

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

CIVIL ENGINEERING (HK01)

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
Associate Professor Ts. Dr. Ismail Saad

Deputy Dean, (Academic and International)
Professor Ir. Dr. Zainal Zakaria

Deputy Dean, (Research and Innovation)
Associate Professor Dr. Abu Zahrim Yaser

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

Compiled and Edited By








Dr. Melvin Gan Jet Hong (Coordinator)
Ms. Adriana Erica Amaludin (HK01)
Mr. Liau Chung Fan (HK02)
Dr. S.M. Anisuzzaman (HK03)
Dr. Farm Yan Yan (HK08)
Dr. Rosalyn R. Porle (HK20)
Dr. Emma Suali (HK88)
Ms. Zykamillia Kamin (H2451)

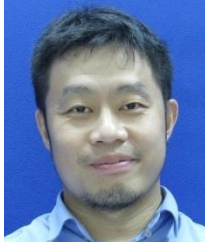



Acknowledgement

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

ACADEMIC STAFF

1		Name : Prof. Mohamad Ibrahim Bin Mohamad Qualification : B.Sc. (Civil)(New England College, New Hampshire, USA) M.Sc. (Eastern Michigan Uni. USA) PhD (University of Loughborough, UK) Email : drmim@ums.edu.my Ext. : 8823 Room No. : Director JPP
2		Name : Prof. Ir. Dr. Abdul Karim Mirasa Qualification : B.Sc. (University of Strathclyde, Glasgow UK) M.Sc. (University of Newcastle) Ph.D. (UTM) Email : akmirasa@ums.edu.my Ext. : 3070 Room No. : 92 (Level 1)
3		Name : Prof. Madya Dr. Nurmin Bolong Qualification : B.Eng (Civil) (USM) M.Sc. (Southampton) Ph.D. (UTM) Email : nurmin@ums.edu.my Ext. : 3009 Room No. : PM2 (Level 1)
4		Name : Dr. Lillian@Lilia Gungat Qualification : B.Eng (UTM) M.Sc. (UPM) Ph.D (USM) Email : lillian@ums.edu.my Ext. : 3092 Room No. : 32 (Level 1)
5		Name : Dr. Ahmad Nurfaidhi Rizalman Qualification : B.Eng (University of Leeds, UK) Ph.D. (UTM) Email : ahmadnurfaidhi@ums.edu.my Ext. : 3033 Room No. : 67 (Level 2)
6		Name : Dr. Harimi Djamila Qualification : Degree of Starte Engineer in Building, M.Sc Ph.D. (Civil Eng)(UMS) Email : djamila@ums.edu.my Ext. : 3036 Room No. : 64 (Level 1)
7		Name : Dr. Hidayati Asrah Qualification : B.Eng (UMS) M.Sc. (Dundee) Ph.D (UMS) Email : hidayati@ums.edu.my Ext. : 3023 Room No. : 46 (Level 1)

8		Name : Dr. Mohammad Radzif Taharin Qualification : B.Eng (UTM) M.Eng (Civil) (UTM) Ph.D (Civil) (USM) Email : radzif@ums.edu.my Ext. : 3099 Room No. : 18 (Level 1)
9		Name : Dr. Mohd Azizul Ladin Qualification : B.Eng, M.Eng, Ph.D (UKM) Email : azizul@ums.edu.my Ext. : 3034 Room No. : 23 (Level 2)
10		Name : Dr. Nazaruddin Abdul Taha Qualification : D.dip, B.Eng, M.Eng, Ph.D (UiTM) Email : nazardin@ums.edu.my Ext. : 3192 Room No. : 21 (Level 2)
11		Name : Dr. Noor Sheena Herayani Harith Qualification : B.Eng (USM) M.Eng (USM) Ph.D (UTM) Email : sheena@ums.edu.my Ext. : 3595 Room No. : 22 (Level 2)
12		Name : Dr. Siti Jahara Matlan Qualification : B.Eng (UTM) M.Eng (UTM) Ph.D (UKM) Email : jahara@ums.edu.my Ext. : 3094 Room No. : 13 (Level 1)
13		Name : Sr. Dr. Asmawan Mohd. Sarman Qualification : D. QS (UTM), B. BS Hons (UM) (Surveying), M. Sc. Const. Mgmt. (Civil Eng. UTM) Ph.D (Architecture) (UKM) Email : asmawan@ums.edu.my Ext. : 5775 Room No. : 67 (Level 1)
14		Name : Adriana Erica Amaludin Qualification : B.Eng (UMS) MSc (UTM) Email : adriana@ums.edu.my Ext. : - Room No. : 57 (Level 2)

15		Name : Lim Chung Han Qualification : B.Eng (University of Bristol, UK) MSc (Imperial College London, UK) Email : Andrew.lim@ums.edu.my Ext. : 3199 Room No. : 26 (Level 1)
16		Name : Salinah Dullah Qualification : B.Eng (UMS) M.Eng (Leeds) Email : salinahd@ums.edu.my Ext. : 3214 Room No. : 71 (Level 2)
17		Name : Ir. Dr. Habib Musa Bin Mohamad Qualification : B.Eng (UTHM) M.Eng (UTHM) Ph.D (UTHM) Email : habibmusa@ums.edu.my Ext. : - Room No. : 76 (Level 1)
18		Name : Sheikh Mohd Iqbal Bin S. Zainal Abidin Qualification : B.Eng (Nottingham) M.Eng (Portsmouth) Email : iqbal.zainal@ums.edu.my Ext. : - Room No. : 85 (Level 1)

INSTRUCTION TO STUDENTS

This handbook serves as a reference for students, which introduces the Vision and Mission of the Faculty, Program Educational Objectives (PEO), Program Outcomes (PO), Course Structure which outlines the courses to be taken every semester, Academic Record, Academic Advisor Record, Club and Extra Curricular Records, Professional Development Record and Student Achievement Record.

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 duration of study are listed according to the Semesters and Year of study, respectively. 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 and ii) at mid semester to review the ongoing performance and finalisation of course registration. Meetings can be done individually or in a group. All meeting outcomes must be recorded in this booklet.

EXTRA CURRICULAR ACTIVITIES, ACHIEVEMENT

Students are encouraged to record extra curricular and club activities, professional development programs attended and their achievements in this booklet to build up their resume and portfolio.

A GLIMPSE OF FKJ

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. The goal for the establishment of the faculty is in line with the mission of UMS to become an innovative university. The faculty strives to foster and promote an environment that is conducive to teaching and learning and excellence particularly in engineering.

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.

VISION OF FKJ

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

MISSION OF FKJ

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

HK01 PROGRAMME AIMS

The mission of the Civil Engineering (HK01) Programme is to augment the liberal education expected of all UMS undergraduates and impart a basic understanding of civil engineering built on a foundation of physical science, mathematics, computing, and technology. Graduates of the programme are expected to possess knowledge of the fundamentals of civil engineering and of one specialty area. The graduates are expected to have the basic experimental, design, and communication skills to be prepared for continued study at the graduate level or for entry level positions of the highly competitive civil and construction industry.

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

In consultation with its stakeholders, the Civil Engineering Programme at the Faculty of Engineering has set its programme educational objectives (PEO) as follows:

PEO 1: Professionalism

Graduates of the programme will establish themselves as practicing professional in Civil Engineering.

Performance criteria for PEO1:

Registration for BEM (minimum graduate member), type of sector (civil engineering and all related field), position (engineer or executive level).

PEO 2: Personal Advancement

Graduates of the programme will pursue their personal growth through personal advance degree, research and involvement in professional bodies.

Performance criteria for PEO2:

Postgraduates, award, CPD courses, competency, speaking engagement.

PEO 3: Corporate Societal Responsibility

Graduates of the programme will contribute to the innovation towards sustainable development in geohazard area to serve the needs of society and nation as a whole.

Performance criteria for PEO3:

Involvement in local project and geohazard area, community services, knowledge/technology transfer/ patent.

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 Civil Engineering Programme at Faculty of Engineering will be expected and prepared to exercise the skills and abilities listed below:

PO 1: Engineering Knowledge

Apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

PO 2: Problem Analysis

Identify, formulate, conduct research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.

PO 3: 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 health and safety, cultural, societal, and environmental considerations.

PO 4: Investigation

Conduct investigation of complex engineering 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.

PO 5: Modern Tool Usage

Create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, to complex engineering problems, with an understanding of the limitations.

PO 6: The Engineer and Society

Apply reasoning informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice and solutions to complex engineering problems.

PO 7: Environment and Sustainability

Understand and evaluate the sustainability and impact of professional engineering work in the solutions of complex engineering problems in societal and environmental contexts.

PO 8: Ethics

Apply ethical principles and commit to professional ethics and responsibilities and norms of engineering practice.

PO 9: Individual and Team Work

Function effectively as an individual, and as a member or leader in diverse teams and in multi-disciplinary settings.

PO 10: Communication

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO 11: Project Management and Finance

Demonstrate knowledge and understanding of engineering management principles and economic decision making and apply these to one's own work, as a member and leader in a team, to manage projects in multidisciplinary environments.

PO 12: Life Long Learning

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

MAPPING THE PEO TO PO

There is a direct relationship between the POs and the PEO. As shown in Table 1 below, 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

Program Outcomes (PO)	PEO		
	1	2	3
PO1	X	X	X
PO2	X	X	X
PO3	X	X	X
PO4	X	X	X
PO5	X	X	X
PO6	X	X	X
PO7	X	X	X
PO8	X	X	X
PO9	X	X	X
PO10	X	X	X
PO11	X	X	X
PO12	X	X	X

OUTCOME BASED EDUCATION (OBE)

According to the Engineering Accreditation Council (EAC), Outcome Based Education (OBE) is a process that involves assessment and evaluation practices in education to reflect the attainment of expected learning outcomes and showing mastery in a given programme, i.e. Civil Engineering (HK01) Programme. The OBE reporting illustrates the attainment of attributes outlined in the six student aspirations stipulated in the Malaysian Education Blueprint (Higher Education) 2015-2025, as well as the eight domains of learning outcomes listed in the Malaysian Qualifications Framework and the twelve PO domains required by the Engineering Accreditation Council (EAC).

MAPPING THE COURSES TO PO

Table 2 shows the overview of Civil Engineering courses, which are mapped to the HK01 Programme Outcomes. The table shows how courses in the programme are linked to the PO.

TABLE 2: COURSES MAPPING TO PROGRAMME OUTCOMES

CODE	COURSE	PROGRAM OUTCOMES (PO)											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
UW00202	Islam and Asian Civilisation												
UB00202 / UB00602	Oral Communication In English / Grammar In Context												
Exxxx3	Co-Curriculum												
KA13503	Calculus 1	√											
KA10102	Civil Engineering Material	√											
KA10302	Civil Engineering Drawing	√				√							
KA10502	Engineering Geology	√	√		√								
UW00102	Ethnic Relations												
UCxxx02													
UB00102 / UB00402	Communicative English Grammar / Academic Reading and Writing												
KA13603	Calculus 2	√											
KA13803	Engineering Programming					√							
KA10603	Applied Mechanics	√											
KA10802	Construction Technology	√					√						
UW00302	Fundamentals of Entrepreneurial Acculturation												
UB00702 / UB02002	English For Occupational Purposes / English for Employment												
KA20102	Engineering Statistics	√				√							
KA20502	Differential Equation	√											
KA20703	Fluid Mechanics	√											
KA20903	Mechanics of Solids	√											
KA21102	Contract And Estimation									√	√	√	
KA23702	Concrete Technology	√		√				√					
UB00302 / UB00502	Reading and Writing in English / English for Research Purposes												
KA20403	Engineering Survey	√	√	√		√							

CODE	COURSE	PROGRAM OUTCOMES (PO)											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
KA20602	Numerical Analysis	√				√							
KA20801	Survey Camp				√	√				√	√		
KA21002	Electrical Technology	√											
KA24003	Theory of Structure 1		√										
KA21603	Geotechnical Engineering 1	√	√										
KA21801	Concrete and, Material Lab		√		√				√	√	√		
KA24201	Structure Lab		√		√				√	√	√		
KA33903	Hydraulics	√				√							
KA31303	Geotechnical Engineering 2		√	√									
KA31503	Theory of Structure 2		√										
KA34101	Fluid and Hydraulics Lab		√		√				√	√	√		
KA34303	Reinforced Concrete Design			√						√	√		
KA34503	Highway Engineering			√			√						
KA34602	Project Management					√						√	
KA30005	Industrial Training		√						√	√		√	
KA34802	Traffic Engineering			√	√			√		√			
KA35003	Hydrology & Water Resources		√	√				√					
KA30603	Steel and Timber Design			√									
KA35201	Geotechnical Lab		√		√				√	√	√		
KA35401	Highway and Traffic Lab		√		√				√	√	√		
KA35603	Foundation Design	√	√	√	√							√	
KA40102	Final Year Project 1		√	√	√						√	√	√
KA44703	Ethics and Law for Engineers						√		√				
KA40503	Environmental Engineering			√			√	√					
KA44901	Environmental Lab		√		√				√	√	√		
KA45102	Integrated Design Project 1	√	√	√	√	√	√	√		√	√		√
KA40204	Final Year Project 2		√	√	√						√	√	√
KA45803	Integrated Design Project 2	√	√	√	√	√	√	√		√	√		√
KA46003	Management and Accounting for Engineers											√	√

CODE	COURSE	PROGRAM OUTCOMES (PO)											
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
KA4XX03	Elective I												
KA42403	Advanced Structural Design		√	√									√
KA41503	Advanced Geotechnical Engineering		√	√									√
KA43003	Advanced Project Management		√	√									√
KA42203	Water and Wastewater Engineering		√	√				√					√
KA43203	Transportation Engineering		√	√								√	√
KA42003	Advanced Concrete Technology	√	√	√				√					√
KA45303	Building Pathology		√	√						√		√	√
KA4XX03	Elective II												
KA46203	Bridge Engineering		√	√									√
KA46403	Soil Stabilisation and Ground Improvement		√	√									√
KA41703	Introduction to GIS		√	√									√
KA43403	Advanced Environment Engineering		√	√				√					√
KA46803	Advanced Highway Engineering		√	√									√
KA41903	Finite Element Method		√	√									√
KA47403	Sustainability and Green Technology		√	√									√
KA4XX03	Elective III												
KA47603	Tunnel Engineering	√	√	√									√
KA47803	Earthquake Engineering	√	√	√									√
KA48403	Marine and Coastal Engineering		√	√									√
KA48003	Solid Waste Management		√	√			√	√					√
KA48203	Advanced Traffic Engineering		√	√									√
KA48603	Advanced Water Resource Management		√	√									√

SYMBOL

(√) : Mapped to the attainment of the Program Outcomes either as a Delivery/Supplementary (1-DV) or Contributing/Essential Course (2-CN)

CIVIL ENGINEERING (HK01) COURSE STRUCTURE FOR INTAKE 2019/2020

	YEAR 1		YEAR 2		YEAR 3		YEAR 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
University Core (Promotion Of Knowledge) (8 Credit Hours)	UW00202 Islam and Asian Civilisation (2 credit hours)	UW00102 Ethnic Relations UCxxx02 (Choose 1 UC only) (4 credit hours)	UW00302 Fundamentals of Entrepreneurial Acculturation (2 credit hours)					
University Core (Languages) (8 Credit Hours)	UB06002 English For Creative Communication (For student MUET Band 3 upper [Total marks 160-179] , 4, 5 & 6) (2 Credit Hours)	UB00402 Academic Reading and Writing (For student MUET Band 3 upper [Total marks 160-179] , 4, 5 & 6) (2 Credit Hours)	UB02002 English For Employment (For student MUET Band 3 upper [Total marks 160-179] , 4, 5 & 6) (2 Credit Hours)	UB00502 English For Research Purposes (For student MUET Band 3 upper [Total marks 160-179] , 4, 5 & 6) (2 Credit Hours)				
	UB00202 Oral Communication in English (For student MUET Band 1,2 & 3 lower [Total marks 140-159]) (2 Jam Kredit)	UB01002 Essential Communication Skills (For student MUET Band 1,2 & 3 lower [Total marks 140-159]) (2 Jam Kredit)	UB00702 English for Occupational Purposes (For student MUET Band 1,2 & 3 lower [Total marks 140-159]) (2 Jam Kredit)	UB00302 Reading & Writing in English (For student MUET Band 1,2 & 3 lower [Total marks 140-159]) (2 Jam Kredit)				
University Core (Co-curriculum) (3 Credit Hours)	Exxxx3 Co-Curriculum (3 credit hours)							
Program Core (107 Credit Hours)	KA13503 Calculus 1 KA10102 Civil Engineering Material KA10302 Civil Engineering Drawing KA10502 Engineering Geology (9 credit hours)	KA13603 Calculus 2 KA13803 Engineering Programming KA10603 Applied Mechanics KA10802 Construction Technology (11 credit hours)	KA20102 Engineering Statistics KA20502 Differential Equation KA20703 Fluid Mechanics KA20903 Mechanics of Solids KA21102 Contract And Estimation KA23702 Concrete Technology (14 credit hours)	KA20403 Engineering Survey KA20602 Numerical Analysis KA20801 Survey Camp KA21002 Electrical Technology KA24003 Theory of Structure 1 KA21603 Geotechnical Engineering 1 KA21801 Concrete and, Material Lab KA24201 Structure Lab (16 credit hours)	KA33903 Hydraulics KA31303 Geotechnical Engineering 2 KA31503 Theory of Structure 2 KA34101 Fluid and Hydraulics Lab KA34303 Reinforced Concrete Design KA34503 Highway Engineering (16 credit hours)	KA34602 Project Management KA30005 Industrial Training KA34802 Traffic Engineering KA35003 Hydrology & Water Resources KA30603 Steel and Timber Design KA35201 Geotechnical Lab KA35401 Highway and Traffic Lab KA35603 Foundation Design (14 credit hours)	KA40102 Final Year Project 1 KA44703 Ethics and Law for Engineers KA40503 Environmental Engineering KA44901 Environmental Lab KA45102 Integrated Design Project 1 (11 credit hours)	KA40204 Final Year Project 2 KA45803 Integrated Design Project 2 KA46003 Management and Accounting for Engineers (10 credit hours)
	Program Core (Elective) (9 Credit Hours)						KA4XX03 Elective I (3 credit hours)	KA4XX03 Elective II KA4XX03 Elective III (6 credit Hours)
TOTAL 135 CREDIT HOURS	16	17	18	18	16	20	14	16

KEJURUTERAAN AWAM (HK01) STRUKTUR KURSUS UNTUK AMBILAN 2019/2020

	TAHUN 1		TAHUN 2		TAHUN 3		TAHUN 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
Teras Universiti (Penataran Ilmu) (8 Jam Kredit)	UW00202 Tamadun Islam dan Asia (2 jam kredit)	UW00102 Hubungan Etnik UCxxx02 (Pilih 1 kursus UC sahaja) (4 jam kredit)	UW00302 Asas Pembudayaan Keusahawanan (APK) (2 jam kredit)					
Teras Universiti (Bahasa) (8 Jam Kredit)	UB06002 English For Creative Communication (Bagi Pelajar MUET Band 3 atas (Jumlah Markah Keseluruhan 160-179) , 4, 5 dan 6) (2 Jam Kredit)	UB00402 Academic Reading and Writing (Bagi Pelajar MUET Band 3 atas (Jumlah Markah Keseluruhan 160-179) , 4, 5 dan 6) (2 Jam Kredit)	UB02002 English For Employment (Bagi Pelajar MUET Band 3 atas (Jumlah Markah Keseluruhan 160-179) , 4, 5 dan 6) (2 Jam Kredit)	UB00502 English For Research Purposes (Bagi Pelajar MUET Band 3 atas (Jumlah Markah Keseluruhan 160-179) , 4, 5 dan 6) (2 Jam Kredit)				
	UB00202 Oral Communication in English (Bagi Pelajar MUET Gelung 1,2 dan 3 (Jumlah markah keseluruhan 140-159) (2 Jam Kredit)	UB01002 Essential Communication Skills (Bagi Pelajar MUET Gelung 1,2 dan 3 (Jumlah markah keseluruhan 140-159) (2 Jam Kredit)	UB00702 English for Occupational Purposes (Bagi Pelajar MUET Gelung 1,2 dan 3 (Jumlah markah keseluruhan 140-159) (2 Jam Kredit)	UB00302 Reading & Writing in English (Bagi Pelajar MUET Gelung 1,2 dan 3 (Jumlah markah keseluruhan 140-159) (2 Jam Kredit)				
Teras Universiti (Ko-kurikulum) (3 Jam Kredit)	EXxxx3 Ko-kurikulum (3 jam kredit)							
Teras Program (107 Jam Kredit)	KA13503 Kalkulus 1 KA10102 Bahan Kejuruteraan Awam KA10302 Lukisan Kejuruteraan Awam KA10502 Geologi Kejuruteraan (9 jam kredit)	KA13603 Kalkulus 2 KA13803 Pengaturcaraan Komputer KA10603 Mekanik Gunaan KA10802 Teknologi Binaan (11 jam kredit)	KA20102 Statistik Kejuruteraan KA20502 Persamaan Pembezaan KA20703 Mekanik Bendalir KA20903 Mekanik Bahan KA21102 Aturcaraan Kontrak dan Taksiran KA23702 Teknologi Konkrit (14 jam kredit)	KA20403 Kejuruteraan Ukur KA20602 Analisa Berangka KA20801 Kem Ukur KA21002 Teknologi Elektrik KA24003 Teori Struktur KA21603 Kejuruteraan Geoteknik 1 KA21801 Makmal Konkrit dan Bahan KA24201 Makmal Struktur (16 jam kredit)	KA33903 Hidraulik KA31303 Kejuruteraan Geoteknik 2 KA31503 Teori Struktur 2 KA34101 Makmal Bendalir dan Hidraulik KA34303 Rekabentuk Struktur Konkrit KA34503 Kejuruteraan Lebuhraya (16 jam kredit)	KA34602 Pengurusan Projek KA30005 Latihan Industri KA34802 Kejuruteraan Trafik KA35003 Hidrologi & Sumber Air KA30603 Rekabentuk Keluli dan Kayu KA35201 Makmal Geoteknik KA35401 Makmal Lebuhraya dan Trafik KA35603 Rekabentuk Asas (20 jam kredit)	KA40102 Projek Tahun Akhir 1 KA44703 Etika dan Undang undang untuk Jurutera KA40503 Kejuruteraan Alam Sekitar KA44901 Makmal Alam Sekitar KA45102 Projek Rekabentuk Bersepadu 1 (11 jam kredit)	KA40204 Projek Tahun Akhir 2 KA45803 Projek Rekabentuk Bersepadu 2 KA46003 Pengurusan dan Perakanaan untuk Jurutera (10 jam kredit)
	Teras Program (Elektif) (9 Jam Kredit)							KA4XX03 Elektif I (3 jam kredit)
JUMLAH 135 JAM KREDIT)	16	17	18	18	16	20	14	16

LIST OF ELECTIVE SUBJECTS
SENARAI KURSUS ELEKTIF

Branch <i>Bidang</i>	Elective I <i>Elektif I</i>	Elective II <i>Elektif II</i>	Elective III <i>Elektif III</i>
Structure <i>Struktur</i>	KA42403 Advanced Structural Design <i>KA42403 Rekabentuk Struktur Lanjutan</i>	KA46203 Bridge Engineering <i>KA46203 Kejuruteraan Jambatan</i>	KA47603 Tunnel Engineering <i>KA47603 Kejuruteraan Terowong</i>
Geotechnical <i>Geoteknik</i>	KA41503 Advanced Geotechnical Engineering <i>KA41503 Kejuruteraan Geoteknik Lanjutan</i>	KA46403 Soil Stabilisation and Ground Improvement <i>KA46403 Penstabilan dan Penambabbaikan Tanah</i>	KA47803 Earthquake Engineering <i>KA47803 Kejuruteraan Gempa Bumi</i>
Environmental <i>Alam Sekitar</i>	KA42203 Water and Wastewater Engineering <i>KA42203 Kejuruteraan Air dan Air Sisa</i>	KA43403 Advanced Environment Engineering <i>KA43403 Kejuruteraan Persekitaran Lanjutan</i>	KA48003 Solid Waste Management <i>KA48003 Pengurusan Sisa Pepejal</i>
Highway & Transportation <i>Lebuhraya & Pengangkutan</i>	KA43203 Transportation Engineering <i>KA43203 Kejuruteraan Pengangkutan</i>	KA46803 Advanced Highway Engineering <i>KA46803 Kejuruteraan Lebuhraya Lanjutan</i>	KA48203 Advanced Traffic Engineering <i>KA48203 Kejuruteraan Trafik Lanjutan</i>
Others <i>Lain-lain</i>	KA43003 Advanced Project Management <i>KA43003 Pengurusan Projek Lanjutan</i>	KA47003 Introduction to GIS <i>KA47003 Pengenalan Kepada GIS</i>	KA48403 Marine and Coastal Engineering <i>KA48403 Kejuruteraan Marin dan Pantai</i>
	KA42003 Advanced Concrete Technology <i>KA42003 Teknologi Konkrit Lanjutan</i>	KA47203 Finite Element Method <i>KA47203 Kaedah Unsur Terhingga</i>	KA48603 Integrated Water Resource Management <i>KA48603 Pengurusan Sumber Air Bersepadu</i>
	KA45303 Building Pathology <i>KA45303 Patalogi Bangunan</i>	KA47403 Sustainability and Green Technology <i>KA47403 Teknologi Hijau dan Mampan</i>	

ACADEMIC RECORDS

CODE	COURSE	CREDIT HOURS	GRADE		
			ATTEMPT 1	ATTEMPT 2	ATTEMPT 3
UW00202	Islam and Asian Civilisation	2			
UB00202 / UB00602	Oral Communication In English / Grammar In Context	2			
Exxxx3	Co-Curriculum	3			
KA13503	Calculus 1	3			
KA10102	Civil Engineering Material	2			
KA10302	Civil Engineering Drawing	2			
KA10502	Engineering Geology	2			
UW00102	Ethnic Relations	2			
UCxxx02		2			
UB00102 / UB00402	Communicative English Grammar / Academic Reading and Writing	2			
KA13603	Calculus 2	3			
KA13803	Engineering Programming	3			
KA10603	Applied Mechanics	3			
KA10802	Construction Technology	2			
UW00302	Fundamentals of Entrepreneurial Acculturation	2			
UB00702 / UB02002	English For Occupational Purposes / English for Employment	2			
KA20102	Engineering Statistics	2			
KA20502	Differential Equation	2			
KA20703	Fluid Mechanics	3			
KA20903	Mechanics of Solids	3			
KA21102	Contract And Estimation	2			
KA23702	Concrete Technology	2			
UB00302 / UB00502	Reading and Writing in English / English for Research Purposes	2			
KA20403	Engineering Survey	3			
KA20602	Numerical Analysis	2			
KA20801	Survey Camp	1			
KA21002	Electrical Technology	2			
KA24003	Theory of Structure 1	3			
KA21603	Geotechnical Engineering 1	3			
KA21801	Concrete and, Material Lab	1			
KA24201	Structure Lab	1			
KA33903	Hydraulics	3			
KA31303	Geotechnical Engineering 2	3			
KA31503	Theory of Structure 2	3			
KA34101	Fluid and Hydraulics Lab	1			
KA34303	Reinforced Concrete Design	3			

KA34503	Highway Engineering	3			
KA34602	Project Management	2			
KA30005	Industrial Training	5			
KA34802	Traffic Engineering	2			
KA35003	Hydrology & Water Resources	3			
KA30603	Steel and Timber Design	3			
KA35201	Geotechnical Lab	1			
KA35401	Highway and Traffic Lab	1			
KA35603	Foundation Design	3			
KA40102	Final Year Project 1	2			
KA44703	Ethics and Law for Engineers	3			
KA40503	Environmental Engineering	3			
KA44901	Environmental Lab	1			
KA45102	Integrated Design Project 1	2			
KA4XX03	Elective I	3			
KA40204	Final Year Project 2	4			
KA45803	Integrated Design Project 2	3			
KA46003	Management and Accounting for Engineers	3			
KA4XX03	Elective II	3			
KA4XX03	Elective III	3			

ACADEMIC ADVISOR RECORDS

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

GPA: _____

CGPA: _____

Date	Meeting Outcomes	AA Signature

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

GPA: _____

CGPA: _____

Date	Meeting Outcomes	AA Signature

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

GPA: _____

CGPA: _____

Date	Meeting Outcomes	AA Signature

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

GPA: _____

CGPA: _____

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: _____

CGPA: _____

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: _____

CGPA: _____

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: _____

CGPA: _____

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: _____

CGPA: _____

Date	Meeting Outcomes	AA Signature

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