



**Universiti Tun Hussein Onn Malaysia
86400 Batu Pahat, Johor**



ACADEMIC PROFORMA 2017/2018

**BACHELOR SCIENCE OF ARCHITECTURE
FACULTY OF CIVIL AND ENVIRONMENTAL ENGINEERING**

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Universiti Tun Hussein Onn Malaysia
Mac 2017

Contents

Contents

Foreword from the Vice-Chancellor	?
Foreword from the Deputy Vice-Chancellor (Academic and International)	?
Foreword from the Dean of Faculty of Civil and Environmental Engineering	?
University Vision	?
University Mission	?
University Education Philosophy	?
University Logo	?
University Board of Directors	?
University Senate Members	?
Faculty of Faculty of Civil and Environmental Engineering	?
Faculty Vision	?
Faculty Mission	?
Faculty Adjung Professors	?
Faculty Visiting Professors	?
Faculty External Examiners	?
Faculty Industrial Advisors	?
Faculty Staff Directory	?
Programme Aims	?
Programme Educational Objectives (PEO)	?
Programme Learning Outcomes (PLO)	?
Curriculum Structure	?
Synopsis of the University Courses	?
Synopsis of the Faculty Courses	?
Career & Further Education Prospect	?

Foreword from the Vice-Chancellor

Salam Sejahtera and Warm Greetings

First of all, please allow me to take this opportunity to extend a warm welcome to our new undergraduates for the academic session of 2017/2018. Thank you for choosing to study at UTHM, and thank you for your faith in the quality of our academic programmes, which we believe would serve you well in your coming years of learning here at the University.

In the course of acquiring advanced knowledge and skills in your respective fields of choice, I hope you will find the University always eager to assist and support your pursuits. Your passion and enthusiasm should be further heightened as you journey towards completion of study and graduation, and I hope that you will leave the University a proud, learned high achiever.

The University is committed to provide the best higher education, especially in the area of engineering technology. Apart from regular review and revision of the programme contents to meet current industrial needs, UTHM is also constantly improving the facilities to ensure a dynamic and conducive learning environment for the students. As future graduates of the University, you are invaluable assets, i.e. human capital, to be groomed and transformed to leaders of tomorrow, for the nation and beyond. Your dreams drive you to work for the goal, and it is your very dreams which drive the University to be by your side every step of the way!

At the threshold of Phase 2 of the National Higher Education Strategic Plan (PSPTN), UTHM is prepared to march towards an era of high quality engineering technology education in particular, in line with the philosophy and aspirations of the Malaysian Technical University Network (MTUN). Built on the strengths of cutting-edge research in green technology and sustainable materials, research excellence contributes to keeping the teaching contents current and relevant with the market trends. The ball is now in your park, to make good of the lively melting pot of teaching and learning, research and development, innovation and commercialization, to soar high and achieve your dreams.

Last but not least, I wish you the very best in your undertaking at hand, and always bearing in mind your duties to your loved ones at home, the society and the nation. We look forward to watch you grow, just as many before you, into outstanding and respectable professionals in your chosen fields.

Thank you, and *bon voyage*. Let the journey begin!

PROFESOR DR. WAHID BIN RAZZALY

Vice-Chancellor

Universiti Tun Hussein Onn Malaysia

Foreword from the Deputy Vice-Chancellor (Academic and International)

Assalamualaikum Warahmatullahi Wabarakatuh and Warm Greetings

I would like to take this opportunity to express the utmost congratulations and well done to you as the new students whom have been successfully been selected to pursue studies at Universiti Tun Hussein Onn Malaysia for this 2017/2018 session.

I would also like to congratulate Center for Academic Development and Training that has successfully produced the proforma which will be used as a guide for students in planning the studies beginning from the first semester until the end of the studies at this University.

Detailed planning which is effectively implemented at every semester as well as early preparation of students before attending lectures is very important in ensuring the readiness of learning process. Apart from that, the preparation for co-curriculum program also is important in shaping the personality and social development of students.

I hope that the publication of this proforma can be fully utilized by you in planning your studies at the University and you are capable of obtaining the best results as well as attaining excellent success.

Last but not least, I would like to wish All the Best and I pray that you will achieve excellent success in your studies at the University and thus can contribute as the human capital towards religion, race and Nation development.

Thank you.

PROFESOR DR. AZME BIN KHAMIS

Acting Deputy Vice-Chancellor (Academic and International)
Universiti Tun Hussein Onn Malaysia

Foreword from the Dean of Faculty of Civil and Environmental Engineering

Salam sejahtera and Salam 1Malaysia

I would like to congratulate all new students at the Faculty of Civil and Environmental Engineering (FoCEE) UTHM for the 2017/2018 academic session. All of you are very fortunate to be selected to enter this University, which is well-equipped with current infrastructure and conducive learning environment. Being selected to this university is a great privilege that should not be wasted. This is due to the fact that the education process at the tertiary level requires continuous effort and commitment so that the knowledge gained can produce students who are excellent in all aspects in accordance with the needs of industries and Nation.

In order to accomplish the University's mission which is to produce and train competitive professionals and technologists of high ethical values, you will be guided by qualified, committed, and responsible academic staff. FoCEE offers academic programmes based on advanced civil engineering field as well as focuses on sustainable environment for universal prosperity. To enhance students' understanding and creativity, the faculty provides laboratories equipped with the latest equipment and assisted by well-trained technicians. Students will also have to undergo practical work in the field relevant to the current industrial needs.

Therefore, you must take this opportunity to work extremely hard in order to achieve the aspirations of not only your parents but also the community and the country. Systematic planning of teaching and learning will produce outstanding graduates.

Thank you.

ASSOC. PROF. DR. ABD. HALID BIN ABDULLAH

Dean

Faculty of Civil and Environmental Engineering

Universiti Tun Hussein Onn Malaysia



Vision

Towards a world class university in engineering, science and technology for sustainable development

Mission

Universiti Tun Hussein Onn Malaysia (UTHM) is committed to generate and disseminate knowledge, to meet the needs of industry and community and nurturing creative and innovative human capital, based on tauhidic paradigm

University Education Philosophy

The education and training in this university is a continuous effort to lead in the market oriented academic programmes. These programmes are student-focused and are conducted through experiential learning in order to produce well trained human resource and professionals who are catalysts for a sustainable development.

University Logo

Logo of UTHM is the pride, identity and idealism of the members of UTHM community. UTHM logo displays a Proton, Book, Tiered Mortar Board, Book Rest and Shield.

The whole concept of the logo symbolises UTHM as an Institution of Higher Learning which supports the growth and development of knowledge at all levels in fields of Science and Technology.

Blue represents a close-knit circle of members of UTHM community which ensures the success and enhancement of its educational and research programmes and activities for the benefits of mankind.

Red symbolises the courage of UTHM in the exploration of new fields as the pioneer in science and technology applications, which reflects the spirit and self-esteem of the members of UTHM community.

Symbolism

Red	Courage
Blue	Co-operation/Loyalty
Silver	Quality/Prestige
Book Rest	Repository of knowledge
Proton	Science and technology
Book	Knowledge
Mortar board	Levels of study
Shield	Confidence

Chancellor

**Duli Yang Maha Mulia Sultan Ibrahim Ibni Almarhum Sultan Iskandar
Sultan of Johor**

D.K., D.K. (Pahang), SPMJ, SSIJ, S.M.N., S.P.M.T., S.M.P.K., P.I.S.

Pro-Chancellor I

Duli Yang Amat Mulia Tunku Ismail Ibni Sultan Ibrahim

Tunku Mahkota of Johor

D.K., SPMJ, P.I.S

Pro-Chancellor II

YBhg. Tan Sri Dr. Ali Hamsa

Chief Secretary to the Government of Malaysia

University Board of Directors

Chairman

Tan Sri (Dr.) Ir. Jamilus bin Md Hussin

President/Chief Executive Officer
KLIA Premier Holdings Sdn. Bhd

Members

PROFESOR DR. WAHID BIN RAZZALY

Vice-Chancellor
Universiti Tun Hussein Onn Malaysia

Associate Professor Dr. Arham bin Abdullah

Director
Industrial Relation Division
Ministry of Education Malaysia

Datuk Dr. Pang Chau Leong

Department of Skills Development
Ministry of Human Resources

Dato' Zainal Abidin bin Mat Nor

Director
Division of Remuneration Policy, Public Money and Services Division
Ministry of Finance

YB Dato' Hj. Nooh bin Gadot

Advisor
Majlis Agama Islam Johor

Tan Sri Dato' Sri Sufri bin Hj Mohd Zin

Group Managing Director
TRC Synergy Berhad

Datuk Mat Noor Nawi

Chairman
Exim Bank Berhad

Mrs. Mazula binti Sabudin

(Ahli Ganti Kementerian Pendidikan)
Director
Bahagian Pengurusan Kemasukan Pelajar
Higher Education Division
Ministry of Higher Education Malaysia

Secretary

Mr. Abdul Halim bin Abdul Rahman

Registrar
Universiti Tun Hussein Onn Malaysia

Senate Members

Chairman

PROFESSOR DR. WAHID BIN RAZZALY

Vice-Chancellor / Chairman

Members

Professor Dr. Azme bin Khamis

Acting Deputy Vice-Chancellor (Academic and International)

Professor Dr. Ruzairi bin Abdul Rahim

Deputy Vice-Chancellor (Research and Innovation)

Associate Professor Dr. Asri bin Selamat

Deputy Vice-Chancellor (Student Affairs and Alumni)

Professor Dr. Ahmad Tarmizi bin Abd. Karim

Assistant Vice Chancellor (Development, Facility Management and ICT)

Professor Dato¹ Dr. Abdul Razak bin Hj. Omar

Assistant Vice Chancellor (Industrial and Community Relation)

Professor Dr. Hj. Ismail bin Abdul Rahman

Dean Centre for Graduate Studies

Associate Professor Dr. Abd Halid bin Abdullah

Dean Faculty of Civil and Environmental Engineering

Dr. Afandi bin Ahmad

Dean Faculty of Electrical and Electronic Engineering

Associate Professor Dr Shahrudin bin Mahzan @ Mohd Zin

Dean Faculty of Mechanical and Manufacturing Engineering

Dr. Mohd. Lizam bin Mohd. Diah

Dean Faculty of Technology Management and Business

Professor Dr. Ahmad bin Esa

Dean Faculty of Technical and Vocational Education

Associate Professor Dr. Nazri bin Mohd Nawi

Dean Faculty of Computer Science and Information Technology

Associate Professor Dr. Mohd. Kamarulzaki bin Mustafa

Dean Faculty of Science, Technology and Human Development

Associate Professor Dr. Ishak bin Baba

Dean Faculty of Engineering Technology

Professor Dr. Ismail bin Abd Rahman

Dean, Centre for Graduate StudiesD

Associate Professor Dr. Mohamad Zaky bin Noh

Dean Centre for Diploma Studies

Professor Dr. Azme bin Khamis

Dean Center for Academic Development and Training

Professor Dr. Rosman bin Md Yusoff

Faculty of Science, Technology and Human Development

Mdm Robijah binti Kamarulzaman

Dean Centre for Language Studies

Professor Dr. Yusri bin Yusof

Director of International office/Faculty of Mechanical and Manufacturing Engineering

Professor Dr. Maizam binti Alias

Faculty of Technical and Vocational Education

Professor Dr. Jailani bin Md Yunos

Faculty of Technical and Vocational Education

Professor Dr. Hj. Mustafa bin Mat Deris

Faculty of Computer Science and Information Technology

Professor Dr. Rosziati binti Ibrahim

Faculty of Computer Science and Information Technology

Professor Datin Dr. Maryati binti Mohamed

Faculty of Science, Technology and Human Development

Professor Dr. Rosman bin Md. Yusoff

Faculty of Science, Technology and Human Development

Encik Abdul Halim bin Abdul Rahman

Secretary/Registrar

Mdm. Azizah binti Nasri

Bursary (Acting)

Mr. Haji Bharun Narosid bin Mat Zin

Chief of Librarian

Faculty of Civil and Environmental Engineering

Faculty Vision

Aspires to lead the application of civil and environmental engineering knowledge in providing innovative and sustainable solutions for the benefits of mankind.

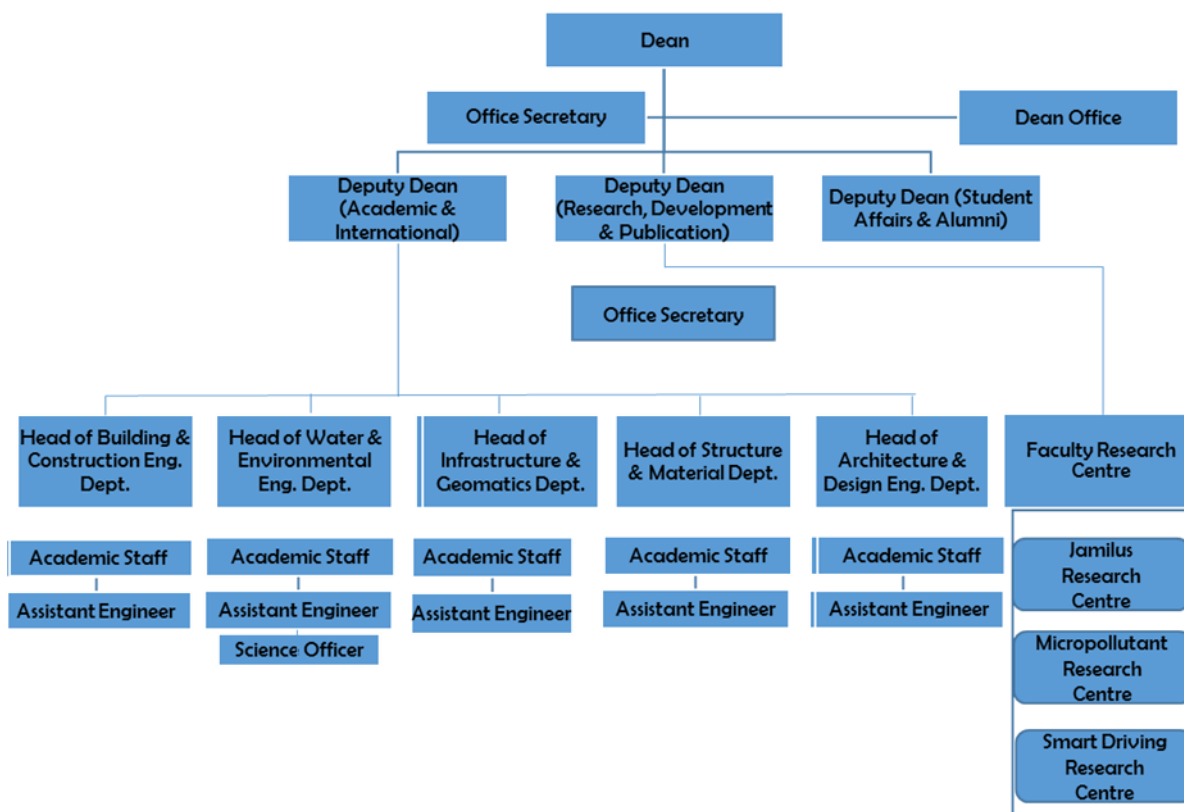
Faculty Mission

To produce dan train professionals who are creative, innovative, competent and responsible to fulfill the societal and environmental needs in a progressive and sustainable manner

Faculty of Civil and Environmental Engineering (FoCEE) was established on May 1, 2004 when the university conducted a restructuring of faculties. FoCEE is the combination of two departments, i.e. the Civil Engineering Department of the Engineering Faculty and the Construction and Environmental Engineering Technology of the Engineering Technology Faculty. The Department of Engineering had existed since September 13, 1993 when the Polytechnic Staff Training Centre was established while the Department of Construction & Environmental Engineering Technology was established on September 30, 2000 when the Institut Teknologi Tun Hussein Onn (ITTHO) was upgraded to Kolej Universiti Teknologi Tun Hussein Onn (KUiTTHO) and then to Universiti Tun Hussein Onn Malaysia (UTHM).

FoCEE offers academic programmes to students at Bachelor and Postgraduate levels. FoCEE is established with the aim of conducting academic programmes specially designed towards the achievement of the Faculty vision and mission as well as conducting innovative research and development in accordance with the needs of the Nation. Apart from offering competitive academic programmes, FoCEE also serves as the reference centre in the field of environmental-friendly civil engineering and construction technology. The qualities and global competitiveness of the programmes offered by FoCEE are proven with the 5-year accreditation by the Board of Engineers Malaysia (full signatory status of the Washington Accord since June 18, 2009).

The faculty, consisted of five (5) departments is led by a Dean and assisted by three (3) Deputy Deans. Organisation chart of FoCEE is depicted as the diagram below.



No. Sijil: 510
Ruj. EAC: BEM/008/0100/M (006)



LEMBAGA JURUTERA MALAYSIA
(Penandatanganan Penuh Washington Accord mulai 18 Jun 2009)

SIJIL AKREDITASI

DENGAN INI MEMPERAKUKAN BAHAWA KURSUS PENGAJIAN

**BACHELOR OF CIVIL ENGINEERING
WITH HONOURS**

(4-Year Programme after STPM)

YANG DIKENDALIKAN OLEH:

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

TELAH MENDAPAT PENGIKTIRAFAN RASMI BAHAWA KELAYAKAN
AKADEMIK YANG DIANUGERAHKAN ADALAH SELARAS DENGAN
STANDARD DAN KUALITI YANG TELAH DITETAPKAN OLEH
LEMBAGA JURUTERA MALAYSIA

**PERAKUAN BAGI GRADUAT
TAHUN 2012 HINGGA 2016 SAHAJA**



.....
DATO' SRI Ir. Dr. JUDIN BIN ABDUL KARIM
Yang DiPertua

.....
Ir. HIZAMUL-DIN AB. RAHMAN
Pendaftar

Penganugerahan Perakuan Akreditasi ini tertakluk kepada peraturan-peraturan dan syarat-syarat yang dinyatakan di sebelah.

Tarikh Perakuan Dikeluarkan: 18.10.2011

Faculty Visiting Professors

Profesor Dr. Katsushi Ijima

Graduate School of Science & Engineering
SAGA University of Japan

Faculty External Examiner

Associate Professor Ir. Adnan bin Zulkiple

Deputy Dean
Academic and Students Affairs
Universiti Malaysia Pahang
Kuantan, Pahang

Faculty Adjung Professors

YBhg. Prof. Dato' Ir. Dr. Mohd Saleh bin Jaafar

Dean
Faculty of Engineering
Universiti Putra Malaysia

YBhg. Dato' Sri Zohari bin Haji Akob

Secretary General
Ministry of Work

Faculty Industrial Advisors

Ir. Shazri bin Shuib

Director
SKAZ Consultancy

Dr. Mohd Pauze Bin Mohamad Taha

Director of Research Technology

Ir. Dr. Mohd Asbi bin Othman

Managing Director
Mohd Asbi & Associates
Civil and Structure Consulting Firm

Ir. Dr. Kamarul Anuar Mohamad Kamar

Head
Unit of Development and Innovation

Ar. Hj. Mustapha Bin Mohd Salleh

Managing Director
Aliran Interiors Sdn. Bhd

Faculty Staff Directory

Administration

Dean

Associate Professor Dr. Abd Halid bin Abdullah

Ph.D (Construction) (Heriot-Watt Univ.) (UK), MSc. (Building Technology) (USM), BSc. (Architectural Studies) (Univ. Winsconsin-Milwaukee) (USA), Dip. Edu. (Hons.) (Sultan Abdul Halim Teachers College)

Office Secretary

Mdm. Noorhayati binti Othman

Dip. (UiTM)

Deputy Dean (Academic and International)

Associate Professor Dr Mohd Haziman Bin Wan Ibrahim

Ph.D (Civil Engineering) (USM), MEng. (Civil) (UTHM), BEng. (Hons) (Civil) (UiTM), Dip. (Civil Engineering) (ITM)

Deputy Dean (Research and Development)

Associate Professor Dr Norzila binti Othman

Ph. D (Civil Engineering) (UiTM), MSc. (Technology Management) (UTM), BSc. (Science) (UM)

Deputy Dean (Student Affairs and Alumni)

Associate Professor Dr Aeslina Binti Abdul Kadir

Ph.D (Civil Engineering) (RMIT Univ.), MEng. (Civil-Environmental Management) (UTM), BSc. (Env. Science) (UKM)

Office Secretary

Mdm. Juliana binti Mohd Sapuan

Dip. (Management & Office Technology) (UiTM)

Senior Assistant Registrar

Mr. Shamsulkhairi bin Md Salleh

BSc. Econ. (UUM)

Senior Assistant Administrative Officer (Academic)

Mdm. Siti Hasnah binti Hud

Dip. (Public Administration) (UiTM)

Senior Assistant Administrative Officer (Post Graduate)

Mr. Rosmaidi bin Shahal

STPM (Pusat Tuisyen Afdzal, Kluang)

Assistant Administrative Officer (Finance & Development)

Mdm. Sabariah Binti Md. Supadil

Dip. (Business Management) (PTSS)

Administrative Assistant (Operational & Clerical)

Mdm. Ruzaimah binti Kamat

SPM (SM Tun Sardon Rengit)

Administrative Assistant (Operational & Clerical)

Mdm. Rafidah binti Sarji

STPM (SM Tun Sardon Rengit)

Senior Administrative Assistant (Operational & Clerical)

Mr. Encik Mohd Rawi Bin Deris

STPM (Maktab Sultan Ismail)

Senior Administrative Assistant (Operational & Clerical)

Mr. Abdul Hadi bin Mohamed Zainal

SPM (SMK Dato' Onn, Batu Pahat)

Senior Administrative Assistant (Operational & Clerical)

Mdm. Norsaliza binti Salleh

SPM (SMK Tun Ismail, Pt. Raja)

Administrative Assistant (Operational & Clerical)

Mr. Mohd Nazri bin Safri

SPM (SMK Munsyi Sulaiman, Batu Pahat)

Assistant Engineer

Mr. Mohd Khairi bin Zainal

Dip. Kej. Elektronik Perhubungan (Politeknik Ibrahim Sultan Johor Bahru)

Office General Assistant

Mr. Muhamad Zuri Iskandar bin Idris

SPM (SMK Dato Sri Amar Diraja Muar)

Department of Structure and Material Engineering

Academic Staff

Dr. Ahmad Zurisman bin Mohd Ali

Ph.D (Concrete Engineering) (Swinburne Univ.of Technology), MEng. (Civil-Structure) (UTM), BEng. (Civil) (UTM), Dip (Civil Engineering) (UTM)

Head of Department

Professor Ir. Dr. Abdul Aziz bin Abdul Samad

Ph.D (Structure) (Univ. Manchester, UK), MSc. (Structure) (Univ. Strathclyde, UK), BSc. (Civil Engineering) (Univ. Glasgow, UK), Dip. (Civil Engineering) (UTM)

Associate Professor Dr. A.S.M. Abdul Awal

Ph.D (Civil Engineering) (UTM), M.Eng. Sc (Melbourne), M.Eng (AIT), B.Sc Eng. (BAU)

Associate Professor Dr. David Yeoh Eng Chuan

Ph.D (Civil Engineering) (Univ. of Canterbury), MEng. (Civil) (UTM), BSc. (Hons.) (Civil Engineering) (UTM), Dip. Ed. (UTM), Cert. (Civil Engineering) (PUO)

Associate Professor Dr. Mohd Haziman Bin Wan Ibrahim

Ph.D (Civil Engineering) (USM), MEng. (Civil) (UTHM), BEng. (Hons) (Civil) (UiTM), Dip. (Civil Engineering) (ITM)

Associate Professor Dr. Mohd Irwan bin Juki

Ph.D (Civil Engineering) (UiTM), MEng. (Structure) (UTM), BEng. (Hons.) (Civil) (UTM)

Associate Professor Dr. Noridah binti Mohamad

Ph.D (Civil Engineering) (UTM), MEng. (Civil-Structure) (USM), BEng. (Civil) (Pacific Univ., California, USA), Dip. Ed. (UTM)

Dr. Faisal bin Sheikh Khalid

Ph.D (Civil Engineering) (UTHM), BEng. (Civil Engineering)(UTHM)

Dr. Goh Wan Inn

Ph.D (Civil Engineering) (UTHM), BEng. (Civil Engineering)(UTHM)

Dr. Nicholas Anting Anak Guntur

Ph.D (Civil Engineering) (UTM), BEng. (Civil Engineering)(UTM)

Dr. Mohd Hanif bin Ismail

Ph.D (Concrete Tech.) (USM), MEng. (Pengurusan Sungai Lestari) (USM), BSc. (Civil Engineering) (USM)

Dr. Mohd Hilton bin Ahmad

Ph.D (Univ. of Surrey, UK), MSc. (Structural Eng. & Construction) (UPM), BEng. (Civil) (UM)

Dr. Muhammad Nizam bin Zakaria

Ph.D (Civil Engineering) (Saga Univ.), MEng. (Civil) (Saga Univ., Japan), BEng. (Civil) (Saga Univ., Japan)

Dr. Noorwirdawati binti Ali

Ph.D (Civil Engineering) (UTHM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Dr. Norashidah binti Abd Rahman

Ph.D (Civil Engineering) (Univ. of Nottingham, UK), MEng. (Structure) (UTM), BEng. (Hons.) (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Dr. Nor Hayati binti Abd Ghafar

Ph.D (Civil Engineering) (Univ. Of Canterbury), MEng. (Civil-Structure) (UTM), BSc. (Structural Engineering) (UKM)

Dr. Norwati binti Jamaluddin

Ph.D (Structure) (Univ. of Leeds, UK), MEng. (Civil-Structure) (UTM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Dr. Nurazuwa binti Md Noor

Ph.D (Civil Engineering) (Kyushu Univ.), MSc. (Structural Engineering and Construction) (UPM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM), Cert. (Civil Engineering-Construction) (PKB)

Dr. Shahiron bin Shahidan

Ph.D (Civil Engineering) (USM), MSc. (Structural Engineering & Construction) (UPM), BEng. (Hons.) (Civil) (UNISEL)

Dr. Shahrul Niza bin Mokhtar

Ph.D (Civil Engineering) (Kyushu Univ., Japan), MEng. (Civil-Structural) (UTM), BEng. (Hons.) (Civil) (UTHM), Dip. Ed. (Civil Engineering) (UTHM)

Dr. Siti Radziah binti Abdullah

Ph.D (Civil Engineering) (Monash Univ), BEng. (Hons.) (Civil) (KUiTTHO), Dip. Ed. (Civil Engineering) (UTM)

Dr. Zainorizuan bin Mohd Jaini

Ph.D (Civil and Computational Engineering) (Univ. of Swansea, UK), MSc. (Finite Element & Computer Modelling) (Univ. Wales, UK), BEng. (Hons.) (Civil Engineering) (UTHM)

Ir. Shamrul-MAr bin Shamsuddin

MEng. (Structure & Construction) (UPM), BEng. (Hons.) (Civil Engineering) (UTM)

Pn. Tuan Norhayati binti Tuan Chik

MEng. (Civil-Structure) (UTM), BEng. (Civil) (UTM)

Mr. Ahmad Fahmy bin Kamarudin

MSc. (Civil Engineering-Structures) (UiTM), BEng. (Hons.) (Civil) (UTHM)

Mr. Koh Heng Boon

MEng. (Structure) (UTM), BEng. (Hons.) (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Mr. Mohammad Soffi bin Md Noh

MSc. (Structural Engineering & Construction) (UPM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Mr. Mohd Khairy bin Burhanudin

MEng (Civil) (UTHM), BEng. (Civil) (UTHM)

Mr. Sallehuddin Shah bin Ayop

MEng. (Civil-Structure) (UTM), BEng. (Civil) (UTM)

Mdm. Masni binti A. Majid

MEng. (Civil) (UTM), BSc. (Civil Engineering and Education) (UTM)

Mdm. Noor Azlina binti Abdul Hamid

MEng. (Civil-Structure) (UTM), BEng. (Civil) (UTM)

Mdm. Norfaniza binti Mokhtar

MEng (Civil) (UTHM), BEng. (Civil) (UTM)

Mdm. Norhafizah binti Salleh

MSc. (Civil Engineering-Structure) (UiTM), BEng. (Civil-Timber Technology) (UTHM)

Mdm. Sharifah Salwa binti Mohd Zuki

BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Mdm. Wan Amizah binti Wan Jusoh

MSc. (Civil Engineering-Structure) (UiTM), BEng. (Civil Engineering) (UiTM), Dip. (Civil Engineering) (UiTM)

Mdm. Zalipah binti Jamellodin

MEng. (Civil-Structure) (UTM), BEng. (Civil) (UTM)

Academic Staff

Associate Professor Dr. Mohd Adib bin Mohammad Razi

Ph.D (Civil Engineering) (UiTM), MEng. (Hydraulics & Hydrology) (UTM), BEng. (Civil) (UTM), Dip. (Civil Eng.) (UTM)

Head of Department

Professor Ir. Dr. Amir Hashim bin Mohd Kassim

Ph.D (Hydrology & Water Resources) (Univ. Birmingham, UK), MSc. (Hydrology & Water Resources) (Colorado State Univ., USA), BEng. (Civil) (Univ. Strathclyde, UK), Dip. (Civil Eng.) (UTM)

Professor Dr. Ahmad Tarmizi bin Abdul Karim

Ph.D (Civil & Structural Eng.) (UKM), MEng. (Environmental Eng.) UTM, PGCE (TTTC), BSc. (Eng. Sci.) (UTK, Tennessee, USA)

Professor Hj. Ab Aziz bin Abdul Latiff

MEng. (Environmental) (UTM), PGCert. (High-Rise Building) (Chisholm Institute of Technology, Melbourne), PGCEd. (MPPPP), BSc. (Civil Eng.) (Salford Univ., UK)

Associate Professor Dr. Aeslina binti Abd. Kadir

Ph.D (Civil Engineering) (RMIT Univ.), MEng. (Civil-Environmental Management) (UTM), BSc. (Env. Science) (UKM)

Associate Professor Dr. Norzila binti Othman

Ph.D (Civil Eng.) (UiTM), Master (Technology Management) (UTM), BSc. (Ecology) (UM)

Associate Professor Dr. Tan Lai Wai

Ph.D (Civil Engineering-Computational Fluid Dynamics) (McGill Univ., Canada), MEng. (Hydraulics and Hydrology) (UTM), BEng. (Civil) (UTM), Dip. (Civil Eng.) (POLIMAS)

Associate Professor Dr. Zawawi bin Daud

Ph.D (Environmental Eng.) (USM), M.Eng. (Civil Eng.) (UTM), BSc. (Civil Eng.) (UTM), Dip. (Civil Eng.) (PUO), Dip. Education (UTM), Cert. (Civil Eng.) (PUO)

Dr. Hartini binti Kasmin

Ph.D (Hydrology and Water Resources) (Univ. Sheffield, UK), MEng. (Hydrology and Water Resources) (UTM), BEng. (Civil) (UTM)

Dr. Mohamad Faizal bin Tajul Baharuddin

Ph.D (Civil Engineering) (UM), MEng. (Water Resources) (UTM), Bachelor in Applied Geology (UM)

Dr. Mohd Azlan Bin Mohd Yusoff

Ph.D (Hydro Informatic) (USM), MSc (Sustainable River Management) (USM), BSc (Civil Engineering) (USM)

Dr. Mohd Hairul Bin Khamidun

Ph.D (Civil Eng.) (UTM), MSc. (Water Resources Eng.) (UPM), BSc (Civil Engineering) (USM)

Dr. Mohd Shalahuddin bin Adnan

Ph.D (Urban and Environmental Engineering) (Kyushu Univ., Japan), Master in Geological Engineering (Gadjah Mada Univ., Yogyakarta), BEng. (Civil) (USM)

Dr. Muhammad Salleh Bin Haji Abustan

Ph.D (Civil Eng.) (Kyoto Univ), MEng. (Civil-Environmental Management) (USM), BSc. (Civil Eng.) (USM)

Dr. Nor Amani Filzah binti Mohd Kamil

Ph.D (Civil Engineering) (UTM), MEng. (Environmental Management) (UTM), BEng. (Civil) (UTM)

Dr. Nur Shaylinda binti Mohd Zin

Ph.D (Water & Waste Water Eng.) (USM), (Environmental Management) (UTM), BEng. (Civil) (UiTM), Dip. (Civil Eng.) (UiTM)

Dr. Radin Maya Saphira binti Radin Mohamed

Ph.D (Environmental Eng.) (Murdoch University, Perth) , MEng. (Civil) (UTHM), BSc. (Industrial Chemical) (UTM)

Dr. Sabariah binti Musa

Ph.D (Urban Storm Water Management) (USM), MEng. (Civil-Hydraulics & Hydrology) (UTM), BEng. (Civil) (UTM), Dip. (Civil Eng.) (PPD), Cert. (Survey Engineering) (MLVK)

Dr. Siti Nazahiyah binti Rahmat

Ph.D (Civil Engineering) (RMIT UNIVERSITY), MEng. (Hydrology and Water Resources) (UTM), BEng. (Civil) (UTM), Dip. (Civil Eng.) (UTM)

Mr. Mohd Baharudin bin Ridzuan

MEng. (Civil) (UTHM), BEng. (Civil-Structure) (UKM)

Mr. Wan Afnizan bin Wan Mohamad

MSc. (Water Engineering) (UPM), BEng. (Hons.) (Civil) (UTM), Dip. (Civil Eng.) (UTM)

Mr. Zulkifli bin Ahmad

MEng. (Environment) (UKM), BEng. (Hons.) (Civil) (USM), Dip. (Civil Engineering) (ITM), Cert. Ed. (MPKI)

Mdm. Azra Munirah binti Mat Daud

MEng. (Civil-Environmental) (UTM), BEng. (Civil) (UTM)

Mdm. Nor Aliza binti Ahmad

MSc. (Water Engineering) (UPM), BEng. (Civil) (UTM), Dip. (Civil Eng.) (ITM)

Mdm. Nur Adila binti Ab. Aziz

MSc. (Civil and Environmental Eng.) (UTHM), BSc. (Civil Eng.) (UTHM)

Pn. Hjh. Roslinda binti Seswoya

MEng. (Civil) (UTM), BEng. (Hons.) (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Mdm. Zarina binti Md Ali

MSc. (Water Resources Eng.) (UPM), BEng. (Agriculture) (UPM)

Academic Staff

Associate Professor Dr. Aziman bin Madun

Ph.D (Engineering Geology) (Univ of Birmigham, UK), MSc. (Geotechnical Engineering) (UPM), BSc. (Geology) (UKM)

Head of Department

Professor Dr. Devapriya Chitral Wijeyesekera

Ph.D (Engineering Geology) (Univ. of London), MSc. (Engineering Geology) (Univ. of London), BEng. (Civil Engineering) (Univ. of Peradeniya, Sri Lanka)

Professor Dr. Mohd Idrus bin Hj. Mohd Masirin

Ph.D (Highway & Transportation Engineering) (Univ. East London, UK), MSc. (Highway & Transportation Engineering) (Univ. East London, UK), BEng. (Civil) (Univ. Han Yang, Seoul), Dip. (Civil Engineering) (UTM)

Associate Professor Dr. Adnan bin Zainorabidin

Ph.D (Geotechnical Engineering) (Univ. of East London, UK), MEng. (Civil) (UTM), BEng. (Civil) (UTHM), DPLI (Edu). (UTHM), Cert. (Civil Engineering) (PPD)

Associate Professor Dr. Mohamad Yusri bin Aman

Ph.D (Asphalt Technology) (USM), MEng. (Civil) (UTHM), BEng. (Civil) (UPM), Cert. (Civil Engineering-Construction) (PUO)

Associate Professor Dr. Mohd Ezree bin Abdullah

Ph.D (Civil Engineering) (UTHM), MEng. (Highway & Transport Engineering) (UTM), BEng. (Civil) (UTHM)

Associate Professor Dr. Munzilah binti Md Rohani

Ph.D (Transportation) (Univ. of Southampton, UK), MEng. (Traffic and Highway) (UTM), BEng. (Civil) (UTM)

Associate Professor Dr. Mustaffa bin Anjang Ahmad

Ph.D (City Planning) (Univ. of Saga, Japan), MSc. (Land Surveying) (UTM), BSc. (Land Surveying) (UTM)

Associate Professor Dr. Saiful Azhar bin Ahmad Tajudin

Ph.D (Geotechnical Engineering) (Univ of Birmigham, UK), MEng. (Geotechnics) (UTM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Ir. Dr. Raha Binti Abd Rahman

Ph.D (Highway & Traffic Engineering) (UTM), MEng. Highway & Traffic Engineering) (UPM), BEng. (Civil) (UPM)

Dr Alvin John Lim Meng Siang

Ph.D (Geotechnical Engineering) (UTHM), BEng. (Civil Engineering) (UTHM)

Dr. Anuar bin Mohd Salleh

Ph.D (Civil Engineering) (UTHM), MSc. (Land Surveying) (UTM), BSc. (Land Surveying) (UTM)

Dr. Basil David Daniel

Ph.D (Transportation Engineering) (University Of Canterbur), MSc. (Highway and Transportation Engineering) (UPM), BEng. (Civil) (UM)

Dr. Felix Ling Ngee Leh

Ph.D (Civil Engineering) (UTM), MEng. (Civil-Geotechnics) (UTM), BSc. (Civil Engineering) (UTM)

Dr. Hanifi bin Othman

Ph.D (Civil Engineering) (UTM), BEng. (Civil Engineering) (UTM)

Dr. ING. Joewono Prasetijo

Ph.D/Dr.-ING. (Traffic and Transportation Engineering) (Ruhr-Universität Bochum, Germany), M.Sc (Road and Transportation Engineering) (IHE-Delft University of Technology, Netherlands), BEng. (Civil) (Univ. of Tanjungpura, Indonesia)

Dr. Kamaruddin bin Ambak

Ph.D (Transportation Engineering) (UKM), MSc. (Highway and Transportation Engineering) (UPM), BSc. (Civil Engineering) (UTM), Cert. (Civil Engineering) (PKB)

Dr. Khairul Nizar bin Mohd Yusof

Ph.D (Geotechnical Engineering) (Univ. of Leeds, UK), MEng. (Geotechnics) (UTM), BEng. (Hons.) (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Dr. Mohd Effendi bin Daud

Ph.D (Civil Engineering) (Nagoya Univ., Japan), MSc. (Land Surveying) (UTM), BSc. (Land Surveying) (UTM), Dip. (Land Surveying) (UTM)

Dr. Mohd Firdaus bin Md. Dan @ Azlan

Ph.D (Civil Engineering) (UTHM), MEng (Civil) (UTHM), BEng. (Civil) (UTHM), Dip. Ed. (Civil Engineering) (UTHM)

Dr. Mohd Khaidir bin Abu Talib

Ph.D (Geotechnical Engineering) (Kyushu Univ.), MEng. (Civil-Engineering) (UKM), BEng. (Civil-Engineering) (UKM), Dip. (Civil)(PPD)

Dr. Nor Azizi bin Yusof

Ph.D (Geotechnical Engineering) (Univ. Sheffield, UK), MEng. (Engineering Geology) (UTM), BEng. (Hons.) (Civil) (UTM)

Mr. Ahmad Raqib bin Ab Ghani

MSc. (Highway and Transport Engineering) (USM), BEng. (Hons.) (Civil Engineering) (USM)

Mr. Faizal bin Pakir

MEng (Civil) (UTHM), BEng. (Civil) (UTHM), Dip. Ed. (Civil Engineering) (UTHM)

Mr. Khairul Nizam bin Mohd Yunus

MEng. (Civil-Transportation & Highway) (UTM), Bachelor in Land Surveying (UTM), Dip. (Survey Science & Geomatic) (UiTM)

Mr. Mohd Fairus bin Yusof

MEng. (Geotechnics) (UTM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Mr. Mohd Hazreek bin Zainal Abidin

MEng. (Civil-Geotechnics) (UTM), BEng. (Civil) (UiTM), Dip. (Civil Engineering) (UiTM)

Mr. Mohammad Nasir bin Mohamad Taher

MEng (Civil) (UTHM), BEng. (Hons.) (Civil) (UTHM)

Mr. Mustafa Kamal bin Shamsudin

MEng. (Geotechnics) (UTM), BEng. (Civil) (UTM)

Mr. Saifullizan bin Mohd Bukari

MSc. (Land Surveying) (UTM), BSc. (Land Surveying) (UTM), Dip. (Land Surveying) (PUO)

Mdm. Marliana Azura binti Ahmad Puzi

MEng. (Civil) (UTM), BSc. (Civil Engineering) (UPM)

Mdm. Noorliyana binti Omar

MEng. (Highway & Traffic) (UTM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Mdm. Nursitihazlin binti Ahmad Termida

MEng. (Highway & Transportation) (UPM), BEng. (Civil) (UTHM)

Mdm. Nurul Hidayah binti Mohd Kamaruddin

MEng (Civil) (UTHM), BEng. (Civil) (UTHM), Dip. Ed. (Civil Engineering) (UTHM)

Mdm. Rosnawati binti Buhari

MEng. (Civil) (UTHM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Mdm. Zaihasra binti Abu Talib

MEng. (Geotechnics) (UTM), BEng. (Civil) (UNIMAS)

Mdm. Salina binti Sani

Dip. (Building Services) (POLISAS)

Department of Building and Construction Engineering

Academic Staff

Dr. Azeanita binti Suratkon

Ph.D (Construction Management) (Chiba University) (Japan), MSc. (Construction Management-Project Management) (Heriot-Watt Univ., UK), BSc. (Building) (UTM), Dip. (Quantity Surveying) (UTM)

Head of Department

Professor Dr. Ismail bin Abdul Rahman

Ph.D (Building Energy) (Univ. Manchester), MSc. (Building Services Eng.) (Heriot-Watt Univ., Edinburgh), BEng. (Hons.) (Civil) (UTM), Dip. (Civil Eng.) (UTM)

Associate Professor Dr. Noor Yasmin binti Zainun

Ph.D (Civil and Building Eng.) (Loughborough Univ., UK), MEng. (Civil-Construction Management) (UTM), BEng. (UTM), ADP3 (ITM)

Dr. Fajaruddin bin Mustakim

Ph.D (Civil Engineering) (Nagoya Inst Of Tech.), Eng MSc. (Construction Management) (UTM), BEng. (Hons.) (Civil) (UiTM), Dip. (Civil Engineering) (PKB), Cert. (Civil Engineering) (PPD)

Dr. Lee Yee Yong

Ph.D (Civil Eng) UTM, B. Eng (Hons) (Civil) UTM

Dr. Riduan bin Yunus

Ph.D (Construction and Project Management) (QUT, Australia), MEng. (Construction Management) (UTM), BEng. (Civil Engineering) (UTM)

Dr. Muhammad Fikri bin Hasmori

Ph.D (Project Management) (USM), MEng. (Project Management) (USM), BEng. (Housing, Building dan Palnning) (USM)

Dr. Nor Haslinda binti Abas

Ph.D (Property, Connst & Project Mgmt) (RMIT), MEng. (Civil & Structure) (UTM), BEng. (Civil) (UTHM)

Dr. Sasitharan A/I Nagapan

Ph.D (Civil Engineering) (UTHM), MEng. (Civil Engineering) (KUiTTTHO), BEng. (Civil Engineering) (KUiTTTHO)

Dr. Siti Hidayah binti Abu Talib

Ph.D (Environment Eng.) (USM), MEng. (Civil Engineering) (USM), BEng. (Civil Engineering) (USM)

Dr. Tong Yean Ghing

Ph.D (Civil Engineering) (Hong Kong Poly Univ), BEng. (Civil Engineering) (UTHM)

Ir Mohd Norazam Bin Yasin

MEng. (Civil Engineering) (UTM), MEng. (Civil Engineering) (Coventry Univ.), Dip. (Civil Engineering) (PKB), Dip. (Civil Engineering) (PKB)

Mr. Ahmad Syukri bin Mohd Nasir

Master BEng. (Civil Engineering) (UTM)

Mr. Hairuddin bin Mohammad

MEng. (Civil) (UTM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (PKB)

Mr. Isham bin Ismail

MEng (Civil) (UTHM), BEng. (Civil) (UTM), Dip. (Civil Engineering) (UTM)

Mr. Mohd Azuan bin Zakaria

MEng (Civil) (UTHM), BEng. (Civil) (UTM)

Mr. Mohd Hafizal bin Hanipah

MEng (Civil) (UTHM), BEng. (Civil) (UTHM)

Mr. Nik Mohd Zaini bin Nik Soh

MEng. (Civil) (UTHM), BEng. (Civil) (UiTM), Dip. (Civil Engineering) (UiTM)

Mr. Syed Burhanuddin Hilmi bin Syed Mohamad

MSc. (Structural Engineering & Construction) (UPM), BSc. (Building) (UTM), Dip. (Quantity Surveying) (UTM)

Mdm. Emedya Murniwaty binti Samsudin

MSc. (Integrated Construction Project Management) (UiTM), BEng. (Civil) (UTHM)

Mdm. Hasniza binti Abu Bakar

MEng. (Civil) (UTHM), BEng. (Hons.) (Civil Engineering) (UTM), Dip. (Civil Engineering) (UTM)

Mdm. Junaidah binti Jailani

MSc. (Building Technology) (USM), BEng. (Civil) (UiTM), Dip. (Civil Engineering) (UiTM)

Mdm. Mardhiah binti Zawawi

MSc. (Construction Management) (UTM), BEng. (Civil) (UTM)

Mdm. Noorli binti Ismail

MEng. (Civil) (UM), BEng. (Civil) (UiTM)

Mdm. Hannifah binti Tami

BEng. (Civil & Structural) (UKM), Dip. (Civil Engineering) (POLISAS), Cert. (Civil-Construction) (POLISAS)

Mdm. Siti Khalijah binti Yaman

BEng. (Civil Engineering) (UTM), Dip. (Civil Engineering) (UTM)

Mdm. Sushilawati binti Ismail

BEng. (Civil Engineering) (UTM), Dip. (Civil Engineering) (UTM)

Department of Architecture & Design Engineering

Academic Staff

Mr. Izudinshah bin Abd Wahab

MSc. (Landscape Architecture) (USM), Bachelor of Architecture (USM), BSc. (Housing, Building & Planning) (USM)

Head of Department

Associate Professor Dr. Abd Halid bin Abdullah

Ph.D (Construction) (Heriot-Watt Univ.) (UK), MSc. (Building Technology) (USM), BSc. (Architectural Studies) (Univ. Winsconsin-Milwaukee) (USA), Dip. Edu. (Hons.) (Sultan Abdul Halim Teachers College)

Associate Professor Dr. Lokman Hakim bin Ismail

Ph.D (Architecture & Building Eng.) (Building Energy & Environment) (Univ. Liverpool), MEnv. (Waste Management) (UPM), BSc. (Hons.) (Housing, Building & Planning) (Building Eng.) (USM)

Associate Professor Dr. Hj. Zainal Abidin bin Akasah

Ph.D (Architecture) (UTM), MSc. (Building Technology) (USM), Bachelor (Technology & Education in Civil Eng.) (UTM), Dip. (Architecture) (UTM), Cert. (Civil Eng.) (PUO)

Mr. Hanafi bin Rahmat

Master of Architecture (Univ. New South Wales), Bachelor of Architecture (Univ. New South Wales)

Mdm. Hanita binti Yusof

Master of Architecture (Architectural Computing) (Univ. New South Wales), Bachelor (Landscape Architecture) (UTM), Dip. (Architecture) (UTM)

Mdm. Nor Azizah binti Adnan

MSc. (Construction Management) (UTM), Bachelor of Interior Architecture (UiTM), Dip. of Interior Design (UiTM)

Mdm. Nur Nasuha binti Abd Salam

Master of Architecture (Univ. New South Wales), Bachelor of Architecture (Univ. New South Wales)

Ar. Sudin bin A. Ghafar

Bachelor of Architecture (Univ. Oklahoma)

Technical Staff

Mr. Kasim bin Sebli

Cert. (Civil-Road and Water Works) (PUO)

Mdm. Aziah binti Abu Samah

Dip. (Building Services & Maintenance) (UiTM), Cert. (Building Services) (POLIMAS)

Mdm. Jalilah binti Mokhtar

Dip. (Civil Engineering) (POLIMAS), Cert. (Civil Engineering-Building) (PSA)

Mdm. Norita binti Samsudin

Dip. (Civil Engineering) (PPD), Cert. (Civil Engineering) (POLISAS)

Mdm. Norkama Azura binti Dolah

Dip. (Building Services Engineering) (POLIMAS), Cert. (Building Services Engineering) (POLIMAS)

Mdm. Nurul Adila binti Jablan

Dip. (Building Services) (POLISAS), Cert. (Building Services) (POLISAS)

Mdm. Siti Fadzilah binti Kasno

Dip. (Civil Engineering) (PPD), Cert. (Civil Engineering) (PKM)

Mr. Abdul Rahim bin Shamsudin

Cert. (Architecture) (PUO)

Mr. Afandi bin Abu Bakar

Cert. (Civil Engineering-Construction) (POLISAS)

Mr. Amran bin Abd. Rahman

Cert. (Civil Engineering) (PKM)

Mr. Azuan bin Poharan @ Bunari

Cert. (Building Services Engineering) (PSA)

Mr. Idris bin Abdul Hamid

Cert. (Vocational Studies) (Muar)

Mr. Mohd Azwan bin Busu

Cert. (Highway Engineering) (PKB)

Mr. Mohd Bahtiar bin Mohd Basri

Cert. (Civil Engineering-Construction) (POLISAS)

Mr. Mohd Ayob bin Sahlan

Cert. (Architecture) (PUO)

Mr. Osman bin Abd Rahman

Cert. (Civil Engineering-Surveying) (PUO)

Mr. Razali bin Slamet

Cert. (Quantity Surveying) (POLIMAS)

Mr. Sabari bin Wahab

Cert. (Civil Engineering - Construction) (PUO)

Mr. Sahidin bin Ghazali

Cert. (Land Surveying) (POLISAS)

Mr. Sariman bin Ahmad

Cert. (Civil Engineering) (PUO)

Mr. Suhaimi bin Harun

Cert. (Civil Engineering-Road and Water Works) (PKB)

Mr. Shaiful Hisham bin Saaban

STPM (Dato Menteri Air Hitam, Batu Pahat)

Mdm. Asmah bin Ibrahim

Cert. (Civil Engineering-Construction) (POLISAS)

Mdm. Hazliana binti Padalilah

Cert. (Civil Engineering) (PKM)

Mdm. Roslina binti Jamil

Cert. (Civil Engineering-Construction) (PSA)

Mdm. Sharifah Zuhriah binti Syed Fadzil

Cert. (Civil Engineering-Construction) (POLIMAS)

Mdm. Zamra binti Jasman

Cert. (Civil Engineering) (PUO)

Programme Name

Bachelor Science of Architecture

Programme Aims

The aim of the Bachelor Science of Architecture is to strive to produce innovative and technically competent architectural graduates ready to respond and engage the community and the environment in creating sustainable built environment for the benefits of mankind.

Programme Educational Objectives (PEO)

The PEOs for Bachelor Science of Architecture is to produce students who capable to:

No	PEO Statement
PEO 1	Fulfill the industrial requirements on architecture based on the knowledge and skills acquired.
PEO 2	Design marketable architectural ideas creatively and innovatively.
PEO 3	Practice professional responsibilities ethically through the engagement of lifelong learning.
PEO 4	Propose ideas on architectural issues effectively and display good leadership quality.

Programme Learning Outcomes (PLO)

These are the PLOs for Bachelor Science of Architecture:

PEO	Key Idea	Description	Primary domain type
1.	<u>A</u>rchitectural <u>K</u>nowledge (K)	Demonstrate understanding of cultural, historical and established architectural theories, philosophies and context in various architectural scenarios and community scales.	Cognitive
2.	<u>P</u>ractical / <u>T</u>echnical <u>S</u>kills/ <u>M</u>odern <u>T</u>ool <u>U</u>sage (PS)	Produce a comprehensive solution to various architectural problems using appropriate practical technology, established regulations and appropriate design skills.	Psychomotor
3.	<u>C</u>ritical <u>T</u>hinking and <u>P</u>roblem <u>S</u>olving / <u>I</u>nvestigation (CTPS)	Demonstrate creativity, innovation and imagination in addressing particular issue(s) and/or problem(s) to devise a feasible solution.	Cognitive
4.	<u>C</u>ommunication <u>S</u>kills (CS)	Apply effective visual, verbal and written communication method and media to deliver convincing design solution using appropriate architectural convention.	Affective
5.	<u>I</u>ndividual / <u>T</u>eam <u>W</u>ork (TW) and <u>L</u>eadership <u>S</u>kills / <u>P</u>roject <u>M</u>anagement and <u>F</u>inance (LS)	Lead, work, function and participate in specific role in performing task in a team.	Psychomotor
6.	<u>E</u>ntrepreneurship <u>S</u>kills (ES)	Seek opportunity and use of appropriate skill towards self-sustenance.	Psychomotor
7.	<u>L</u>ife <u>L</u>ong <u>L</u>earning (LL)	Engage in a voluntary, self-motivated and continuous acquisition of knowledge to keep abreast of any developments in architectural field	Affective
8.	<u>E</u>thics and <u>P</u>rofessionalism <u>V</u>alues (ET)	Display appropriate behaviour according to architectural industry standard, moral standing and environmental ethics.	Affective

Curriculum

Table 1. Summary of curriculum for Bachelor Science of Architecture

Year	Semester	Course Code	Courses	Credit	Total
1	I	UHB 10100	English for Higher Education	0	16
		UQI 10102 /202	* Islamic Studies / Moral Studies	2	
		BFR 10106	Architecture Studio 1	6	
		UQ* 1xxx2	Foreign Language	2	
		UQ* 1xxx1	Co-Curriculum I	1	
		BFR 10203	Basic Principle of Architecture and Presentation Technique	3	
		BFC 23702	Creativity and Innovation	2	
	II	BFR 10306	Architecture Studio 2	6	19
		BFR 10402	Architectural Profession and Construction Industry	2	
		BFR 10503	Architectural Working Drawing I (CAD)	3	
		BFR 10603	Interior Architecture	3	
		BFC 10202	Nature Conservation	2	
		UQ* 1xxx1	Co-Curriculum II	1	
		UHB 20102	Essential Academic English	2	
	III	BFR 10703	Appreciation of Cities	3	8
BFR 10803		Site Appraisal and Planning	3		
BFR 11702		Community Engagement	2		
2	I	BFR 20906	Architecture Studio 3	6	19
		BFR 21003	History and Theory of Architecture	3	
		BFR 21103	Sustainability in Architecture	3	
		BFR 21203	Building Construction I (Material and Construction)	3	
		UHB 30102	English for Technical Purpose	2	
		UQU 10202	Ethnic Relation	2	
	II	BFR 21306	Architecture Studio 4	6	19
		BFR 21403	Architectural Working Drawing II (BIM Authoring)	3	
		BFR 21503	Construction Engineering	3	
		UQI 10302	Islamic and Asian Civilisation	2	
		BPK 20802	Entrepreneurship	2	
		UQU 10103	Nationhood and Current Development of Malaysia	3	
	III	BFR 21603	Architectural Measured Drawing	3	8
		BFR 22503	Landscape Architecture	3	
		BFR 22602	Geomatic Engineering	2	
3	I	BFR 31808	Architecture Studio 5	8	19
		BFR 31903	Building Infrastructure	3	
		BFR 32003	Building Construction II (Design and Detailing)	3	
		BFR 32103	Building Services Technology	3	
		UHB 40102	English for Occupational Purposes	2	
	II	BFR 32208	Architecture Studio 6	8	14
		BFR 32302	Architectural Project Management	2	
		BFR 32403	Building Laws and Legislation	3	
		BFC 43502	Occupational Safety and Health	2	
				Total Credit	123

UHB10100/UHB10200 English For Higher Education

Synopsis

This course exposes students to English language learning in higher education and enhances their study skills. Students have opportunities to learn about using technological affordances in listening to lectures, note taking, library and internet research, conducting academic group discussions, preparing and delivering presentations, and writing an academic report. The course also provides opportunities for students to acquire learning skills that facilitate the transition to tertiary education. Aspects of English language oral and written skills that are most relevant to students in their academic work will be reinforced.

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6. Wong, L. (2012). Essential study skills (7th ed.). Boston, MA: Wadsworth Cengage Learning. LB1049, W66 2012
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UQU10103 Nationhood and Current Development of Malaysia

Synopsis

This course discusses on the fundamental concept, process of formation, and development of Malaysia. It includes Malay Sultanate of Malacca Empire, imperialism and colonialism, patriotism and nationalism, the independence and formation of Malaysia, Constitution of Malaysia, government system of Malaysia, main policies in national development, roles and responsibilities of a citizen, and the success and challenges of Malaysia.

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3. Noor Aziah Mohd. Awal (2003). Pengenalan kepada Sistem Perundangan di Malaysia. Petaling Jaya: International Law Book Services. [KPG68 .N66 2003]
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UQU10202 Ethnic Relation

Synopsis

This course focuses on the conceptual and practicality of the ethnic relation in Malaysia community. The discussions comprise of fundamental concepts of ethnic relation and the history of the construction of a plural society, constitution as the core of the societal life, relationship between development and the ethnicity in the aspects of economy, politics and social based on the government and society top-down and bottom-up approaches.

References

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2. Mansor Mohd Noor, Abdul Rahman Abdul Aziz & Mohamad Ainuddin Iskandar Lee (2006). Hubungan Etnik di Malaysia. Petaling Jaya: Prentice Hall. [DS595.m37 2006]
3. Nazri Muslim & Nasruddin Yunus (2006). Hubungan Etnik. Selangor: Fulson Trading Co. [UTHM Library request]
4. Shamsul Amri Baharuddin (2007). Modul Hubungan Etnik. Shah Alam: Universiti Teknologi MARA. [Modul Hubungan Etnik]

5. Zaid Ahmad, Ho Hui Ling, Sarjit Sing Gill, Ahmad Tarmizi Talib, Ku Halim Ku Arifin, Lee Yok Fee, Nazri Muslim & Ruslan Zainuddin (2006). Hubungan Etnik di Malaysia. Shah Alam: Oxford Fajar Sdn. Bhd. [UTHM Library request]

UQI10102 Islamic Studies

Synopsis

This course explains about Islamic concept as ad-deen. It discusses the study of al-Quran and al-Hadith, Sunnism, schools of Islamic theology, development of schools of Fiqh, principles of muamalat, Islamic Criminal Law, Islamic work ethics, issues in Islamic family law and current issues.

References

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3. Mustafa Abdul Rahman (1998), Hadith 40, Kuala Lumpur: Dewan Pustaka Fajar. (BP135. A2 M87 1998)
4. Mustafa Haji Daud (1989), Institusi Kekeluargaan Islam, Kuala Lumpur: Dewan Pustaka dan Bahasa. (BP188.3. F3.M87 1989)
5. Paizah Haji Ismail (1991), Undang-undang Jenayah Islam, Kuala Lumpur: Dewan Pustaka Islam, Angkatan Belia Islam Malaysia. (BP144. P35 1991)

UQI10202 Moral Studies

Synopsis

This course explains on concepts of moral, aspects of moral and its importance in daily lives, Western moral theories and moral values of great religions of the world, moral values in work and current moral issues.

References

1. Ahmad Khamis. (1999). Etika untuk Institusi Pengajian Tinggi. Kuala Lumpur. Kumpulan Budiman. (LC 315 .M3 .A35 1999)
2. Eow Boon Hin. (2002). Moral Education. Longman. (LC 268 .E48 2008)
3. Hussain Othman, S.M. Dawilah Al-Edrus, Berhannudin M. Salleh, Abdullah Sulaiman, (2009). PBL untuk Pembangunan Komuniti Lestari. Batu Pahat: Penerbit UTHM. (LB 1027.42 P76 2009a)
4. Hussain Othman. (2009). Wacana Asasi Agama dan Sains. Batu Pahat: Penerbit UTHM. (BL 240.3 H87 2009a)
5. Mohd Nasir Omar (1986). Falsafah Akhlak. Bangi: Penerbit UKM. (BJ 1291 .M524 2010)

UQI10302 Islamic and Asian Civilisations

Synopsis

This course discusses on the introductory to civilization, its development, interaction between civilizations, the Islamic civilization, Islam in Malay civilization; contemporary civilization issues and the principles of Islam Hadhari.

References

1. Saifullah Mohd Sawi (2009), Sejarah dan tamadun Islam di Asia Tenggara, Shah Alam Karisma Publications, [BP63.A785 .S24 2009]
2. Sazelin Arif, (2007), Tamadun Islam dan tamadun Asia, Shah Alam, Selangor: McGraw Hill. [BP190.5 .T35 2007]
3. Abu al-Fida al Hafiz Ismail ibn Kathir; penterjemah Zaidah Mohd Nor [et al.], (2005), Sejarah tamadun Islam Ibn Kathir, Kuala Lumpur: Dewan Bahasa dan Pustaka. [DS36.85.I32 2005 v.1]
4. Mohd Liki Hamid, (2003), Pengajian Tamadun Islam, Bentong: PTS Publications. [DS36.85 .P46 2003]
5. Lok, Chong Hoe, (1998), Tamadun Cina: Falsafah, Pandangan Hidup dan Aspek-Aspek kesenian, Kuala Lumpur: Pusat Pembangunan dan Pendidikan Komuniti (CEDC) dan Sekretariat Falsafah dan Sains Islam. Universiti Sains Malaysia. [DS721.L64 1998]

BFR 10106 Architecture Studio 1

Synopsis

Architectural Studio 1 is a fundamental studio based system in architectural studies. Students are exposed to the basic principles of architectural design through the exploration of surrounding case studies where the principles are to be identified. Students will therefore perform the application of the principles in given project tasks. Projects given are categories in series of short projects which to be handled in maximum 3 weeks and one final project which to be handled in maximum 4 weeks. Final project will required a final presentation which to be accessed by panels besides the studio masters. Students are expected to be able to develop their ideas along the architectural principles understanding which to be presented along with the design development process.

References

1. Anderson, Jane, 2011. Architectural Design, Lousanne: AVA Academy. Call No. NA 2750. A 52 2011.
2. Fisher, Thomas, 2008. Architecture Design and Ethics, London: Elseiver. Call No.: NA2500 F 57 2008.
3. Thompson, Arthur, 1999. Architecture Design Procedures, London: Arnold. Call No.: NA2520 T46 1999 N1
4. Crossbie, Micheal J., 1997. Time Saver Standards for Architectural Design Data, New York: Mc-Graww-Hill. Call No.: TH151 T45 1997.
5. Burden, Ernest E., 2000. Elements of Architectural Design, New York: John Willey. Call No.: NA 2750 B872 2000.

UQ*1xxx1 Co-Curriculum I

Synopsis

This course is offered in the form of multiple choice of activities for Diploma students and undergraduates. Three categories of activities offered are Sports and Recreational, Club/ Associations and Uniform Bodies.

BFR 10203 Basic Principle of Architecture and Presentation Technique

Synopsis

This course introduces students to all architectural presentation techniques using manual and modern digital approach. The course focuses on the knowledge and skill of basic design critique. It will be based on a set of basic design principles and theories including critical theory, knowledge and practice of visual acuity and literacy, as well as studies on architectural typology. The course also introduces the students to the architectural planning principles so they can correlate planning and concepts in the design proposal.

References

1. Paul Laseau. 2000. Architectural representation handbook : traditional and digital techniques for graphic communication. McGraw-Hill, New York. [Call Number: NA2714 .L37 2000]
2. Tom Porter and Sue Goodman. 1991. Design drawing techniques : for architects, graphic designers and artists. Oxford : Architectural Press. [Call Number: NA2714 .P67 1991] Smith, R. T., Minton, R. B. (2006). Calculus: Concept & Connection. New York: McGraw-Hill.
3. Albert O Halse. 1988. Architectural rendering: the techniques of contemporary presentation. McGraw-Hill, New York. [Call Number: NA2780 .H34 1988]
4. Thomas Forget. The construction of drawings and movies: models for architectural design and analysis.
5. Andrea Gleiniger and Georg Vrachliotis. 2008. Simulation: presentation technique and cognitive method. [Call Number: NA2750 .S55 2008]

BFC23702 Creativity and Innovation

Synopsis

This course focuses on developing a creative person who will eventually think strategically, creatively and critically. The knowledge and skills acquired throughout the course will later be applied by the students in creative problems solving (CPS) and making decisions in the future. In this course, students will be exposed to various creative thinking and problem solving techniques, creative and innovative skills.

References

1. Bernacki, E. 2002. Wow! That's a Great Idea! Singapore: Prentice Hall.
2. Ceserani, J. & Greatwood, P. 1995. Innovation and Creativity. London: Kogan Page.
3. Ceserani, J. & Greatwood, P. 2001. Innovation and Creativity. New Delhi: Creast Publishing House.
4. Clegg, B. & Birch, P. 2002. Crash Course in Creativity. London: Kogan Page.
5. De Bono, E. 1998. Edward De Bono Supermind Pack: Expand Your Thinking Power with Strategic & Mental Exercise. DK Publishing Incorporated.
6. De Bono, E. (2003). Serious Creativity 1: Lateral Thinking Tools, Techniques and Application. Singapore: Allscript Books.
7. De Bono, E. (2003). Serious Creativity 2: Lateral Thinking Tools, Techniques and Application. Singapore: Allscript Books.
8. Lumsdaine, E., Lumsdaine, M. & Shelnut, J. W. 1999. Creative Problem Solving and Engineering Design. USA: McGraw-Hill.
9. Tanner, D. 1997. Total Creativity. APTT Publications.

BFR 10306 Architecture Studio 2

Pre-requisite: BFC10106 Architecture Studio I

Synopsis

Architectural Studio 2 is the continuation of Architectural Studio 1. Upon understanding the architectural principle application in Studio 1, students are exposed to a bigger scale users. Although hypothetical site will be given for the projects, emphasize on green environmental surrounding will be the main type of site setting

for the projects to create design awareness of environmental preservation. The understanding on the site condition will be integrated with a course on conservation and natural environment which the students will be taken concurrently in the same semester. Therefore, timber and simple brick and block will be focused as the materiality of the projects in this studio. Projects given are categories in series of projects which to be handled in maximum 3 weeks and one final project which to be handled in maximum 4 weeks. All projects required presentation session which to be accessed by panels besides the studio masters. Students are expected to perform the design process which to be presented along with the final project design outcome.

References:

1. Fisher, Thomas, 2008. Architecture Design and Ethics, London: Elsevier. Call No.: NA2500 F 57 2008
2. Johnson, Paul Allan, 1994. Theory of Architecture. New York: John Willey. Call No.: NA2500 J66 1994
Beer, Ferdinand P.; vector mechanics for engineers: static and dynamics, 9th Edition, McGraw-Hill, 2009. (Call no. UTHM library: TA350 .V42 2009)
3. Dangel, Ulrich, 2010. Sustainable Architecture: Energy Concept, Basel: Birkhauser. Call No.: NA1009 V6 D36 2010.
4. Anderson, Jane, 2011. Architectural Design, Lusanne: AVA Academy. Call No. NA 2750. A 52 2011.
5. Burden, Ernest E., 2000. Elements of Architectural Design, New York: John Willey. Call No.: NA 2750 B872 2000.

BFC10202 Nature Conservation

Synopsis

Nature conservation is the wise management and utilisation of natural renewable resources in a sustainable manner to ensure the maintenance of biodiversity. There is an increasing awareness that the conservation of the world's natural resources is vital for human survival. This course introduces students to nature conservation and understanding impacts of human activities on environment. Scope of study includes the need to maintain a good natural environment, introduction to the principles and practice of conservation and responsibility to maintain the environment.

References

1. Richard, K.L. & Courtney, J.W. (2009). Conservation for New Generation, Redefining Natural Resources Management. Washington Island. (Shelf no. S936 .C66 2009)
2. Scott, P. and Charles, W.F. (2008). Conservation biology. Evolution in action. New York Oxford University Press. (Shelf no. QH75 .C65 20080)
3. Dan, G & John, A. (2006). Nature conservation. New York, Springer. (Shelf no. QH75 .N37 2006)
4. Miller, G.T. Jr. (2006) Environmental Science: Working with the earth Belmont, CA: Thomson Learning (GE105.N545 2006)
5. Miller, G.T. Jr. (2005) Living in the environment: Principles, connections and solutions Pacific Grove, CA: Thomson (G E105.N544 2005)

BFR 10402 Architectural Profession and Construction Industry

Synopsis

This course covers the introduction to architectural profession, construction industry and other players involved in the construction industry.

References

1. Architect Act 1967. International Law Book Services (2007) call number : KPG1085.A31967 .A4 2000 rw N1
2. Architect Rules 1996. Call Number KPG1085.A31967 .A4 1997 rw n.1
3. Architect (Scale of Minimum Fees) 2010.
4. Chappell, David. (2003). Standard Letters in Architectural Practice. Blackwell call number : NA2584 .C42 2003
Stroud, K. A., Booth, D. J. (2007). Engineering Mathematics. 6th Ed. USA: Palgrave Macmillan.
5. Joseph A. Demkin (2004). The Architect's Handbook of Professional Practice. John Wiley & Sons. Call Number : NA1996 .A72 2008
6. Greenstreet, Bob (2005). Architect's Guide to Law and Practice. Elsevier. Call number : KF2925 .G73 2005
7. James R. Franklin (2000). Architect's Professional Practice Manual. Mc Graw Hill. Call number : Call Number NA1996 .F72 2000 r

BFR 10503 Architectural Working Drawing I (CAD)

Synopsis

This subject is designed to improve the students' skill using the AutoCAD software and produce the working drawings. Topics covered include the overview of drawing preparation which is covered , structures or system drawings in the construction, Introduction to AutoCAD : main window and toolbars, title block, Architectural drawings: orthographic projection, elevation, building envelope elements, dimension, Structural Drawing :

Types of structure / system drawings, intersection of structures and building, detailing, and Services schematic diagrams : mechanical and electrical services.

References

1. Liebing, Ralph W, 1999. Architectural working drawings. 4th Edition, New York : John Wiley. Call Number: NA2713 .L53 1999 N3
2. William P Spence, 1993. Architectural working drawings : residential and commercial buildings. New York : John Wiley. Call Number : NA2713 .S64 1993 r N2
3. Helper, Donald E, 1998. Architecture: drafting and design : student workbook. New York : McGraw Hill. Call Number : NA2700 .H44 1998

BFR 10603 Interior Architecture

Synopsis

The course prepares ground for the students to gain an understanding into the fundamental issues in building design on interior design problems solutions. Understanding various art forms, appreciation of art along with social and cultural influences on design. Knowledge required for specifying appropriate materials for various spaces in interiors of buildings and mass production of furniture for various classes of people with the parameters of economy and culture. Responsiveness that enables to deal effectively with specialists and consultants in acoustics, lighting and to predict climatic conditions in a given building and redesign for given parameters. Understanding into the practical design problems related to way finding and develop the knowledge with various types of signage and way finding systems in the built environment.

References

1. Karlen Mark, Space planning Basics (2004), Van Nostrand Reinhold, New York,. NA2765 .K37 2004
2. Joseph D Chiara, Julius Panero, & Martin Zelnick (2001), Time Saver standards for Interior Design & space planning, 2nd edition, Mc-Graw Hill professional,. NK2110 .D44 2001 N1
3. Francis.D. Ching & Corky Bingelli, Interior Design Illustrated, 2nd edition, Wiley publishers, 2004. NA2850 .C44 2012
4. Robert Rengel (2007), Shaping Interior Space, Fairchild Books & Visuals,. 9781563675188
5. Neufert Ernest (2000), Architects Data, Granada pub. Ltd. London,. TH151 .N48 2000 N1
6. Maryrose McGowan & Kelsey Kruse 2004, Interior Graphic Standards, Wiley and sons,. 9780071346160
4. Oliver Herwig & L. Bruce, 2008 Universal Design: Solutions for Barrier-free, Birkhäuser Basel; 1st edition, TA174 .K42 2008

UWB 10602 French Language

Synopsis

This course is designed for students to learn the basic of French. Students are exposed to the skills of listening, reading, speaking and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using French.

References

1. Booth, Trudie Maria, 2008. French Verbs Tenses. McGraw-Hill. Call no.: PC 2271, U66 2008.
2. Heminway, Annie, 2008. Complete French Grammar. McGraw-Hill. Call no.: PC2112, H45 2008
3. Price, Glanville, 2003. A Comprehensive French Grammar. Blackwell Publishing. Call no.: PC2112. P74, 2003.
4. Hatier, 1995. Le Nouveau Bescherelle Complete Guide 12 000 French Verbs. Paris: Librairie Hatier.
5. Kaneman-Pougatch, Massia et al, 1997. Méthod de français: Café Crème 1. Paris: Hachette F.L.E.

UWB10702 German Language

Synopsis

This course is designed for students to learn the basic German language. Students are exposed to the skills of listening, reading, speaking, and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using German language.

References

1. Astrid Henschel, 2006. German Verb Tenses. New York: McGraw-Hill. [PF3301. H46 2006]
2. Gabriele Kopp, Siegfried Büttner, 2004. Planet 1: Deutsch für Jugendliche: Kursbuch. Ismaning: Germany: Hueber Verlag. [PF3129. K664 2004]
3. Gabriele Kopp, Siegfried Büttner, 2004. Planet 1: Deutsch für Jugendliche: Arbeitsbuch. Ismaning: Germany: Hueber Verlag. [PF3129. K664 2004]
4. Heiner Schenke, 2004. Basic German: a grammar and workbook. London: Routledge. [PF3112.5. 35 2004]
5. Robert Di Donato 2004. Deutsch, Na Klar! Boston: McGraw-Hill. [PF3112. D36 2004]

UWB10802 Japanese Language

Synopsis

This course is designed for students to learn the basic Japanese language. Students are exposed to the skills of listening, reading, speaking, and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using Japanese language.

References

1. M. Rajendran, (1991). Malay Japanese English Dictionary, Petaling Jaya: Pelanduk Publications. [PL5125 .R34 1991rd]
2. Rosmahalil Azrol Abdullah, (2008) : Bahasa Jepun (UMJ 1312): Learning Module (2nd Edition), Batu Pahat: Penerbit UTHM. [PL539.3 .R67 2008a]
3. Surie Network, (2000). Minna no Nihongo: Kaite Oboeru, Tokyo: 3A Corporation. [PL539.3 .M56 2000].
4. Surie Network, (1998). Minna no Nihongo: Main Textbook - Shokyu 1, Tokyo: 3A Corporation. [PL539.3 .M574 1998]
5. Surie, Network (2010). AE Minna no Nihongo 1-1 Elementary: Main Textbook, Tokyo: 3A Corporation. [TK7885.7 .V44 2000r]

UWB10902 Mandarin Language

Synopsis

This course is designed for students to learn the basic of Mandarin. Students are exposed to the skills of listening, reading, speaking and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using Mandarin Language.

References

1. Lim Hong Swan, Yeoh Li Cheng, 2010. Mandarin Made Easy Through English. Batu Pahat: Penerbit UTHM. [PL1129.E5 .L554 2009 a]
2. Liping Jiang (2006). Experiencing Chinese. China: Higher Education Press. [PL1129.E5 .T59 2006]
3. Kang Yuhua (2007). Conversational Chinese 301:Vol. 2. China: Beijing Language and Culture University Press. [PL1121.C5 .K364 2007]
4. Liu Xun (2010). New Practical Chinese Reader: textbook. China: Beijing Language and Culture University Press. [PL1129.E5 .L58 2010]

UWB11002 Malay Language

Synopsis

This course is designed for students to learn the basic Malay language. Students are exposed to the skills of listening, reading, speaking, and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using Malay language.

References

1. Asmah Hj. Omar (1985). Kamus Ayat .Eastview. PL5091 .A85 1985 rd
Asmah Hj. Omar. (1993). Susur Galur Bahasa Melayu. DBP : KL. PL5127 .A85 1993N1
2. Asmah Hj. Omar. (1993). Nahu Melayu Mutakhir. DBP: KL. PL5137 .A85 1993
3. Ainun Mohd.(2011). Tesaurus Bahasa Melayu. PTS Professional Publishing. PL5123. A364 2011
4. Nik Safiah Karim (2008). Tatabahasa Dewan. DBP. PL5108 .T37 2008 r
5. Kamaruddin Saad. (2009). 105 Karangan Bahasa Melayu UPSR. Minerva Publishing. PL 5108 KAM 2009

UWB11102 Spanish Language

Synopsis

This course is designed for students to learn basic Spanish language. Students are exposed to the skills of listening, reading, speaking, and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using Spanish language.

References

1. Nurul Sabrina Zan, (2010). Hola! Hablo español. First Edition Batu Pahat: Penerbit UTHM. PC4445 .N72 2010 a
2. Salina Husain, (2005). Vamos a aprender español lengua extranjera. Batu Pahat: Penerbit UTHM. PC4121 .S24 2005 a
3. Bey, Vivienne (2004). Spanish verbs drills. Mc. Graw Hill. PC4271 .B49 2004
4. Terrell, Tracy D. (2003). Dos mundos. Mc. Graw Hill. PC4129.E5 .D67 2003
5. O'Connor, Niobe (2002). Caminos 1. Nelson Thornes. PC4121 .O36 2002

UWB11202 Arabic Language

Synopsis

This course is designed for students to learn the basic of Arabic. Students are exposed to the skills of listening, reading, speaking and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using Arabic.

References

1. Mohd Hisyam Abdul Rahim; Ahmad Sharifuddin Mustapha; Mohd Zain Mubarak. 2008.
2. Bahasa Arab UMR 1312. Batu Pahat: Penerbit UTHM. (NO RUJUKAN: PJ6115 .M445 2008 a)
3. Mohd Hisyam bin Abdul Rahim. 2005. Senang Berbahasa Arab. Batu Pahat: Penerbit KUITTHO. (NO RUJUKAN: PJ6115 .M44 2005 a)
4. Ab. Halim Mohammed; Rabiyyah Hajimaming; Wan Muhammad Wan Sulong. 2007. Bahasa Arab Permulaan. Serdang: Penerbit UPM. (NO RUJUKAN: PJ6065 .A32 2007)
4. Fuad Ni'mat. 1973. Mulakhas qawa'id al-lughatul 'arabiyyah. Damsyik: Darul Hikmah. (NO RUJUKAN: PJ5161 .F62 1973)

UWB11302 Javanese Language

Synopsis

This course is designed for students to learn the basic Javanese language. Students are exposed to the skills of listening, reading, speaking, and writing with basic vocabulary, grammar and structure. Students are also exposed to the real daily situations which will help them to communicate using Javanese language.

References

1. Majendra, Maheswara (2010). Kamus lengkap Indonesia-Jawa, Jawa-Indonesia/Majendra Maheswara. Pustaka Mahardika. XX(131732.1)
2. Yrama, Widya (2008). Cara belajar membaca dan menulis huruf jawa, jilid 1 . Yrama Widya. Publication info:, 2008 XX(131738.1)
3. Yrama, Widya (2008). Cara belajar membaca dan menulis huruf jawa, jilid2. Yrama Widya .Publication info:, 2008 XX(131739.1)
4. Budhi Santosa, Iman. (2010). Nguri-uri paribasan Jawi = Melestarikan peribahasa Jawa. Intan Pariwara. XX(131751.1)
5. Purwanto, Eko (2011). Pepah Bahasa Jawi. Cara mudah belajar cepat dan tuntas bahasa Jawa. Diva press. XX(131748.1)

UHB 20102/UHB 20202 Essential Academic English

Synopsis

This course enhances students' English language skills, emphasising listening and reading skills necessary for academic contexts. The course provides opportunities for students to learn the strategies to help them understand information from documentaries, lectures and paper presentations and develop analytical listening to differentiate between facts and opinions. This course also provides opportunities for students to develop skills to critically respond to academic materials such as journal articles.

References

1. Bowen, E. (2010). Listening in: Broadcasts, speeches and interviews. Edinburgh: Edinburgh University Press
2. Fairbairn, G.J (2011). Reading, writing and reasoning: A guide for students. Maidenhead: Open University Press. LB2395 .F34 2011
3. Lewis, J. (2002). Reading for academic success: Reading and strategies. Boston: Houghton Mifflin. LB2395.3 .L48 2002
4. Metcalfe, M. (2006). Reading critically at university. Los Angeles: Sage. LB2395.3 .M47 2006
5. Shipside, S. (2007). Effective communication: get your message across and learn how to listen. London: Dorling Kindersley. HF5718 .S54 2007
6. Smith, L. C. (2005). Exploring content I: Reading for academic success. White Plains, NY: Longman. PE1122 .S64 2004
7. Wright, L. (2001). Critical thinking: An introduction to analytical reading and reasoning. Oxford: Oxford University Press. B809.2 .W74 2001.

BFR 10703 Appreciation of Cities

Synopsis

Most settlement and physical development in developing countries occurs in cities. Understandably, the role of an architect is visible largely in projects within a city boundary. Hence, it is essential for students of architecture to be equipped with awareness and understanding of city development. This course provides students with opportunity to study and experience urban environment in selected cities.

References

1. Hutter, M. (2012). *Experiencing Cities* (Allyn & Bacon). HT151 .H87 2012
2. Amin, A. and Thrift, N. (2002). *Cities: Reimagining the Urban*. (Cambridge: Polity Press).
3. Donald, J. (1999). *Imagining the modern City*. (London: The Athlone Press)
4. Lefebvre, H. (1996). *Writings on Cities*. (Oxford: Blackwell).
5. Pile, S. (2005). *Real cities: modernity, space and the phantasmagorias of city life*. (London: Routledge). BF353.5.C53 .P54 2005

UQ*1xxx1 Co-Curriculum II

Synopsis

This course is offered in the form of multiple choice of activities for Diploma students and undergraduates. Three categories of activities offered are Sports and Recreational, Club/ Associations and Uniform Bodies.

BFR 10803 Site Appraisal and Planning

Synopsis

This course equips students with site appreciation skills using reverse engineering skills. The use of SWOT analysis will provide an understanding of relationship between empty site and existing development, as well as the theoretical possibility should the student become part of the (future) development team. It also strengthens the students' precedent study methodology.

References

1. Kevin Lynch (1971), *Site Planning*, MIT Press.
2. Gordon Cullen (1971), *Concise Townscape*, Architectural Press.
3. Thomas Russ (2009), *Site Planning and Design Handbook*, McGraw Hill professional.
4. Mark Karlen (2004), *Space Planning Basics*, New York: John Wiley. NA2765.K37 2004.

BFR 11702 Community Engagement

Synopsis

This course promotes students to become school ambassadors to promote architecture programme of UTHM to selected community. Each semester students will embark to the selected community in parallel with Architectural Measured Drawing course. Students are required to prepare engagement plan prior to the visit and document the whole engagement activities into a written report.

References

1. Reena Tiwari, Marina Lommerse, Dianne Smith, 2014. *M² Models and Methodologies for Community Engagement* : Springer
2. Nancy Temple, 1996. *Home space planning : a guide for architects, designers, and home owners* New York : McGraw-Hill TH4816 .T45 1996.

BFR 20906 Architecture Studio 3

Pre-requisite: BFC10306 Architecture Studio 2

Synopsis

Architectural Studio 3 is focusing on small organization architectural needs in the aspect of spaces and physical building. Consideration on the sustainable design is emphasized in this studio projects. Students are introduced to passive design approach. Actual site context is also introduced where students have to be critical in problem solving. Projects given are categories in series of projects which to be handled in maximum 4 weeks and one final project which to be handled in maximum 5 weeks. All projects required presentation session which to be accessed by panels besides the studio masters. Students are expected to perform the design process which to be presented along with the final project design outcome.

References

1. Blundell-Jones, Peter, 2007. *Peter Hubner: building as a social process*. London: Edition Axel Menges. Call No.: NA1088.H84 .B58 2007.
2. Lindner, Christoph, 2006. *Urban space and cityscapes: perspectives from modern and contemporary culture*. London: Routledge. Call No.: NX650.C66 .U72 2006.
3. Forster, Wolfgang, 2002. *Harry Seidler: Social Housing, Innovative Architecture*. Munich: Prestel Verlag. Call No.: NA1605.S4 .F67 2002.
4. Anderson, Jane, 2011. *Architectural Design*, Lousanne: AVA Academy. Call No. NA 2750. A 52 2011.
5. Burden, Ernest E., 2000. *Elements of Architectural Design*, New York: John Wiley. Call No.: NA 2750 B872 2000.

BFR 21003 History and Theory of Architecture

Synopsis

The history of architecture traces the changes in architecture through various traditions, regions, overarching stylistic trends, and dates. This course examines architecture through time, beginning with First Societies and extending to the 15th century. Though the course is chronological, it is not intended as a linear narrative, but rather aims to provide a more global view, by focusing on different architectural moments.

References

1. Francis Ching, Mark Jarzombek, Vikram Prakash, A Global History of Architecture, Wiley, 2006.
2. Watkin, David (Sep 2005), A History of Western Architecture, Hali Publications, ISBN
3. Curtis, William J. R. (1987), Modern Architecture Since 1900, Phaidon Press, ISBN-X. Call Number: NA680 .C87 1996.
4. Kwinter, Sanford (2001). Architectures of time: toward a theory of the event in modernist culture. Cambridge, MA: MIT Press. NA682.M63 .K84 2001
5. Frampton, Kenneth (1992). Modern Architecture, a critical history. Thames & Hudson- Third Edition. ISBN
6. Jencks, Charles, (1993) Modern Movements in Architecture. Penguin Books Ltd - second edition. ISBN-X
7. Curl, James Stevens (2006). The Egyptian revival: ancient Egypt as the inspiration for design motifs in the west. New York: Routledge. Call Number: N6351.2.E39 .C87 2005.

BFR 21103 Sustainability in Architecture

Synopsis

Construction industry has a significant impact to environment, social and economic to any countries, especially for a developing country like Malaysia. This course introduces students various impacts of construction activities including its global warming, climatic changes and desertification. The principles of sustainable construction will be introduced and how the integration of these elements will be discussed in this subject. The assessment of indoor performance such as acoustic quality, ventilation and lighting will be explored in conjunction to green technologies. In addition, green building assessment will be introduced to students with several examples or case studies to develop understanding on this concept.

References

1. Emmitt, Stephen; Architectural engineering and design management: design management for sustainability; Sterling, VA: Earthscan, 2009. Call number: NA2542.36 .E45 2009
2. Kopec, David Alan; Health, Sustainability, and the built environment; New York: Fairchild Books, 2009. Call number: TH880 .K66 2009.
3. Vallero, Daniel; Sustainable design: the science of sustainability and green engineering; Hoboken, NJ: John Wiley, 2008. Call number: TH880 .K66 2009.

BFR 21203 Building Construction I (Material and Construction)

Synopsis

Construction materials have an important role to play for sustainable construction. This course introduces students various types of construction materials including its classification, properties, laboratory testing, manufacturing process and applications in civil engineering. Scope of study includes cement, aggregates, concrete, bricks and masonry, timber, steel and other construction materials.

References

1. William P. Spence; Construction Materials, Methods and Techniques, Second Edition: Thomson 2007. Call number: TH145 .S64 1998
2. M. S. Mamlouk, J. P. Zaniewski; Materials for civil and construction engineers; Pearson Prentice Hall, 2006. Call number: TA403 .M36 2011
3. H. Zhang; Building Materials in Civil Engineering; Woodhead Publishing Limited, 2010. Call number: 131381.1
4. C. L. Page and M. M. Page; Durability of Concrete and Cement Composites; Woodhead Publishing Limited, 2007. Call number: TA440 .D87 2007
5. P. Kumar Mehta, Paulo J. M. Monteiro; Concrete: microstructure, properties, and materials; McGraw-Hill, 2006. Call number: TA439 .M43 2006

BFR 21306 Architecture Studio 4

Pre-requisite: BFC 20906 Architecture Studio 3

Synopsis

Architectural Studio 4 emphasizes on the needs to comply the architectural requirements for small-medium community. Students are exposed to actual sub urban sites where the community issues have to be addressed. Wider scope of passive design approach is expected in the design development while structural sense and understanding of load distribution is also emphasized. Projects given are categories in series of projects which to be handled in maximum 4 weeks and one final project which to be handled in maximum 5 weeks. All projects required presentation session which to be accessed by panels besides the studio masters. Students are expected to perform the design process which to be presented along with the final project design outcome.

References

1. Blundell-Jones, Peter, 2007. Peter Hubner: building as a social process. London: Edition Axel Menges. Call No.: NA1088.H84 .B58 2007.
2. Lindner, Christoph, 2006. Urban space and cityscapes: perspectives from modern and contemporary culture. London: Routledge. Call No.: NX650.C66 .U72 2006
3. Forster, Wolfgang, 2002. Harry Seidler: Social Housing, Innovative Architecture. Munich: Prestel Verlag. Call No.: NA1605.S4 .F67 2002.
4. Malaysia, 2001. Undang-Undang Kecil Bangunan Seragam 1984. Petaling Jaya, International Law book Services. Call No.: KPG2590.A31984 .A4 2001
5. Anderson, Jane, 2011. Architectural Design, Lousanne: AVA Academy. Call No. NA 2750. A 52 2011.

BFR 21403 Architectural Working Drawing II (BIM Authoring)

Synopsis

This course provides a basic principle in Building Information Modelling (BIM) through theoretical and practical components. A BIM model will be developed and combined based on application of separate disciplines of architecture, construction and building services engineering, to create a common visualisation model for coordination.

References

1. C. Eastman, P. Teicholz, R. Sacks, K. Liston; BIM Handbook: A Guide to Building Information Modeling for Owners, Managers, Designers, Engineers and Contractors, 2nd Edition: Wiley 2011. Call number: TH437 .B55 2008
2. R. Deutsch; BIM and Integrated Design: Strategies for Architectural Practice; Wiley, 2011. Call number: NA1996 .D48 2011
3. W. Kymmell; Building Information Modeling: Planning and Managing Construction Projects with 4D CAD and Simulations; McGraw-Hill Construction Series, 2008. Call number: TH437 .K95 2008

BFR 21503 Construction Engineering

Synopsis

The construction industry is continually adopting new and improves technologies for increasing productivity and quality to meet present and future needs of human kind. Construction engineering addresses the needs of improving the technology through application of fundamental of science and engineering. This course introduces students to identify various types of construction components and method to lay a solid foundation in all areas of construction engineering. Scopes of study are building sub-structure, super structure, formwork, jointing in concrete structure, scaffolding and construction plant.

References

1. R.L. Peurifoy et al, Construction Planning, Equipment and Methods, 6th Edition. Mc Graw Hill, 2002.
2. S.W. Nunnally, Construction Methods and Management, 5th Edition, Prentice Hall, 2001.
3. J.W. Hinze, Construction Safety, Prentice Hall, 1997.
4. Roger Greeno (2004). Building Construction Handbook, 5th Edition; London: Butterworth-Heinemann.

BFR 21603 Measured Drawing

Synopsis

Students will conduct the Measured Drawing on existing buildings focusing on notable structural, construction and/or detailing under supervision of the respective supervisor. The course involves on-site data collection from pre-selected building in the form visual recording (measured drawing, photography, sketches) and survey using appropriate surveying tools. The data collected will be represented in Measured Drawing format and Written Report.

References

1. John A. Burns, Recording Historic Structures, Historic American Buildings Survey / Historic American Engineering Record, Historic American Landscape.
2. Measured and Drawn: Techniques and Practice for the Metric Survey of Historic Buildings.
3. Chen Voon Fee, Encyclopedia of Malaysia: Vol 5 Architecture. Editions Didier Millet.
4. Panduan Penulisan Tesis, Universiti Tun Hussein Onn Malaysia, 2009, 1000251954.
5. Ranjit Kumar, Research Methodology: a step-by-step guide for beginners, Sage Publications 2011, 1000272491.
6. Donald H. McBurney and Theresa L. White, Research Methods, Thomson Learning 2007, 1000187873.
7. Richard Fellow and Anita Lui, Research method for construction, Wiley Blackwell, 2008. 1000242854.

BFR 22503 Landscape Architecture

Synopsis

This course introduces students to basic knowledge on landscape architecture. Overview of the importance of landscape architecture in complementing the architecture projects towards balancing the environment. Study on the landscape design theory

References

1. Charles Ward Harris, Nicholas T Dines, Kyle D Brown. 1998. Time-saver standards for landscape architecture: design and construction data. McGraw-Hill, New York. [Call Number: SB475.9 .T55 1998]
2. Siobhan Vernon, Nicola Garmory, Rachel Tennant. 2009. Landscape architect's pocket book. Amsterdam: Elsevier. [Call Number: SB472.3 .V47 2009] Budhu, M. (2007), "Soil Mechanics & Foundations (2nd. Edition)", John Wiley & Sons, Inc., United States of America. (Library shelf number: TA 710.B83 2007)

BFR 22602 Geomatic Engineering

Synopsis

Students will conduct the field work survey to collect physical data of an area or existing buildings and then produce survey drawings using the collected data.

References

1. Kavanagh, B.F. and Glenn Bird S.J.; Surveying: Principles & Applications, 6th Edition; Prentice Hall, USA; 2009. (TA545.K37 2009)
2. Kavanagh, B.F.; Surveying with construction application; Prentice Hall, USA; 2010. (TA625.K38 2010)
3. Paul R. Wolf and Charles D.G.; Elementary Surveying – An Introduction to Geomatics; 10th Edition; Prentice Hall; 2002. (TA545.W64 2002)
4. Stephen V.E.; A guide to understanding land surveys, Hoboken, NJ: J.Wiley; 2009. (TA551.E87 2009)
5. Watson, P.; Surveying and Engineering: Principles and Practice; Francis 10th Edition, Addison Wesley; 2008. (TH438.S97 2008).

UHB 30102/UHB 30202 English For Technical Purposes

Synopsis

This course aims to prepare students with the skills to write reports and express ideas or opinions competently. Students will be equipped with persuasive strategies that can be applied to writing technical reports. The course will also enable them to practice these techniques by drafting and collaborating to produce assigned tasks. The students are also expected to orally present their proposals and written reports before an audience or a panel examiners.

References

1. Bogdan, R. C. (2007). Qualitative research for education: An introduction to theory and methods (5th ed.). Boston, MA: Pearson. LB1028 .B63 2007
2. Chandra, S. (2013). Research methodology. Oxford, U.K: Alpha Science Intl Ltd. H62. C42 2013
3. Grix, J (2010). Informations skills: Finding and using the right resources. New York: Palgrave Macmillan.
4. Farquhar, J. (2012). Case study research for business. London, England: Sage. HD30.4 .F37 2012.
5. Hittleman, D. R. (2006). Interpreting educational research: An introduction for consumers of research (4th ed.). Upper Saddle River, NJ: Pearson. LB1028. H57 2006.
6. Newby, P. (2014). Research methods for education (2nd ed.). Abingdon: Routledge. LB1028. N48 2014
7. Neville, C. (2010). The complete guide to referencing and avoiding plagiarism. Maidenhead: Open University Press. PN171.F56 .N48 2010
8. Scruggs, T.E. (2006). Applications of research methodology. Oxford: Elsevier. LC4704 .A66 2006
9. Sekaran, U. (2013). Research methods for business: A skill-building approach (6th ed.). Chichester, West Sussex: Wiley. HD30.4 .S44 2013.

10. Somekh, B. (2006). Action research: a methodology for change and development. Bershire: Open University Press. LB1028.24 .S65 2006

BFR 31808 Architecture Studio 5 (Pre-requisite: BFR21306 Architecture Studio 4)

Synopsis

Architectural Studio 5 emphasizes on the needs to comply the architectural requirements for medium sized community. Students are exposed to actual urban sites where the students have to respond theoretically to the community issues. Total planning and functionality is focused in the studio. Basic active approach of building services is expected to be applied by students. Projects given are categories in series of projects which to be handled in maximum 4 weeks and one final project which to be handled in maximum 5 weeks. All projects required presentation session which to be accessed by panels besides the studio masters. Students are expected to perform the design process which to be presented along with the final project design outcome

References

1. Huth, Mark W., 2005. Understanding construction drawings. Clifton Park, NY : Thomson Learning. Call No.: T355 .H87 2005
2. Blundell-Jones, Peter, 2007. Peter Hubner : building as a social process. London : Edition Axel Menges. Call No.: NA1088.H84 .B58 2007.KUitTHO.
3. Forster, Wolfgang, 2002. Harry Seidler: Social Housing, Innovative Architecture. Munich: Prestel Verlag. Call No.: NA1605.S4 .F67 2002.
4. Malaysia, 2001. Undang-Undang Kecil Bangunan Seragam 1984. Petaling Jaya, International Law book Services. Call No.: KPG2590.A31984 .A4 2001
5. Anderson, Jane, 2011. Architectural Design, Lousanne: AVA Academy. Call No. NA 2750. A 52 2011.
6. Lindner, Christoph, 2006. Urban space and cityscapes: perspectives from modern and contemporary culture. London: Routledge. Call No.: NX650.C66 .U72 2006.

BFR 31903 Building Infrastructure

Synopsis

Building construction consist several elements in order to function as the end user expected. The elements are including sub-structure, superstructure, finishes and infrastructure. This course introduces student to the infrastructure elements in a building. This course provide understanding on principles of building infrastructure, water supply infrastructure, sanitary discharge system, energy and water supply, communication infrastructure, and solid waste management infrastructure

References

1. Guy, Simon, 2001. Urban infrastructure in transition: networks, building, plans. London : Earthscan, Call Number : HT169.E8 .G89 2001
2. Pearce, Annie R. Sustainable buildings and infrastructure: paths to the future. London; New York, NY: Routledge. TH880 .P42 2012.
3. McDonald, Patrick H. 2001. Fundamentals of infrastructure engineering: civil engineering systems, 2nd ed., rev. and expanded. New York: Marcel Dekker. Call Number : TA153 .M36 2001

BFR 32003 Building Construction II (Design and Detailing)

Synopsis

This subject will explain the architectural building construction industry that is continually adopting new and improves technologies for increasing productivity and quality to meet present and future needs of human kind. Construction engineering addresses the needs of improving the technology through application of fundamental of science and engineering. This course introduces students to various types of building construction components and method to lay a solid foundation in all areas of building construction engineering, which include site investigation, building setting out, earthwork, sub-structure, super-structure, finishing and infrastructure.

References

1. William P. Spence; Construction Materials, Methods and Techniques, Second Edition: Thomson 2007. Call number: TH145 .S64 1998
2. M. S. Mamlouk, J. P. Zaniewski; Materials for civil and construction engineers; Pearson Prentice Hall, 2006. Call number: TA403 .M36 2011
3. H. Zhang; Building Materials in Civil Engineering; Woodhead Publishing Limited, 2010. Call number: 131381.1

BFR 32103 Building Services Technology

Synopsis

This course covers the basic principles, types, and applications of mechanical, electrical systems in commercial construction. It introduces students to design, installation, operation and monitoring of the mechanical, electrical and public health systems required for the safe, comfortable and environmentally friendly operation of modern buildings. The scope of this course includes fundamental of building physics, ventilation system, fire safety, electrical and water supply.

References

1. William K.Y. Tao. 2009. Mechanical and Electrical Systems in Buildings, 2nd Edition. Prentice Hall. New Jersey. Call Number: TH6010 .T36 2005.
2. David V. Chadderton. 2000. Building Services Engineering, 3rd Edition. E & FN SPON. London. Call Number: TH6010 .C42 2000.
3. Roger Greeno. 2007. Building Services, Technology and Design. Pearson, London. Call Number: TX955 .G73 1997.

BFR 32208 Architecture Studio 6

(Pre-requisite: BFR 31808 Architecture Studio 5)

Synopsis

Architectural Studio 6 is a comprehensive design studio which expect application of knowledge and skills acquired through out the programme. Students are exposed to actual urban sites where the students have to respond to current needs/issues related to surrounding community. The projects involve total planning and UBBL implementation. Projects given are categories in a projects which to be handled in maximum 4 weeks and one final project which to be handled in maximum 5 weeks. All projects required presentation session which to be accessed by panels besides the studio masters. Students are expected to perform the design process which to be presented along with the final project design outcome.

References

1. Huth, Mark W., 2005. Understanding construction drawings. Clifton Park, NY: Thomson Learning. Call No.: T355 .H87 2005
2. Blundell-Jones, Peter, 2007. Peter Hubner: building as a social process. London: Edition Axel Menges. Call No.: NA1088.H84 .B58 20073. Das, Braja M. (2007), "Principles Of Geotechnical Engineering, Adapted International Student Edition", Thomson, Canada. TA710 .D37 2010
3. Forster, Wolfgang, 2002. Harry Seidler: Social Housing, Innovative Architecture. Munich: Prestel Verlag. Call No.: NA1605.S4 .F67 2002.
4. Malaysia, 2001. Undang-Undang Kecil Bangunan Seragam 1984. Petaling Jaya, International Law book Services. Call No.: KPG2590.A31984 .A4 2001
5. Anderson, Jane, 2011. Architectural Design, Lusanne: AVA Academy. Call No. NA 2750. A 52 2011.
6. Lindner, Christoph, 2006. Urban space and cityscapes: perspectives from modern and contemporary culture. London: Routledge. Call No.: NX650.C66 .U72 2006.

BFR 32302 Architectural Project Management

Synopsis

The construction industry is continually adopting new and improves technologies for increase the productivity and quality to meet present and future needs of human kind. Architectural project management addresses the needs of improving the technology through application of fundamental of science and engineering. This course introduces students to identify various types of management components and issues in all areas of architectural project management. Scopes of study are management in construction such as definition of project management, management functions, project management functions, building process, and project scheduling.

References

1. Brandon, P. S., Lombardi, Patrizia (2011); Evaluating sustainable development in the built environment. Hoboken, NJ: Wiley-Blackwell. Call number: HT241 .B72 2011
2. Charles J. Kibert (2008); Sustainable construction: green building design and delivery. Hoboken, NJ: John Wiley. Call number : TH880 .K52 2008
3. Thomas E. Glavinich (2008); Contractor's guide to green building construction: management, project delivery, documentation and risk reduction. Hoboken, NJ: John Wiley. Call number: TH880 .G52 2008
4. M. Regina Leffers (2010); Sustainable construction and design. Boston: Prentice-Hall. Call Number : TH880 .L43 2010
5. Shirley J. Hansen, James W. Brown (2011); Sustainability management handbook. Lilburn, GA: Fairmont Press; Boca Raton, FL: Distributed by Taylor & Francis. Call number: TA190 .S97 2011
6. Sam Kubba (2010); Green construction project management and cost oversight. Burlington, MA: Architectural Press. Call number: TH880 .K824 2010

7. Daniel W. Halpin, Senior Bolivar (2011); Construction management. Hoboken, N.J.: Wiley. Call number: HD9715.U52 .H34 2011
8. L. Peurifoy et al (2002) Construction Planning, Equipment and Methods, 6th Edition. Mc Graw Hill, Call number : TH145.P48 2011 /2002

BFR 32403 Building Law and Legislation

Synopsis

Building laws and legislation are essential in project development process to ensure the project success according to the existing Uniform Building By-Laws (UBBL), 1984. This course introduces students to the common Malaysian building laws. The aim is to provide knowledge and understanding about legal and administration procedures in the process development of building projects. Scopes of study includes Building Regulation, fire safety regulation, submission for approval for planning and building, certification of completed building through the use of Certificate of completion and compliance (CCC) system.

References

1. Uniform Building By Laws 1984, Selangor: International Law Book Services, 2010. Call Number: KPG2590 .A3 2000 rw N16.
2. Abd. Wahab, I. & Ismail, L. H., Undang-undang Bangunan untuk Pembangunan Perumahan, Batu Pahat, Johor: Penerbit UTHM, 2013. Call Number : HD7363.6.A3 .I98 2013 a
3. Akta Hak Milik Strata 1985 (Akta 31 B), Kaedah-Kaedah & Perintah-Perintah, Selangor: International Law Book Services, 2010. Call Number: KPG677.A31985 .A4 2005 rw3.
4. Akta Pemajuan Perumahan (Kawalandan Perlesenan) 1966 (Akta 118) & Peraturan-Peraturan, Selangor: International Law Book Services, 2009.
5. Akta Perancangan Bandar dan Desa 1976, Selangor: International Law Book Services, 2005. Call Number: KPG2578.A31976 .A4 2001 rw N1
6. David Chappell, Micheal Cowlin & Micheal Dunn, Building Law Encyclopedia, United Kingdom: Wiley-Blackwell, 2009. Call Number : KD1140.A68 .C42 2009 re

BFC34502 Entrepreneurship

Synopsis

This course cover various topics related to basic entrepreneurship including introduction to entrepreneurship, entrepreneur's characteristics and motivation, screening business environment and opportunity, formation of business and managing business. Students will also be exposed to real business.

References

1. Charles E. Bamford, Garry D. Bruton (2011). Entrepreneurship: a small business approach. New York: McGraw-Hill. Call number HD62.5 .B35 2011
2. Schaper M., Volery, T, Weber, P., Lewix, K., (2011). Entrepreneurship and small business; 3rd Asia-Pacific Edition. John Wiley & Son. Call number HD2341 .E57 2011
3. Hisrich, R.D., Peter, M.P., Shepherd, D.A., (2010). Entrepreneurship, 8th Edition. McGraw Hill. Call number HD62.5 .H57 2010
4. Donald F. Kuratko, Richard M. Hodgetts. (2007). Entrepreneurship: theory, process, practice, 7th Edition. Mason: Thomson South-Western. Call number HB615 .K87 2007
5. John. B., Tidd. J., (2011). Innovation and entrepreneurship. 2nd Edition. Chichester, West Sussex, UK Call number HD53 .B48 2011

UHB 40102/ UHB 40202 English for Occupational Purposes

Synopsis

This course employs a task-based learning approach and focuses on developing students' delivery of specific job interviews and presentations. Particular emphasis will be given to promote the mastery of self-directed research, oral presentations, reasoning and creativity. This course also enables students to acquire the necessary skills for conducting and participating in meetings, which includes writing meeting documents and on specific themes. Students will also be exposed to interview techniques.

References

1. Haynes, Marion E. (2009). Meeting skills for Leaders: Make Meetings more Productive (4th ed.). Rochester, NY: Axzo Press. HD30.3 .H39 2009
2. Leigh, Judith, (2004). Cv's and Job Application. New York: Oxford university Press. HF5383 .L44 2004.
3. Molinsky, Steven J, & bliss, Bill. (1994). Day by Day. English for Employment Communication (1st ed.): Longman. PE1128 .M67 1994
4. Peberdy, Duncan. (2009). Brilliant Meetings: What to Know, Do and Say to Have Fewer, Better Meetings. Harlow: Prentice Hill. HF5734.5 .P42 2009
5. Wendleton, Kate. (2014). Mastering the Job Interview and Winning the Game (5th ed.). Boston: Cengage Learning. HF5549.5.16 .W46 2014.
6. Wrathall, Jeff, (2011). Event Management: Theory and Practice. North Ryde, N.S.W: McGraw-hill, GT3405, W72 2011

Synopsis

This course introduces students to knowledge and skills in occupational safety and health in workplace. Scopes of the study include: Health and Safety Management- OSHA 1994 (Act 514), construction regulation, safety and health management, and safety and health culture; Risk assessment- legal aspect of risk assessment, and risk assessment process; Safety hazards and controls- slips, trips, and falls, caught-in or – between objects, struck by objects, fire and explosions, transportation and vehicle related accidents, confined space, electrical hazards and mechanical handling; Health hazards- chemical hazards, physical hazards, biological hazards, and ergonomics and repetitive strain injuries; and Incident/Accident investigation and reporting- accident causation models, incident investigations, incident analysis and data collection, and incident reporting.

References

1. Occupational Safety and Health Act and Regulations. MDC Publishers Printer Sdn. Bhd. 2001. Call number: KPG1390.M34 2001 rw N2.
2. Factories and Machinery Act & Regulations. MDC Publishers Printer Sdn. Bhd. 2001. Call number: KPG1390.A31967 .A4 2001 rw N1.
3. Ismail Bahari (2006). Pengurusan Keselamatan dan Kesihatan Pekerjaan. Edisi ke-2.. McGraw Hill Education (Malaysia). Call number: T55.I85 2006.
4. Davies, V. J. and Tomasin K. (2006). Construction Safety Handbook. 2nd ed. London: Thomas Telford. Call number: TH443.R43 2006.
5. Anton, Thomas J. (2009). Occupational Safety and Health Management. 3rd ed. New York: McGraw-Hill. Call number: T55.A57 1989.

**MALAYSIAN QUALIFICATIONS FRAMEWORK:
QUALIFICATIONS AND LEVELS**

MQF Levels	Sectors			Lifelong Learning
	Skills	Vocational and Technical	Higher Education	
8			Doctoral Degree	Accreditation of Prior Experiential Learning (APEL)
7			Masters Degree	
			Postgraduate Certificate & Diploma	
6			Bachelors Degree	
			Graduate Certificate & Diploma	
5	Advanced Diploma	Advanced Diploma	Advanced Diploma	
4	Diploma	Diploma	Diploma	
3	Skills Certificate 3	Vocational and Technical Certificate	Certificate	
2	Skills Certificate 2			
1	Skills Certificate 1			

Source: Malaysian Qualification Framework

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Center for Academic Development and Training
Universiti Tun Hussein Onn Malaysia
86400 Batu Pahat, Johor Darul Ta'zim
www.uthm.edu.my

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