FACULTY OF ENGINEERING (FKJ) STUDENT HANDBOOK SESSION 2020/2021

OIL AND GAS ENGINEERING (HK88)

STUDENT NAME	
MATRIC NO	
HEAD OF THE PROGRAMME	
ACADEMIC ADVISOR	

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Message from the Dean

Assalamualaikum wbt and my warmest greeting to all new students.

Welcome and Congratulations on your acceptance to the Universiti Malaysia Sabah (UMS). We are delighted that you joined our Faculty of Engineering (FKJ) family

This handbook is prepared to provide brief information about the vision and mission of the faculty, program educational objectives (PEO), program outcomes (PO), course structure that outlined courses to be taken every semester, academic record, academic advisor record, club and extra-curricular records, professional development record and student achievement. The faculty



implemented an outcome-based education (OBE) that focuses on student-centered learning outcomes.

We take pride in our students and alumni that have demonstrated outstanding achievement and academic excellence. It is hoped that this handbook will be able to provide the required information on the faculty's administration and respective programs structure.

An academic advising system exists at the University of which the advisor is a lecturer assigned for the students. The advisor can guide on the matters related to studies, personal and financial problems that faced by the students. Students must meet their advisor at least twice per semester preferably at early semester when selecting the courses to be taken and at mid semester to review the ongoing academic performance and finalisation of course registration before the add and drop week. Students are required to record all meeting outcomes in this handbook for future reference.

It is also important for you to know that during your study period, you should abide by the rules of Malaysian law, Universities and University Colleges Act (AUKU), Statute of the University, and Rules and Regulations of the University. Take great responsibility in upholding the image of the University.

Lastly, on behalf of the Faculty, I would like to take this opportunity to wish you success in your academic journey and I hope that your study experience at Faculty of Engineering, UMS is rewarding.

Together we are stronger.

With warmest regards,

Associate Professor Ts. Dr. Ismail Saad Dean Faculty of Engineering Universiti Malaysia Sabah

ACADEMIC ADVISOR COMMITTEE

ADVISORS

Dean, Faculty of Engineering Assoc. Prof. Ts. Dr. Ismail Saad

Deputy Dean, (Academic) Prof. Ir. Ts. Dr. Zainal Zakaria

Deputy Dean, (Research and Innovation) Assoc. Prof. Dr. Abu Zahrim Yaser

Deputy Dean, (Student Affairs and Alumni) Dr. Mohd Kamel Wan Ibrahim

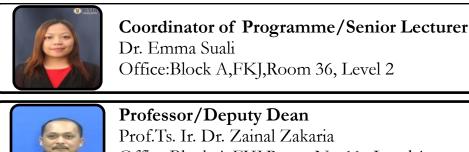
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Acknowledgement

Thank you to those have contributed directly or indirectly towards preparing this handbook.

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M Instruction to Students

This handbook serves as a one-stop information for students mainly introducing the Vision and Mission of the Faculty, Program Educational Objectives (PEO), Program Outcomes (PO), Course Structure that outlined courses to be taken every semester, Academic Record, Academic Advisor Record, Club and Extra Curricular Records, Professional Development Record and Student Achievement.

VISION, MISSION, PEO, PO



Students are required to read the Vision and Mission of the Faculty, as well as knowing the PEO and PO of the Programme.

COURSE STRUCTURE, ACADEMIC RECORD



The courses to be taken throughout the studies are given in Semesters and according to Year. Students have to monitor and track the courses taken and record the results achieved every semester. Students must complete all the required courses before they can graduate.

ACADEMIC ADVISOR SYSTEM



An Academic Advisor System exists at the University of which the Advisor is a lecturer assigned for the student. The Advisor can advise on matters mainly related to studies and also personal problems that are faced by the students. Students must meet their Advisor at least two times per semester preferably; i) at early semester, when selecting the courses to be taken, ii) at mid semester to review the ongoing performance and finalization of course registration. Meetings can be done individually or in group. All meeting outcomes must be recorded in this booklet.



EXTRA CURRICULAR ACTIVITIES, ACHIEVEMENT

Students are encouraged to record extracurricular and club activities, professional development programs attended and their achievements in this booklet to build up their resume and portfolio. The goal for the establishment of the faculty is in line with the mission of UMS to become an innovative university.

The Faculty of Engineering (FKJ) was established in 1996 to meet the increasing needs of skilled manpower of the country in the field of engineering.

GLIMPSE OF FKJ

Α

VISION OF FKJ

Faculty of Engineering (FKJ) aims to be a global centre for quality professional education.

MISSION OF FKJ

The faculty strives to foster and promote an environment that is conducive to teaching and learning and excellence particularly in engineering. The Faculty of Engineering strives to foster and promote an environment conducive to teaching and learning excellence and aims to be a centre of academic excellence recognized internationally by providing a balanced education that leads the nation's professional development.

EDUCATION PHILOSOPHY

The vision of Universiti Malaysia Sabah is to strive to be an innovative university of global standing. To achieve this vision, the mission states that UMS strives to achieve academic excellence in various fields by gaining international recognition through learning and teaching, research and publication, social services and a balanced specialization of knowledge and personality development of students resulting in high productivity and quality in the context of the society and the nation. The philosophy of the Faculty of Engineering (FKJ) will therefore be in line with the university and the national education philosophy. All learning and teaching methods implemented in the Faculty are geared towards the academic excellence whilst grounded in practicality.

HK88 PROGRAMME AIMS

To be the world class oil and gas engineering programme in teaching and training students with the latest technology and engineering skills on both theoretical and practical aspects, and enabling them to become highly confident, creative, knowledgeable and capable engineers in problem solving.

	PEO 1: Professionalism
	Graduate of the programme will establish themselves as practising
	professionals in oil and gas or related industries.
	professionals in on and gas of related industries.
PROGRAMME	The PEO1, professionalism is also referred to the attainment of
	competence or skill in practicing oil and gas engineering fields which
EDUCATIONAL	is indicated from the oil and gas engineering job relevancy, position
OBJECTIVES	held as engineer and the salary range.
(PEO)	PEO 2: Continuous Professional Development
	Graduate of the programme will pursue their career growth
T 1, ,• •,1	through advanced degrees, research and involvement in
In consultation with	professional bodies.
its stakeholders, the	• • • • • • • • • • • • • • • • • • • •
Oil and Gas	 The PEO2, Continuous Professional Development (CPD) is
Engineering	described as the attainment in participation and involvement in
Programme at the	professional bodies and courses (i.e. CPD Short courses and/or postgraduate courses) for self-competence and forefront knowledge).
Faculty of	PEO3: Corporate Societal Responsibility
Engineering has set	Graduate of the programme will contribute to sustainable
its programme	development through innovative technologies by mimicking natural
educational	processes to serve the needs of the society and the nation as a
objectives (PEO)	whole.
objectives (i EO)	
	• In PEO3, the graduates are expected to bear the hallmark of innovation when engaging in the following activities: local projects, community services, knowledge/technology transfer (e.g. assessor for Field Development Project (FDP), assessor for FYP, mentoring), speaking engagement (Schools, Special lectures, Rotarians, etc.).

MAPPING THE PEO TO PO	Program
PEO IO PO	PO1: Eng
There is a direct	PO2: Pro

relationship between the POs and the PEO. As shown in Table 1, every PO is related to one or more PEO, and all PEO are supported by one or more PO.

Table 1: Mapping the PEO to PO									
Programma Outcomes (BOs)*		PEO							
Programme Outcomes (POs)*	1	2	3						
PO1: Engineering Knowledge	×								
PO2: Problem Analysis	×	×							
PO3: Design/Development of Solutions	×		×						
PO4: Investigation	×		×						
PO5: Modern Tool Usage	×	×							
PO6: The Engineer and Society	×		×						
PO7: Environment & Sustainability		×	×						
PO8: Professional Ethics	×		×						
PO9: Individual and Team Work	×								
PO10: Communications	×	×	×						
PO11: Project Management & Finance	×		×						
PO12: Lifelong Learning		×	×						
The description of POs are shown in next page*									

PROGRAMME OUTCOMES (PO)

In order to meet the obligations stated in the University and Faculty mission and vision statement, twelve Programme Outcomes (POs) are used. These Programme Outcomes are the specific skills and knowledge that our students are expected to have obtained at the time of their graduation from the programme as stipulated by the Engineering Accreditation Council (EAC), the delegated body by the Board of Engineers Malaysia (BEM) as the only recognized accrediting body for engineering degree programmes offered in Malaysia. Students graduating from the Oil and Gas Engineering Programme at Faculty of Engineering will be expected and prepared to exercise the skills and abilities listed below:

PO1: Engineering Knowledge Apply knowledge of mathematics, science, engineering fundamentals and oil and gas principles to the solution of complex engineering problems.	 PO2: Problem Analysis Identify, formulate, research literature and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences. PO3: Design/Development of Solution Design solutions for complex engineering problems and design systems, components or processes that meet specified 	needs with appropriate consideration for public nearin and safety, cultural, societal, and environmental considerations. PO4: Investigation Conduct investigation into complex problems using research- based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.	PO5: Modern Tool Usage Instil modern computational techniques and tools which include prediction and modelling, to solve complex engineering activities, with an understanding of the limitations.	PO6: The Engineer and Society Act and respond to the societal, health, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice	PO7: Environment and Sustainability Understand and evaluate the impact of professional engineering work solutions in societal and environmental contexts and demonstrate knowledge of sustainable development;	PO8: Ethics Apply ethical principles and commit to professional ethics, responsibilities, and norms of engineering practice.	PO9: Individual and Team Work Function effectively as an individual, as a member or leader in diverse teams and in multi-disciplinary settings.	PO10: Communication Communicate effectively in written and oral modes on complex engineering activities to all levels of society.	PO11: Project Management and Finance Demonstrate knowledge and understanding of engineering and management and entrepreneurial principles to manage projects and in multidisciplinary environments.	PO12: Life Long Learning Recognize the need for and have the preparation and ability to encage in independent and life-long learning	
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MAPPING THE COURSES TO PO

Table 2 shows the big-picture planning of the PO. The table shows how courses in the programme are linked to the PO.

TABLE 2: COURSES MAPPING TO PROGRAMME OUTCOMES

							I	Program	n Outco	ome				
List	Code	Course Name	EK PO1	PA PO2	DoS PO3	I PO4	MT PO5	E&S PO6	Env & Sus PO7	PE PO8	I & TW PO9	Com PO10	PM & F PO11	LL PO12
1	KG04403	Calculus	Х											
2	KG12501	Engineering Workshop	Х								Х			
3	KG12903	Applied Mechanics	Х	Х							Х			
4	KG12303	Introduction to Oil and Gas Engineering	X	Х							Х			
5	KG05503	Multivariable Calculus	X											
6	KG06603	Engineering Programming	Х	Х			Х							
7	KG12403	Engineering Thermodynamic	Х	Х							Х			
8	KG12603	Reservoir Rock and Fluid Properties	Х	Х										
9	KG22501	Laboratory I (Fluid and Thermodynamic)				Х					Х	Х		
10	KG22503	Geoscience	Х	Х								Х		
11	KG22903	Fluid Mechanics	Х	Х							Х			
12	KG22303	Differential Equations	Х											
13	KG22101	Laboratory II (Geoscience)				Х					Х	Х		
14	KG22301	Geology Field Work	Х	Х							Х	Х		
15	KG22803	Engineering Design			Х		Х					Х		
16	KG22802	Electrical Technology	Х											
17	KG22203	Materials of Engineering	X	Х								Х		
18	KG22403	Geophysics	X	Х							Х			
19	KG22801	Laboratory III (Material Engineering)				Х					Х	X		
20	KG22603	Reservoir Engineering	X	Х							Х			
21	KG22401	Laboratory IV (Reservoir and Fluid Testing)				Х					Х	Х		
22	KG08803	Ethics and Law for Engineers	X							Х		Х		
23	KG32703	Reservoir Simulation	X	Х			Х				Х			

							F	Program	o Outco	ome				
List	Code	Course Name		PA	DoS	I	MT	E&S	Env & Sus	PE	I & TW	Com	PM & F	LL
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
24	KG32503	Engineering Statistics	Х											
25	KG32903	Process Control and Instrumentation	Х	Х			Х			Х				
26	KG32103	Drilling Engineering	X	Х						Х				
27	KG32101	Laboratory V (Drilling fluid)				Х					Х	Х		
28	KG32403	Well Completion	Х	Х							Х			
29	KG32203	Production Engineering	Х	Х							Х			
30	KG32803	Formation Evaluation and Well Testing	Х	Х										
31	KG32603	Safety in Oil and Gas Engineering	Х					Х	Х	Х				
32	KG30005	Industrial Training		Х	Х	Х	Х	Х	Х	Х	Х	Х		
33	KG09903	Management & Accounting for Engineers	Х									Х	Х	
34	KG42703	Transport and Storage	Х	Х							Х			
35	KG01202	Project 1	Х	Х						Х		Х	Х	Х
36	KG01204	Project 2	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х
37	KG42102	Field Development Project 1	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
38	KG42404	Field Development Project 2	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
39	KG42303	Gas Engineering	X	Х								Х		
40	KG42503	Petroleum Economy	Х		Х		Х					Х		Х

							ŀ	Program	n Outco	ome				
Т:	Cal		EK	PA	DoS	Ι	MT	E&S	Env	PE	I	Com	PM	LL
List	Code	Course Name							& Sus		& TW		& F	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
Prog	ogramme Elective Courses													
41	KG41103	Enhanced/ Improved Oil Recovery	Х	Х								Х		
42	KG41303	Gas Transmission and Distribution system	Х	Х								Х		
43	KG41503	Energy Management	Х	Х								Х		
44	KG41703	Processing and Liquefaction	Х	Х								Х		
45	KG42203	Deep Water Engineering	Х	Х								Х		
46	KG42403	Gas Storage and Reticulation System	Х	Х								Х		
47	KG42603	Reservoir Geomechanics	Х	Х								Х		
48	KG42803	Offshore Structural Engineering	Х	Х								Х		
49	KG43203	Renewable Energy	Х	Х								Х		
50	KG43403	Electric Drive in oil and Gas industry	Х	Х								Х		
51	KG43603	Combustion Technology	Х	Х								Х		
52	KG43803	Corrosion Engineering	Х	Х								Х		
		Total	45	36	6	9	11	5	5	9	20	30	5	5

SYMBOL

(X)- Essential course contributing to PO attainment

Legend

- PK Problem Knowledge
- PA Problem Analysis
- DoS Design / Development of solution
- I Investigation
- MT Modern Tool
- E&T Ethics and Society

- Env & Sus Environment and Sustainability
- PE Professional Ethics
- I & TW Individual and Team Work
- Com Communication
- PM & F Project Management and Finance
- LL- Lifelong Learning

OIL AND GAS ENGINEERING (HK88) COURSE STRUCTURE FOR INTAKE 2020/2021

			· · · · · · · · · · · · · · · · · · ·	/		TN I AKE 2020/2021		4
	Ye	ear 1		Year 2		Year 3		ear 4
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
UNIVERSITI	UW00702	UW00802	UW00302					
CORE	Philosophy and	Appreciation of	Fundamentals					
(PROMOTION	Contemporary	Ethics and	Of Entrepreneurial					
OF	Issues (FIS)	Civilizations (PEDP)	Acculturation					
KNOWLEDGE)	(local)/ UW00502	(local)/UW00702						
(8 Credit Hours)	Malay Language	Philosophy and	(2 Credit Hours)					
	for	Contemporary Issues						
	Communication II	(FIS) (International)						
	(BMK II)							
	(international)	UCXXX02						
		(Choose 1 UC Only)						
	(2 Credit Hours)	(4 Credit Hours)						
UNIVERSITY	UB00202 Oral	UB01002 Essential	UB00702 English	UB00302 Reading &				
CORE	Communication in	Communication	for Occupational	Writing in English/				
LANGUAGE	English/	Skills/ UB00402	Purposes	UB00502 English for				
	UB06002 English	Academic Reading &	/UB02002	Research Purposes				
(8 Credit Hours)	for Creative	Writing	English For					
	Communication	(0, C) $(1, 1)$	Employment					
UNIVERSITY	(2 Credit Hours) EXXXX3	(2 Credit Hours)	(2 Credit Hours)	(2 Credit Hours)				
CORE CO-	Co-Curriculum							
CURRICULUM	Co-Cumculum							
(3 Credit Hours)	(3 Credit Hours)							
PROGRAMME	KG04403 Calculus	KG05503	KG22903	KG22203	KG08803	KG09903	KG01202	KG01204
CORE		Multivariable	Fluid Mechanics	Materials of Engineering	Ethics and Law for	Management &	Project I	Project II
	KG12501	Calculus		88	Engineers	Accounting for Engineers)	
	Engineering		KG22303	KG22403	0	0 0	KG42102	KG42404
	Workshop	KG06603	Differential	Geophysic	KG32101	KG32203	Field	Field Development
	1	Engineering	Equations	1 5	Laboratory V	Production Engineering	Development	Project II
	KG12903	Programming	1	KG22801			Project I	,
	Applied Mechanics		KG22501	Laboratory III	KG32103	KG32403		
		KG12403	Laboratory I		Drilling Engineering	Well Completion	KG42703	
	KG12303	Engineering		KG22401			Transport and	
	Introduction to	Thermodynamics	KG22101	Laboratory IV	KG32503	KG32603	Storage	
	Oil and Gas		Laboratory II		Engineering	Safety in Oil and Gas		
	Engineering	KG12603		KG22802	Statistics	Engineering	KG42303	
		Reservoir Rock and	KG22301	Electrical Technology			Gas Engineering	
		Fluid Properties	Geology Field		KG32703	KG32803	KG42503	
			Work	KG22603	Reservoir Simulation	Formation Evaluation and	Petroleum	
				Reservoir Engineering		Well Testing	Economy	

	Ye	ear 1		Year 2		Year 3	Ye	ear 4
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
(107 Credit Hours)	(10 Credit Hours)	(12 Credit Hours)	KG22503 Geoscience	KG22803 Engineering Design	KG32903 Process control and	KG30005 Industrial Training	(13 Credit Hours)	(8 Credit Hours)
			(12 Credit Hours)	(16 Credit Hours)	instrumentation (16 Credit Hours)	(20 Credit Hours)		
MINOR / ELECTIVES							KG4xxx3 Elective I	KG4xxx3 Elective II KG4xxx3 Elective III
(9 Credit Hours)							(3 Credit Hours)	(6 Credit Hours)
TOTAL CREDIT HOURS (135 Credit Hours)	17	18	16	18	16	20	16	14

Elective Scheme: Choose from the following groups. All subjects are stand-alone and maybe offered in any elective of I, II or III.

	ELECTIVE I	ELECTIVE II	ELECTIVE III
Option 1	KG41103	KG42203	KG43203
	Enhanced/ Improved Oil Recovery	Deep Water Engineering	Renewable Energy
Option 2	KG41303	KG42403	KG43403
	Gas Transmission and Distribution system	Gas Storage and Reticulation System	Electric Drive in oil and Gas Industry
Option 3	KG41503	KG42603	KG43603
	Energy Management	Reservoir Geomechanics	Combustion Technology
Option 4	KG41703	KG42803	KG43803
	Processing and Liquefaction	Offshore Structural Engineering	Corrosion Engineering

STRUKTUR KURIKULUM KEJURUTERAAN MINYAK DAN GAS PENGAMBILAN 2020/2021

	TAH	UN 1	TAHU	J N 2	Т	'AHUN 3	TAH	IUN 4
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
TERAS	UW00702 Falsafah	UW00802	UW00302					
UNIVERSITI	dan Isu Semasa	Penghayatan Etika	Asas Keusahawanan					
(PENATARAN	(FIS) (tempatan)/	Dan Peradaban	Akulturasi					
ILMU)	UW00502 Bahasa	(PEDP)						
	Melayu	(local)/UW00702	(2 Jam Kredit)					
	komunikasi II	Falsafah dan Isu						
(8 Jam Kredit)	(BMK II)	Semasa (FIS)						
	(antarabangsa)	(antarabangsa)						
	(2 Jam Kredit)	UCXXX02						
		(Pilih 1 UC sahaja)						
		(4 Jam Kredit)						
TERAS	UB00202 Oral	UB01002 Essential	UB00702 English	UB00302 Reading				
UNIVERSITI	Communication in	Communication	for Occupational	& Writing in				
(BAHASA)	English/	Skills/ UB00402	Purposes /UB02002	English/				
	UB06002 English	Academic Reading	English For	UB00502 English				
(8 Jam Kredit)	for Creative	& Writing	Employment	for Research				
	Communication		(2 Credit Hours)	Purposes				
	(2 Credit Hours)	(2 Credit Hours)		(2 Credit Hours)				
KOKUM	EXXXX3							
	Ko-Kurikulum							
(3 Jam Kredit)	(3 jam kredit)							
TERAS	KG04403 Kalkulus	KG05503 Kalkulus	KG22903	KG22203	KG08803	KG09903	KG01202	KG01204
PROGRAM		Pelbagai	Mekanik Bendalir	Kejuruteraan	Etika dan	Pengurusan & Perakaunan	Projek I	Projek II
	KG12501 Bengkel	Pembolehubah		Bahan	Perundangan untuk	untuk Jurutera		
	Kejuruteraan		KG22303 Persamaan		Jurutera		KG42102	
		KG06603	Pembezaan	KG22403		KG32203	Projek	KG42404
	KG12903	Pengaturcaraan		Geofizik	KG32101	Kejuruteraan Pengeluaran	Pembangunan	Projek
	Mekanik Gunaan	Kejuruteraan	KG22501		Makmal V		Lapangan I	Pembangunan
			Makmal I	KG22801		KG32403		Lapangan II
	KG12303	KG12403		Makmal III	KG32103	Kelengkapan Telaga	KG42703	
	Pengenalan	Termodinamik	KG22101		Kejuruteraan		Pengangkutan	
	Kepada	Kejuruteraan	Makmal II	KG22401	Penggerudian	KG32603	dan Storan	
	Kejuruteraan			Makmal IV		Keselamatan dalam		
	Minyak dan Gas	KG12603	KG22301		KG32503	Kejuruteraan Minyak dan	KG42303	
		Sifat-Sifat Batuan	Kerja Lapangan	KG22802	Statistik Kejuruteraan	Gas	Kejuruteraan	
		dan Bendalir	Geologi	Teknologi Elekt r ik			Gas	
		Reservoir	KG22503	KG22603	KG32703	KG32803	KG42503	
			Geosains	Kejuruteraan	Simulasi Reservoir	Penilaian Formasi dan	Ekonomi	
				Reservoir		Pengujian Telaga	Petroleum	

	TAH	HUN 1	TAHU	UN 2	Т	'AHUN 3	TAH	UN 4
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
(107 Jam Kredit)	(10 Jam Kredit)	(12 Jam Kredit)	(12 Jam Kredit)	KG22803	KG32903	KG30005	(13 Jam Kredit)	(8 Jam Kredit)
				Rekabentuk	Kawalan Proses dan	Latihan Industri		
				Kejuruteraan	Instrumentasi			
				(16 Jam Kredit)	(16 Jam Kredit)	(20 Jam Kredit)		
MINOR /							KG4xxx3	KG4xxx3
ELEKTIF							Elektif I	Elektif II
								KG4xxx3
								Elektif III
							(3 Jam Kredit)	(6 Jam Kredit)
(9 Jam Kredit)								
JUMLAH								
KESELURUHAN	17	18	16	18	16	20	16	14
JAM KREDIT		10	10	10	10	20	10	11
(135 Jam Kredit)								

Skim Elektif: Sila pilih daripada kumpulan berikut. Semua kursus adalah berdiri sendiri dan mungkin akan ditawarkan dalam mana-mana kumpulan Elektif I, II dan III.

	ELEKTIF I	ELEKTIF II	ELEKTIF III
Pilihan 1	KG41103	KG42203	KG43203
r mnan i	Perolehan Minyak Tertingkat	Kejuruteraan Air Dalam	Tenaga Boleh Diperbaharui
	KG41303	KG42403	KG43403
Pilihan 2	Sistem Penghantaran dan Pengagihan	Sistem Storan dan Retikulasi Gas	Pacuan Elektrik dalam Industri Minyak dan Gas
	Gas		
Pilihan 3	KG41503	KG42603	KG43603
Piiiiaii 3	Pengurusan Tenaga	Geomekanik Reservoir	Teknologi Pembakaran
Pilihan 4	KG41703	KG42803	KG43803
Fiinall 4	Pemprosesan dan Pencecairan	Kejuruteraan Struktur Luar Pantai	Kejuruteraan Kakisan

ACADEMIC RECORDS

CODE	COURSE	CREDIT HOURS	ATTEMPT	GRADE ATTEMPT	ATTEMPT
		HOURS	1	2	3
UW00702	Philosophy and	2			
	Contemporary Issues (FIS)				
UW00502	Malay Language for	2			
	communication				
UW00802	Appreciation of Ethics and Civilizations (PEDP)	2			
UW00302	Fundamentals	2			
	Of Entrepreneurial				
	Acculturation				
UB00202/	Oral Communication in	2			
UB06002	English / English for Creative				
	Communication				
UB01002/	Essential Communication	2			
UB00402	Skills/ Academic Reading &				
	Writing				
UB00702/	English for Occupational	2			
UB02002	purposes/English For				
	Employment				
UB00302/	Reading & Writing in	2			
UB00502	English/ English for Research				
Exxxx3	Purposes Co-Curriculum	3			
KG04403	Calculus	3			
KG12501	Engineering Workshop	1			
KG12903	Applied Mechanics	3			
KG12303	Introduction to Oil and Gas	3			
	Engineering				
UW00102	Ethnic Relations	2			
UCxxx02	(Students' Choice)	2			
UB01002/	Essential Communication	2			
UB00402	Skills / Academic Reading and				
	Writing				
KG05503	Multivariable Calculus	3			
KG06603	Engineering Programming	3			
KG12403	Engineering Thermodynamics	3			
KG12603	Reservoir Rock and Fluid	3			
LLC 00000	Properties				
KG22903	Fluid Mechanics	3			
KG22303	Differential Equations	3			
KG22501	Laboratory I	1			
KG22301	Geology Field Work	1			
KG22101	Laboratory II	1			

		ODEDIT	GRADE		
CODE	COURSE	CREDIT HOURS	ATTEMPT 1	ATTEMPT 2	ATTEMPT 3
KG22503	Geoscience	3			
UB00302/	Reading and Writing in	2			
UB00502	English/ English for Research				
	Purposes				
KG22802	Electrical Technology	2			
KG22203	Materials of Engineering	3			
KG22403	Geophysic	3			
KG22603	Reservoir Engineering	3			
KG22801	Laboratory III	1			
KG22401	Laboratory IV	1			
KG22803	Engineering Design	3			
KG08803	Ethics and Law for Engineers	3			
KG32101	Laboratory V	1			
KG32503	Engineering Statistics	3			
KG32703	Reservoir Simulation	3			
KG32903	Process Control and	3			
	Instrumentation				
KG32103	Drilling Engineering	3			
KG09903	Management & Accounting	3			
	for Engineers				
KG32403	Well Completion	3			
KG32203	Production Engineering	3			
KG32603	Safety in Oil and Gas	3			
	Engineering				
KG32803	Formation Evaluation and	3			
	Well Testing				
KG30005	Industrial Training	5			
KG01202	Project I	2			
KG42102	Field Development Project I	2			
KG42703	Transport and Storage	3			
KG42303	Gas Engineering	3			
KG4xxx3	Elective I	3			
KG42503	Petroleum Economy	3			
KG01204	Project II	4			
KG42404	Field Development Project II	4			
KG4xxx3	Elective II	3			
KG4xxx3	Elective III	3			

ACADEMIC ADVISOR RECORDS

SEMESTER ONE: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____ CGPA:_____

Meeting Outcomes	AA Signature
_	Meeting Outcomes

SEMESTER TWO: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

Date	Meeting Outcomes	AA Signature

SEMESTER THREE: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:	CGPA:
GPA:	CGPA:

Date	Meeting Outcomes	AA Signature

SEMESTER FOUR: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

Date	Meeting Outcomes	AA Signature

SEMESTER FIVE: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

CGPA:_____

Date	Meeting Outcomes	AA Signature

SEMESTER SIX: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

Date	Meeting Outcomes	AA Signature

SEMESTER SEVEN: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

CGPA:_____

Date	Meeting Outcomes	AA Signature

SEMESTER EIGHT: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

Date	Meeting Outcomes	AA Signature

SEMESTER NINE: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:	CGPA:

Date	Meeting Outcomes	AA Signature

SEMESTER TEN: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

Date	Meeting Outcomes	AA Signature

SEMESTER ELEVEN: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

CGPA:_____

Date	Meeting Outcomes	AA Signature

SEMESTER TWELVE: Student must meet their Academic Advisor (AA) at least TWO times per semester

GPA:_____

Meeting Outcomes	AA Signature
	Meeting Outcomes

CLUB AND EXTRA CURRICULAR ACTIVITIES RECORD

Any activities that contribute to the attainment of Program Outcomes related to communication, values, volunteering, team work and other soft skills.

Date	Activities	Organizer	Role

PROFESSIONAL DEVELOPMENT RECORDS

Any programs, talks or short courses that contribute to the attainment of Program Outcomes related to technical knowledge or professional skills

Date	Industrial Talks / Short Courses	Organizer	AA Verification

	AwARDS Recognition or acknowledgment of their achievements Date Awards / Achievement Received From AA Verification			
Date	Awards / Achievement	Received From	AA Verification	
			1	

AWARDS