sustainability: Making the World a Better Place</i>	2			
			Program Elective	10			
	<b>Total Credit</b>			<b>16</b>			<b>8</b>
<b>Total Credit Hours</b>		<b>134</b>					