

Universiti Tun Hussein Onn Malaysia  
86400 Batu Pahat, Johor



# Academic Proforma 2012/2013

Bachelor of Technology Management (Construction)  
with Honours  
Faculty of Technology Management and Business

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Universiti Tun Hussein Onn Malaysia  
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## **Welcoming Address from the Vice Chancellor**

Assalamualaikum Warahmatullahi Wabarakatuh and Warm Greetings

I would like to take this opportunity to welcome the new students of Academic Session 2012/2013 to Universiti Tun Hussein Onn Malaysia (UTHM). Thank you for your interest in pursuing further studies for a success and better life. You should be thankful for being fortunate in comparison to other friends whom do not have the chance to continue their studies in an institution of higher learning. Therefore, utilize this good opportunity to instill the spirit and will power in pursuing knowledge for the success and prosperity of oneself, family, religion, race and the Nation.

UTHM is determined to be one of the well-known higher learning institutions in the Nation and worldwide. Having well-planned academic system whilst supported with the latest and modern teaching and learning facilities, UTHM is capable of producing excellent graduates to meet the needs of national workforce.

As one of the Public Higher Learning Institutions in the country, UTHM offers a variety of academic programmes at Diploma, Bachelor, Master and Doctorate levels. UTHM is the best choice for science, technology and engineering courses. UTHM also offers courses in the fields of technology management, information technology, and technical and vocational education. The academic programmes of UTHM focus on student-centered hands-on aspect to ensure that the knowledge and skills acquired can be readily applied especially in national industries. High quality co-curricular programmes will provide you the opportunity to strengthen on your honorable personality and competence.

I put my trust that you will become a member of the University that will continue the excellent tradition of the University in becoming graduates whom are capable in applying and translating the science, engineering and technology knowledge in accordance with the national needs.

Wishing You Success

Professor Dato' Dr. Mohd Noh bin Dalimin  
Vice Chancellor  
Universiti Tun Hussein Onn Malaysia

## **Welcoming Address from the Deputy of Vice Chancellor (Academic and International)**

Assalamualaikum Warahmatullahi Wabarakatuh and Warm Greetings

I would like to take this opportunity to express my warmest congratulations and well done to you as the new students whom have successfully been selected to pursue studies at Universiti Tun Hussein Onn Malaysia for this 2012/2013 session.

I would also like to congratulate the Centre for Academic Development for successfully publishing the proforma which will serve as the students guide in planning the learning beginning the first semester till the completion of studies at this University.

Detailed planning and effective implementation in each semester coupled with preparedness before attending the lectures are very important to ensure you are prepared for the learning process. In addition, preparedness for the co-curricular programmes also is important to ensure that the knowledge gained is beneficial and helps in upholding your profession in the future.

I hope the publication of this proforma can be fully utilised in planning for your learning in this University and you are able to make the best decision in achieving success with flying colours.

Last but not least, I would like to wish All the Best and pray that you will be successful in your studies at this University and thus be able to contribute towards talented human capital for the development of the religion, society and Nation.

Thank you.

Profesor Ir. Dr. Abdul Aziz bin Dato' Abdul Samad  
Deputy of Vice Chancellor (Academic and International)  
Universiti Tun Hussein Onn Malaysia

## **Welcoming Address from the Dean of Faculty of Technology Management and Business**

Assalamualaikum Warahmatullahi Wabarakatuh and Greetings to All

I would like to express my heartfelt congratulations to all new students of the Faculty of Technology Management and Business (FPTP), UTHM of the academic session 2012/2013. You are so fortunate to be chosen among many others whom are still looking for the opportunity to futher their tertiary studies at universities. Bear in mind of the fact that you are already the undergraduates of this university.

As such, you should be aware that this is indeed a special privilege that should not be wasted. This is also an opportunity for you to acquire as much knowledge as possible focusing fully on your studies without distractions to realise your full potentials and the hopes placed upon you by your beloved families.

To produce and train professionals and technologists who are competitive and with high ethical values, you will be guided through your studies by teaching professionals whom are committed to their cause. The programmes offered by FPTP which are imbued with core knowledge of technology management will allow you to develop the requisite skills with specialisations in the fields of Technology Management, Production and Operation Management, Construction Management and Real Estate Management. To enhance students' understanding and creativity, the faculty strives to provide teaching and learning facilities which are conducive such as lecture rooms, seminar rooms and laboratories which are suitably equipped with the latest equipments and technology manned by skilled technicians, in addition to practical field work conducted from time to time.

Therefore, you should make full use of this opportunity to work as hard as you can so that you will be able to achieve your dreams and ambitions of obtaining a tertiary degree. A well planned and systematic learning approach throughout the duration of your studies here will result in producing excellent graduates from all of you.

Thank you.

Associate Professor Sr. Dr. David Martin @ Daud Juanil  
Dean  
Faculty of Technology Management and Business  
Universiti Tun Hussein Onn Malaysia



## **Vision**

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

## **Mission**

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

## **Education Philosophy of University**

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

## **Logo of the University**

Logo of Universiti Tun Hussein Onn Malaysia (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
Circle	Resilience and its relation to global characteristics
Shield	Confidence

## University Board of Directors

### *Chairman*

**Tan Sri Dato' (Dr.) Ir. Jamilus bin Md Hussin**

Chairman

KLIA Premier Holdings Sdn. Bhd.

### *Members*

**Professor Dato' Dr. Mohd. Noh bin Dalimin**

Vice-Chancellor

Universiti Tun Hussein Onn Malaysia

**Dato' Sri Sufri bin Hj Mohd Zin**

Executive Chairman

TRC Synergy Berhad

**Major General (R) Dato' Md. Ismail bin Ahmad Khan**

Managing Director

TALHIS-K Sdn. Bhd.

**Dato' Abd. Shukor bin Ibrahim**

Project Manager

e-Procurement Unit

Ministry of Finance Malaysia

**Dato' Ir. Hj. Wahab bin Suhaili**

Chairman

Wahba Group Sdn. Bhd.

**Professor Dr. Shamsuddin bin Baharin**

Director

Division of Industry Relation

Ministry of Higher Education

**Dr. Pang Chau Leong**

Director

Department of Skills Development

Ministry of Human Resources Malaysia

**Professor Ir. Dr. Hj. Abas bin Abdul Wahab**

Professor Faculty of Mechanical and Manufacturing Engineering,

Universiti Tun Hussein Onn Malaysia

**Mr. Jamalulail bin Abu Bakar**

Director

Division of Student Affair and Development

Ministry of Higher Education Malaysia

### *Secretary*

**Tuan Haji Sulam bin Hamid**

Registrar



## Senate Members

### *Chairman*

**Professor Dato' Dr. Mohd. Noh bin Dalimin**  
Vice Chancellor

### *Members*

**Professor Ir. Dr. Abdul Aziz bin Dato' Abdul Samad**  
Deputy Vice Chancellor (Academic and International)

**Professor Dr. Wahid bin Razzaly**  
Deputy Vice Chancellor (Research and Innovation)

**Professor Ir. Dr. Amir Hashim bin Mohd Kassim**  
Assistant Vice Chancellor (Student Affairs and Alumni)

**Professor Dr. Hashim bin Saim**  
Assistant Vice Chancellor (Industry and Community Relations)

**Professor Dr. Ahmad Shakri bin Mat Seman**  
Dean Centre for Graduate Studies

**Associate Professor Dr. Ahmad Tarmizi bin Abd Karim**  
Dean Faculty of Civil and Environmental Engineering

**Professor Hj. Ayob bin Hj. Johari**  
Dean Faculty of Electrical and Electronic Engineering

**Associate Professor Dr. Yusri bin Yusof**  
Dean Faculty of Mechanical and Manufacturing Engineering

**Associate Professor Sr. Dr. David Martin @ Daud Juanil**  
Dean Faculty of Technology Management and Business

**Dr. Razali bin Hassan**  
Acting Dean Faculty of Technical and Vocational Education

**Professor Dr. Rosziati binti Ibrahim**  
Dean Faculty of Computer Science and Information Technology

**Associate Professor Dr. Azme bin Khamis**  
Dean Faculty of Science, Technology and Human Development

**Associate Professor Dr. Ishak bin Baba**  
Dean Faculty of Engineering Technology

**Professor Ab. Aziz bin Abd. Latiff**  
Dean Centre for Diploma Studies

**Dr. Sh Salleh bin Sh Ahmad**  
Dean Centre for Academic Development

**Associate Professor Hj. Kamarudin bin Khalid**  
Director Centre for Co-Curriculum and Culture

**Professor Emeritus Dato' Dr. Hj. Ismail bin Hj. Bakar**  
Faculty of Civil and Environmental Engineering

**Professor Dr. Mohammad Zarar bin Mohamed Jenu**  
Faculty of Electrical and Electronic Engineering

**Professor Hj. Mohd. Imran bin Hj. Ghazali**  
Faculty of Mechanical and Manufacturing Engineering

**Professor Ir. Dr. Saparudin bin Ariffin**

Faculty of Mechanical and Manufacturing Engineering

**Professor Ir. Dr. Hj. Abas bin Ab Wahab**

Faculty of Mechanical and Manufacturing Engineering

**Professor Dr. Hj. Sulaiman bin Yamin**

Faculty of Technical and Vocational Education

**Professor Dr. Wan Mohd Rashid bin Wan Ahmad**

Faculty of Technical and Vocational Education

**Professor Dr. Hj. Mustafa bin Mat Deris**

Faculty of Computer Science and Information Technology

**Professor Dr. Noraini binti Kaprawi**

Director Strategic and Quality Management Office

**Associate Professor Dr. Abd Halid bin Abdullah**

Director Development and Property Management Office

**Pn. Azizah binti Nasri**

Acting Bursar

**En. Bharun Narosid bin Mat Zin**

Chief Librarian

**Tn. Hj. Sulam bin Hamid**

Registrar / Secretary

## **Faculty Adjunct Professor**

### **Ir. Dr. Zuhairi bin Abd. Hamid**

Executive Director

Construction Research Institute of Malaysia (CREAM)

## **Faculty Visiting Professors**

### **Professor Terrence Perera**

Faculty of Arts, Computing, Engineering and Sciences  
Sheffield Hallam University

### **Professor Heng Li**

Chair Professor of Construction Informatics  
Department of Building and Real Estate  
Hong Kong Polytechnic University

### **Professor Dr. Chris Eves**

Professor in Property Economics  
Science and Engineering Faculty  
Queensland University of Technology

## **Faculty External Examiners**

### **Associate Professor Dr. Zulkifli Mohamed Udin**

School of Technology Management and Logistic  
UUM College of Business  
Universiti Utara Malaysia

### **Associate Professor Dr. Rosli Abdul Rashid**

Faculty of Built Environment  
Universiti Teknologi Malaysia

### **Professor Sr. Dr. Hj. Abdul Hadi bin Hj. Nawawi**

Faculty of Architecture, Planning and Surveying  
Universiti Teknologi MARA

# Faculty of Technology Management and Business

Faculty of Technology Management and Business (FPTP), formerly known as Faculty of Technology Management (FTP) was established on 20th June 2001. Its establishment is in accordance with Universiti Tun Hussein Onn Malaysia (UTHM) aspiration to produce and train competitive professionals and technologists of high ethical values in the global arena through holistic academic programmes, knowledge and research culture, based on the concept of Tauhid.

There are four (4) departments within FPTP, i.e. (i) Department of Management and Technology (JPT), (ii) Department of Production Management and Operation (JPPO), (iii) Department of Real Estate Management (JPHT), and (iv) Department of Construction Management (JPP).

These four departments are responsible of the implementation of academic programmes at the Bachelor, Masters and Doctorate degree levels. All the academic programmes offered by FPTP are accredited by the Ministry of Higher Education Malaysia (KPT), Malaysian Qualifications Agency (MQA) and professional institution, i.e. the Board of Valuers, Appraisers and Estate Agents (BOVAEA) for the programme of Bachelor of Real Estate Management.

FPTP is led by a Dean and assisted by two Deputy Deans. FPTP organisational chart is shown in Figure 1.

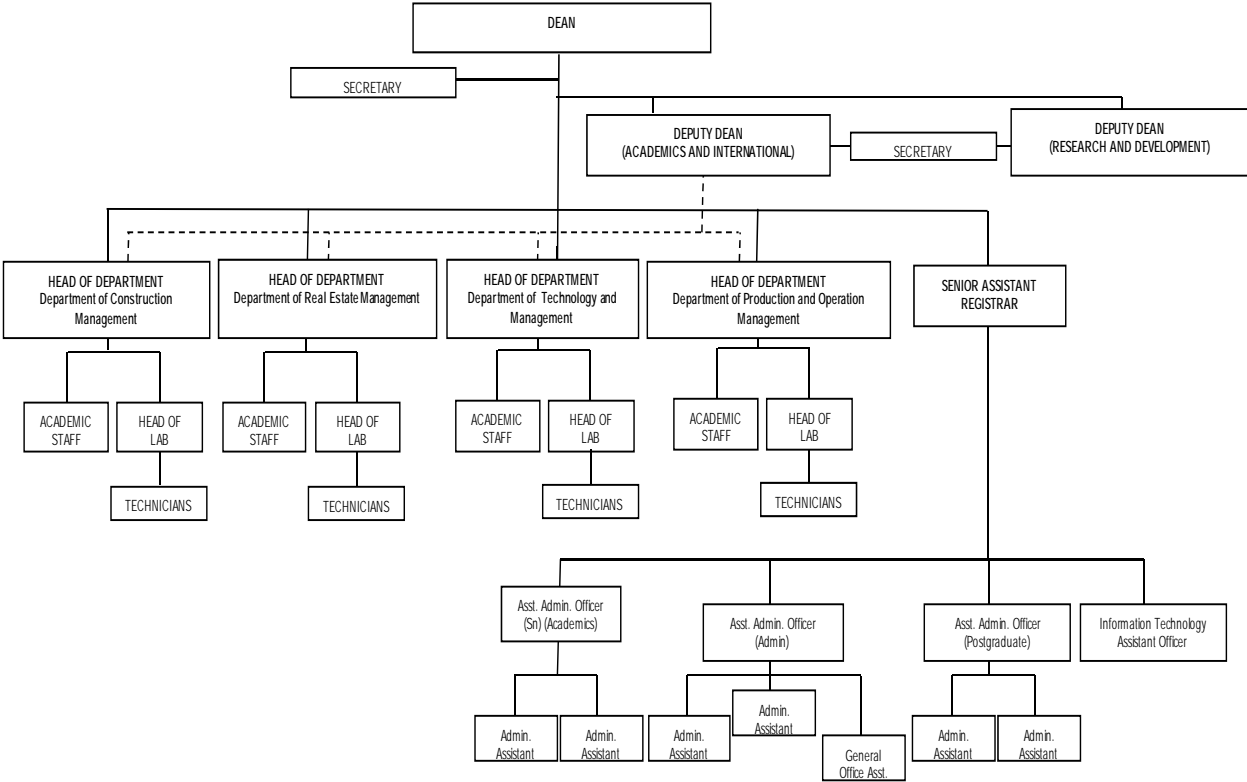


Figure 1. Organisation chart of Faculty of Technology Management and Business

# Directory of Staff of Faculty of Technology Management and Business (FFTP)

## *Administration*

### **Dean**

**Associate Professor Sr. Dr. David Martin @ Daud Juanil**

Ph.D (Real Estate & Facilities Mgmt.) (KUiTTTHO), MSc. (Urban Land Appraisal) (Univ. Reading, UK), B.Surv. (Hons) (Property Mgmt.) (UTM), Dip. (Valuation) (UTM)

### **Deputy Dean (Academic and International)**

**Dr. Eta binti Wahab**

Ph.D (Mgmt.) (Curtin Univ. Tech., Australia), MSc. (Mgmt.) (UUM), BSc. (Agri. Business) (UPM)

### **Deputy Dean (Research and Development)**

**Dr. Seow Ta Wee**

Ph.D (Env. Mgmt.) (UKM), MSc. (Env. Mgmt.) (UKM), BSc. (Geography) (UKM)

### **Senior Assistant Registrar**

**En. Mohd. Lotfi Solihan**

Bachelor (Usuluddin & Dakwah) (Aqidah dan Falsafah) (Univ. Al Azhar, Mesir)

### **Office Secretary**

**Pn. Lilyanna binti Jamari**

Dip. (ITM)

**Pn. Norfaiza binti Baidawi**

Dip. (Office Mgmt. & Technology) (UiTM)

### **Senior Assistant Administrative Officer (Academics)**

**En. Mohd Azrai bin Kamisan**

Dip. (Public Admin.) (ITM)

### **Assistant Administrative Officer (Postgraduate)**

**Pn. Noorashikin binti Abd Wahab**

Dip. (Banking) (UiTM)

### **Assistant Administrative Officer (Administrations & Finance)**

**En. Mohd Azam Jainal**

B.A. (Human Resource Mgmt.) (Hons) (OUM), Dip. (Business Mgmt.) (Insurance) (UiTM)

### **Information Technology Assistant Officer**

**Pn. Faizah@Rashidah binti Hj. Dahari**

Dip. (Computer Science) (ITM)

### **Senior Administrative Assistant**

**En. Muhammad Yusof bin Hj. Ramly**

Dip. (Accounting) (UiTM)

### **Administrative Assistant (Postgraduate)**

**Pn. Noor Hasmiza binti Che Mohamad**

### **Administrative Assistant (Academics)**

**En. Mohd Rezuan bin Darlan**

**Pn. Siti Nurazurah binti Mohamed**

**Pn. Kamilah binti Osman**

### **Administrative Assistant (Administrations)**

**Pn. Farinda Arilia binti Abdul Razak**

### **General Office Assistant**

**En. Zailizam bin Paiman**

*Academic Staff*

**Head of Department**

**Dr. Nor Hazana binti Abdullah**

Ph.D (Tech. Mgmt.) (UTHM), MSc. (HRD) (UTM), BSc. (Psychology) (IUB), Dip. (Factory Mgmt.) (JAMA)

**Dr. Eta binti Wahab**

Ph.D (Mgmt.) (Curtin Univ. Tech., Australia), MSc. (Mgmt.) (UUM), BSc. (Agri. Business) (UPM)

**Dr. Alina binti Shamsuddin**

Ph.D (Mgmt. Tech.) (Strathclyde Univ., UK), MSc. (Tech. Mgmt.) (UTM), BSc. (Tech. Mgmt.) (UTM)

**Dr. Wan Fauzi @ Fauziah binti Wan Yusoff**

Ph.D (Corporate Governance) (Victoria Univ., Australia), BSc. (Human Resource Mgmt.) (UPM), Bachelor (Business Admin.) (UiTM), Dip. (Human Development) (UPM)

**Dr. Patmawati binti Ibrahim**

Ph.D (Economy) (Development) (UPM), Master (Economy) (UIAM), Bachelor (Economy) (UIAM)

**Dr. Ng Kim Soon**

Ph.D (Corporate Mgmt.) (USM), MBA (General Mgmt.) (USM), BSc. (Hons) (Food Tech.) (UKM), DIPM (MIHRM), CBTE Cert. (Australia), Cert. (Project Mgmt.) (Sweden)

**En. Haris bin Md. Noor**

Master (Mgmt Tech.) (Human Resources Development) (UTM), B.Ed. (TESL) (UPM)

**Tuan Haji Abdul Ghafar bin Abdul Rahman**

Master (Business Admin.) (OKC), Bachelor (Business Admin.) (UKM), Dip. (Public Mgmt.) (INTAN)

**En. Ahmad Kaseri bin Ramin**

Chartered Accountant (Malaysian Inst. of Accountants), Fellow (Assoc. Int. Accountants, UK), Exec. Master (Business Admin.) (UKM), BAcc. (Hon) (UKM)

**Pn. Maimunah binti Ali**

MBA (Cardiff Univ., UK), Bachelor (Economy) (Hons) (UIAM)

**En. Mohd. Nazir bin Mohd. Adi**

Master (Laws) (UKM), Bachelor (Laws) (UIAM)

**Pn. Noreina binti Kepal@Nasir**

Master (Marketing) (UPM), Bachelor (Marketing) (UiTM), Dip. (Business Studies) (ITM)

**Pn. Nor Kamariah binti Kamaruddin**

MSc. (Tech. Mgmt.) (UUM), BSc. (Tech. Mgmt.) (UUM)

**Pn. Anim Zalina binti Azizan**

MSc. (Tech. Mgmt.) (Teknologi) (UTM), BSc. (Admin. & Land Development) (UTM), Dip. (Valuation) (UTM)

**En. Abd. Razak bin Ahmad**

MSc. (Tech. Mgmt.) (Tech.) (UTM), Bachelor (Hons) (Economics Statistics) (UKM)

**Pn. Nur Aniza Quantaniah binti Jusoh**

Exec. Masters (Business Admin.) (UiTM), Bachelor (Business Studies) (Acc.) (Massey Univ. New Zealand), Dip. (Accounting) (UiTM)

**Pn. Fazian binti Hashim**

MSc. (Information Mgmt.) (UiTM), Bachelor (Business Mgmt.) (Hons) (UUM)

**En. Shafie bin Mohamed Zabri**

Master (Business Admin.) (UKM), Bachelor (Business Admin.) (UUM)

**En. Abd. Rahman bin Ahmad**

MBA (Strategic Mgmt.), BSc. (Human Resource Mgmt.) (UUM)

**Pn. Wan Nurul Karimah binti Wan Ahmad**

Master (Eng. Mgmt.) (UPM), Bachelor (Technology Mgmt.) (Hons) (KUiTTTHO)

**Pn. Umi Kartini binti Rashid**

MBA (Hitotsubashi Univ., Tokyo), Bachelor (Commerce & Mgmt.) (Hitotsubashi Univ., Tokyo)

**En. Mohd Haniff bin Zainudin**

Master (Accounting) (UiTM), Bachelor (Univ. Adelaide)

**Pn. Asmah binti Md Yusuf**

Master (Business Admin.) (UKM), Bachelor (Accounting) (Nottingham Trent Univ., UK)

*Supporting Staff*

**Pn. Azreena binti Abidin**

Cert. (PPD)

**Pn. Wan Azratuazna binti Wan Mohamad**

Cert. (Politeknik Johor Bahru)

*Academic Staff*

**Head of Department**

**Pn. Rohaizan binti Ramlan**

Master (IT) (Manufacturing) (UTM), BSc. (Computer) (UTM)

**Associate Professor Dr. Hj. Abdul Talib bin Bon**

Ph.D (Manufacturing) (La Rochelle, France), MBA (Quality Mgmt.) (UKM), BEng. (Hons) (Mech.) (UTM), Dip. (Mech. Eng.) (UTM), Cert. (Mechatronics & Robotics) (Carlisle, UK)

**Dr. Hj. Rosmaini bin Tasmin**

Ph.D (Corporate Knowledge Mgmt.) (MMU), Master (Tech. Mgmt.) (UTM), BSc. (Hons) (Computer Sc Eng.) (UT Arlington, Texas, USA), Cert. (Int. Mgmt.) (JAISMS Hawaii, USA), Cert. (Japanese Language) (YKC Yokohama, Japan), Cert. (Industrial Radiation) (MINT Bangi), Cert. (Mandarin) (IPJ)

**Pn. Nor Aziati binti Abdul Hamid**

MSc. (IT) (UiTM), BSc. (IT) (Computer Science) (UKM)

**En. Yunos bin Ngadiman**

MSc. (Industrial Tech. Mgmt.) (Osaka Univ.), BEng. (Hons) (Electronic) (Kumamoto Univ. Tech., Kyushu, Japan), Dip. (Electronic Eng.) (Kumamoto National College of Tech., Kyushu, Japan), Dip. (Japanese Language) (Tokyo Int. Student of Japanese Language Inst., Tokyo)

**En. Mohamed Ismail K.P. Hj. Pakir Mohamed**

BSc. (Industrial Eng.) (Univ. Miami, Florida, USA)

**Pn. Kamilah binti Ahmad**

Master (Business Admin.) (Finance) (UKM), Bachelor (Accounting) (UKM)

**Pn. Siti Anisah binti Atan @ Yaakub**

MBA (Business Admin.) (UKM), Bachelor (Material Eng.) (USM)

**Pn. Siti Norziah binti Ismail**

BEng. (Mechanics of Control) (Jepun)

**Pn. Raja Zuraidah binti Raja Mohd Rasi**

MBA (UKM), BSc. (Tech. Mgmt.) (Manufacturing) (UTM)

**Pn. Norhadilah binti Abd Hamid**

MSc. (Eng. Mgmt.) (UPM), BSc. (Tech. Mgmt.) (Hons) (UUM)

**Pn. Siti Sarah binti Omar**

MSc. (Human Resource Development) (UTM), Bachelor (Business Admin.) (Hons) (IIUM)

**Pn. Nurul Aida binti Abdul Malek**

MSc. (Quantitative) (Production & Operation) (UiTM), BSc. (Hons) (Tech. Mgmt.) (KUiTTTHO)

**Pn. Vikneswari a/p Subramaniam**

MSc. (Decision) (UUM), BSc. (Hons) (Tech. Mgmt.) (KUiTTTHO)

**Pn. Rumaizah binti Ruslan**

Master (Occupational Health & Safety) (UPM), BSc. (Health, Environment & Occupational) (UPM)

**Pn. Zarina binti Abu Hassan**

MBA (UiTM), Bachelor (Corporate Admin.) (UiTM), Dip. (Public Admin.) (ITM)



**Pn. Norasmiha binti Mohd Nor**

MSc. (Quality & Productivity Improvement) (UKM), BSc. (Tech. Mgmt.) (UUM), Dip. (Manufacturing Eng.) (TATI)

**En. Mohd Fahmy bin Abdullah**

Master (Economy) (UMS), Bachelor (Economy) (Planning & Manufacturing) (UMS)

**En. Juzaimi bin Nasuredin**

Bachelor (Economy) (Univ. Wakayama, Jepun)

**En. Mohd Fauzi bin Ahmad @ Mohamad**

MEng. (Mechanical) (UTM), BEng. (Electric & Electronic) (Muroran Inst. Tech., Jepun)

***Supporting Staff***

**En. Abdul Rahman Iskandar bin Ab. Jawat**

Dip. (Mechatronic Eng.) (PKB)

**En. Mohd Ainuddin bin Md Zainal**

Cert. (Politeknik Johor Bahru)

**En. Mohamad Azahar bin A. Wahid**

Cert. (PUO)

**Academic Staff**

**Head of Department**

**Dr. Narimah binti Kasim**

Ph.D (Const. Mgmt.) (Loughborough Univ., UK), MSc. (Const. Mgmt.) (UTM), BEng. (Civil) (UM)

**Dr. Christy A/L Pathrose Gomez**

Ph.D (Civil Eng.) (Const. Mgmt.) (Univ. Birmingham, UK), BSc. (Math.) (UM), BEng. (Hons) (Civil Eng. with Computing) (Univ. Surrey, UK)

**Dr. Seow Ta Wee**

Ph.D (Env. Mgmt.) (UKM), Master (Env. Mgmt.) (UKM), BA (Geography) (UKM)

**Dr. Haryati binti Shafii**

Ph.D (Env. Mgmt.) (UKM), MSc. (Env. Mgmt.) (UKM), BA (Geography-Politic Sciences) (UKM)

**Dr. Goh Kai Chen**

Ph.D (Built Env. & Eng.) (Queensland Univ. Tech., Australia), MSc. (Const. Mgmt.) (UTM), BSc. (UTM), Dip. (Quantity Surveying) (UTM)

**Pn. Ruziah binti Hussin**

MSc. (Const. Mgmt.) (UTM), BEng. (Civil) (UTM), Cert. (Architecture) (PPD)

**Dr. Aryani binti Ahmad Latiffi**

Ph.D (Const. Mgmt.) (Loughborough Univ., UK), MSc. (Project Mgmt.) (USM), BSc. (Const. Mgmt.) (USM), Dip. (Quantity Surveying) (UiTM)

**Pn. Rozlin binti Zainal**

MSc. (Project Mgmt.) (USM), BSc. (Const. Mgmt.) (USM), Dip. (Real Estate Mgmt.) (UiTM)

**En. Mohd Yamani bin Yahya**

MSc. (Const. Mgmt.) (Glasgow Caledonian Univ.), BSc. (Const. Mgmt.) (UiTM), Dip. (Building) (ITM)

**En. Hezil bin Mansor**

MSc. (Const. Eng.) (Const. Structure) (Oita Univ., Japan), BSc. (Const. Eng.) (Oita Univ., Jepun), Dip. (Architecture) (Const. Structure) (Miyakonojo National College, Japan)

**Pn. Syarifah Meryam binti Shareh Musa**

MSc. (Env. Mgmt.) (UKM), BA (Geografi - Antropology & Sociology) (UKM)

**En. Kamalludin bin Bilal**

MSc. (Facilities Mgmt.) (UTM), Bachelor (Landscape Architecture) (UTM), Dip. (Agriculture) (UPM)

**En. Saiful Hadi bin Mastor**

Master (Project Mgmt.) (USM), Bachelor (Land Admin. & Development) (UTM), Dip. (Land Surveying) (UTM)

**Pn. Roshartini binti Omar**

MSc. (Building Tech.), BSc. (Housing, Building & Planning) (USM)

**En. Sulzakimin bin Mohamed**

Master (Const. Mgmt.) (Glasgow Caledonia Univ.), BSc. (Hons) (Surveying & Mapping) (East London Univ.), Dip. (Land Surveying) (UiTM)

**En. Md. Asrul Nasid bin Masrom**

MSc. (Const. Contract Mgmt.) (UTM), BSc. (Building) (UTM), Dip. (Quantity Surveying) (UTM)

**Pn. Naadira binti Che Kamaruddin**

MSc. (Const. Mgmt.) (UTM), BSc. (Building Surveying) (UM)

**En. Hamidun bin Mohd Noh**

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

**Pn. Norliana binti Sarpin**

MSc. (Const. Mgmt.) (UTM), BSc. (Quantity Surveying) (UTM), Dip. (Quantity Surveying) (UTM)

**Pn. Norpadzlihatun binti Manap**

MEng. (Mgmt.) (UPM), BEng. (Civil) (UTM)

**Pn. Hilyati binti Sabtu @ Othman**

MEng. (Civil & Structure) (UTM), BEng. (Civil) (UiTM), Dip. (Civil Eng.) (UiTM)

**En. Mohd Firdaus bin Mustaffa Kamal**

MSc. (Mgmt. & Const.) (UTM), BSc. (Tech. Mgmt.) (Const.) (UTHM)

***Supporting Staff***

**En. Salleh bin Mansor**

Cert. (Civil Eng.) (PPD)

**En. Nasrul Aiman bin Kosrin**

Dip. (Land Surveying) (Politeknik Merlimau), Cert. (Land Surveying) (PUO)

**Pn. Wan Faizah binti Abdullah**

Dip. (Civil Eng.) (Politeknik Merlimau), Cert. (Civil Eng.) (PPD)

**Pn. Rodiah binti Hassan**

Dip. (Quantity Surveying) (PKB), Cert. (Quantity Surveying) (POLISAS)

*Academic Staff*

**Head of Department**

**Dr. Mohd. Lizam bin Mohd. Diah**

Ph.D (Real Estate) (Univ. Aberdeen), MSc. (IT-Mgmt.) (UTM), BSc. (Surveying) (Property Mgmt.) (UTM)

**Associate Professor Sr Dr. David Martin @ Daud Juanil**

Ph.D (Real Estate & Facilities Mgmt.) (KUiTTHO), MSc. (Urban Land Appraisal) (Univ. Reading, UK), Bachelor (Surv.) (Hons) (Property Mgmt.) (UTM), Dip. (Valuation) (UTM)

**Dr. Rozilah binti Kasim**

Ph.D (Facilities & Property Mgmt.) (Salford Univ., UK), MSc. (Facilities Mgmt.) (UTM), BSc. (Hons) (Estate Mgmt.) (East London Univ., UK), Dip. (Estate Mgmt.) (UiTM)

**Associate Professor Sr. Dr. Wan Zahari bin Wan Yusoff**

Ph.D (Property & Facility Mgmt.) (UTHM), MSc. (Integrated Const. Project Mgmt.) (UiTM), BSc. (Hons) (Estate Mgmt.) (UiTM), Dip. (Real Estate) (ISM), Dip. (Valuation) (UTM)

**Associate Professor Dr. Tono Saksono**

Ph.D (Geomatic Eng.) (Univ. College London, UK), MSc. (Geodetic Science & Surveying) (Ohio State Univ., Ohio, USA), BEng. (Geodetic) (Gadjah Mada Univ., Indonesia)

**Pn. Haidaliza binti Masram**

Master (Urban Planning) (Cardiff Univ., UK), Bachelor (Urban Planning) (UTM)

**Pn. Norjariah binti Arif**

MSc. (Urban Property) (Univ. Paisley), Bachelor (Property Mgmt.) (UTM), Dip. (Valuation) (UTM)

**Pn. Zarina binti Shamsudin**

MSc. (Real Estate Mgmt.) (UTM), Bachelor (Surveying) (Property Mgmt.) (UTM), Dip. (Valuation) (UTM)

**En. Abdul Jalil bin Omar**

MSc. (Pengurusan Harta Tanah) (UTM), BSc. (Pengurusan Harta Tanah) (UTM)

**Dr. Azlina binti Mohd. Yassin**

Ph.D (Property) (Lincon Univ., New Zealand), MSc. (Land Resource Mgmt.) (UPM), Bachelor (Real Estate Mgmt.) (UTM)

**Dr. Noralfishah binti Sulaiman**

Ph.D (Property & Facilities Mgmt.) (Univ. Salford Manchester), MSc. (Facilities Mgmt.) (UTM), BSc. (Real Estate Mgmt.) (UTM)

**En. Mat Tawi bin Yaacob**

MSc. (Facility Mgmt.) (UiTM), BEng. (Civil) (Univ. Newcastle, Australia), Cert. (Value Mgmt.) (CIDB/Provam)

**En. Indera Syahrul bin Mat Radzuan**

MSc. (Housing) (USM), BSc. (Soc.) (USM)

**Pn. Sabariah binti Eni**

Master (Land Resource Mgmt.) (UPM), Advance Dip. (Real Estate Mgmt.) (UiTM), Dip. (Real Estate Mgmt.) (UiTM)

**Pn. Burhaida binti Burhan**

Master (Commerce) (Real Estate Investment) (Univ. Western Sydney), BSc. (Real Estate Mgmt.) (UTM)

**Pn. Nurbaity Aqmar binti Mahamud**

Master (Real Estate & Facilities Mgmt.) (UTHM), Bachelor (Technology Mgmt.) (KUiTTTHO)

**Pn. Khadijah binti Md Ariffin**

Bachelor (Business Admin.) (Hons) (Finance) (UPM), Dip. (Bank Mgmt.) (UiTM)

**En. Edie Ezwan bin Mohd Safian**

Master (Real Estate & Facilities Mgmt.) (UTHM), Bachelor (Hons) (Real Estate Mgmt.) (UTHM)

**Pn. Masni binti Salleh**

MSc. (Real Estate) (UTM), Bachelor (Urban & Regional Planning) (UTM), Dip. (Urban & Regional Planning) (UTM)

**Pn. Marina binti Osman**

MSc. (Property Mgmt.) (UTM), Bachelor (Surveying) (Property Mgmt.) (UTM)

**Pn. Masitah binti Zulkepli**

MSc. (Real Estate & Facilities Mgmt.) (UTHM), Bachelor (Hons) (Technology Mgmt.) (KUiTTTHO)

**En. Shamre Liew @ Romzie**

Master (Real Estate) (UM), BSc. (Property Mgmt.) (UTM)

*Supporting Staff*

**En. Zulhidi bin Harun**

Cert. (Comm. Electronics Eng.) (PUO)

**Pn. Norshilah binti Salleh**

Dip. (Civil Eng.) (Politeknik Merlimau ), Cert. (Civil Eng.) (PPD)

## Curriculum

### Curriculum of Bachelor of Technology Management (Construction) with Honours

Table 1. Summary of curriculum of Bachelor of Technology Management (Construction) with Honours (BPC)

Year	Semester	Course code	Courses	Credit	Total
1	I	BPA12203	Mathematics for Management	3	18
		UWA10102/UWA10202	Islamic Studies/ Moral Studies	2	
		UWB10102	Academic English	2	
		UQ*1xx01	Co-Curriculum I	1	
		BPA10103	Economics	3	
		BPA10202	Principles of Management	2	
		BPD10102	Engineering Drawing	2	
	BPA21703	Technology Management	3		
	II	BPA12303	Statistics for Management	3	17
		UWA10302	Islamic and Asian Civilisations	2	
		UWB10202	Effective Communication	2	
		UQ*1xx01	Co-Curriculum II	1	
		BPA10402	Human Resource Management	2	
		BPA10502	Principles of Marketing	2	
BPD13103		Construction Technology I	3		
BPD13502	Architecture Design	2			
2	I	UWB20302	Technical Writing	2	18
		UWS10103/UWS10303	Nationhood and Current Development of Malaysia/ Malaysian Studies and Culture	3	
		BPD24002	Basic Engineering Sciences	2	
		BPA20703	Management of Information System	3	
		BPD23603	Construction Project Management	3	
		BPD20502	Soil Mechanics	2	
	BPD22203	Construction Technology II	3		
	II	UWS10202/UWB11202	Ethnic Relations/ Malay Language	2	18
		UWB20402	Creativity and Innovation	2	
		BPK20802	Entrepreneurship	2	
		BPD20302	Construction Law	2	
		BPD20403	Structural Analysis	3	
		BPD20203	Construction Land Surveying	3	
		BPD21602	Construction Equipment	2	
BPD22302		Construction Financial Management	2		
3	I	UWB1xx02	Foreign Language	2	18
		BPA31102	Leadership and Supervision	2	
		BPD30703	Construction Procurement	3	
		BPD30802	Structural Design	2	
		BPD30903	Construction Materials and Testing	3	
		BPD33702	Construction Safety and Health Management	2	
		BPD33802	Risks Management	2	
		BPD32902	Building Services	2	
	II	BPD31003	Construction Cost Estimation	3	15
		BPD33903	Project Planning and Scheduling	3	
		BPD32702	Construction Professional Ethics	2	
		BPD33002	Environmental Management	2	
		BPA31902	Bachelor Project I	2	
		BPF3xxx3	Elective I	3	
4	I	BPD41902	Computer Application for Construction	2	15
		BPD42502	Construction Facilities Management	2	
		BPD42802	Construction Economics	2	
		BPD42902	Construction Strategic Management	2	
		BPA42004	Bachelor Project II	4	
		BPF4xxx3	Elective II	3	
	II	BPA42108	Industrial Training	8	8
<b>Overall Total Credit</b>					<b>127</b>

Table 2. List of elective courses in Bachelor of Technology Management (Construction) with Honours

Year	Course code	Elective course	Credit
3	BPF34003	Principles of Landscape Architecture Design	3
	BPF31603	Town Planning for Construction	3
	BPF31703	Land Economics for Construction	3
	BPF31803	Traffic and Transportation Management	3
4	BPF44103	Sustainable Construction	3
	BPF41003	Water Resources and Treatment	3
	BPF42003	Environmental Technology	3
	BPF44203	Real Estate Development	3

## **BPA12203 Mathematics for Management**

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### **Synopsis**

This course covers Inequalities: elementary theorems, conditional inequalities. Logic: connectives, truth tables, arguments. Combinatorics: sample, permutations, combinations, selection. Vectors in operations on vectors. Matrices: elementary row operations, solving linear equations, inverse matrix, Markov chain. Linear programming: geometric approach. Linear programming: algebraic approach. Differentiation: techniques of derivatives, related rates, maximum and minimum problems. Integration: by substitution, finding areas. Double integration.

### **References**

1. Sullivan, Mizrahi. (2004). *Mathematics–An Applied Approach*. Wiley International Edition. Call no.: HF5691 .S944 2004
2. Barnett, Raymond. (2011). *College Algebra with Trigonometry*, Prentice Hall , New Jersey. Call no.: QA154.3 .C65 2011
3. Anton, Howard & Rorres, Chris. (2011). *Elementary Linear Algebra with Applications*, 6th edition. John Wiley & Sons, Inc. USA. Call no.: QA188 .A57 2011
4. Berkey, D.D & Blanchard. Paul. (1994). *Calculus for Management, Social, and Life Sciences*. Saunders College Publishing New York. Call no.: QA303 .B49 1994
5. Hester, Yvette (1998) *Student Resource Manual for Applied Finite Mathematics*. Pacific Grove, CA: Brooks/Cole. Call no.: QA39.2 .H473 1998

## **UWA10102 Islamic Studies**

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### **Synopsis**

This course explains about Islamic concept as ad deen. It discusses the study of al-Quran and al-Hadith, Aqidah ahl al-Sunnah wa al Jamaah, trends of aqidah's doctrine, the growth of fiqh's mazhab, the principles of muamalah, Islamic criminal law, the ethics of work in Islam, issues in Islamic Family law, and current issues.

### **References**

1. Harun Din (Dr.) (2001), *Manusia Dan Islam*, cetakan pertama, Kuala Lumpur: Dewan Bahasa dan Pustaka. [BP174. M36 1990]
2. Ismail Haji Ali, (1995), *Pengertian dan Pegangan Iktikad yang benar: Ahli Sunnah Wal Jamaah*: Kuala Lumpur: Penerbitan al-Hidayah. [BP166.78. P46 1995]
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]

## **UWA10202 Moral Studies**

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### **Synopsis**

This course explores the introduction to moral concepts, some aspects related to the morality and its importance in our daily lives, some western moral theories, moral values in great religions of the world, morality and ethics in professional careers and contemporary moral issues.

### **References**

1. Eow Boon Hin. (2002). *Moral Education*. Longman. (LC268 .E48 2008)
2. Ahmad Khamis. (1999). *Etika Untuk Institusi Pengajian Tinggi*. Kuala Lumpur: Kumpulan Budiman. (LC315.M3 .A35 1999)



3. Mohd Nasir Omar. (1986). *Falsafah Akhlak*, Penerbit Universiti Kebangsaan Malaysia / 2010, Bangi. (BJ1291 .M524 2010).
4. Hussain Othman. (2009). *Wacana Asasi Agama dan Sains*. Batu. Pahat: Penerbit UTHM. (BL240.3 .H87 2009 a)
5. Hussain Othman, S.M. Dawilah Al-Edrus, Berhannudin M. Salleh, Abdullah Sulaiman, (2009). *PBL Untuk Pembangunan Komuniti Lestari*. Batu Pahat: Penerbit UTHM. (LB1027.42 .P76 2009 a)

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### **UWB10102 Academic English**

#### ***Synopsis***

This course focuses on fulfilling students' academic requirements such as the acquisition of reading, writing, listening and speaking skills in English. The course also concurrently provides opportunities for students to acquire basic grammar knowledge to complement the acquisition of English language. Students will be reinforced on aspects of English language oral and written skills that are most relevant to them in their academic work. By the end of the course, students should be able to use English for a wide range of academic activities.

#### ***References***

1. Abd. Aziz, A et al. (2005). *English for Academic Communication*. Kuala Lumpur: McGraw Hill Malaysia. Call no.: PE1128.A2 .E53 2005
2. Koh, S.L. (2005). *MUET Moments: Malaysia University English Test*. Selangor: Pearson. Call no.: PE1128 .K63 2005
3. Richards, C. (2009). *Longman Text MUET: A Strategic Approach*. Petaling Jaya: Pearson Malaysia. Call no.: PE1128 .K97 2009
4. Kaur, H. (2005). *Explore MUET*. Kuala Lumpur: Fajar Bakti Sdn. Bhd.

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### **UQ\*1xxx1 Co-Curriculum I**

#### ***Synopsis***

This course covers various forms of co-curricular activities to be chosen by the students. Eight major activities are Public Speaking, Entrepreneurship, Sports, Community Services, Leadership, Cultural, Initiatives and Innovation.

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### **BPA10103 Economics**

#### ***Synopsis***

This course covers introduction to Economics, Price, Quantity and Efficiency, Microeconomics of Product Market, Macroeconomics Theory; and International Economics.

#### ***References***

1. Case K. E and Fair, R. C (2012). *Principles of Economics* 10th ed. Pearson. Call no.: HB172.5 .C37
2. McConnell, Campbell R. and Brue, Stanley L (2011), *Economics*, McGraw Hill. Call no.: HB171.5 .M32
3. Parkin, M, (2012), *Economics* Tenth Edition, Pearson. Call no.: HB172 .P37
4. O'Sullivan A. and Sheffrin S. M. (2003), *Economics Principles and Tools*, New Jersey: Prentice Hall. Call no.: HB171.5 .O88
5. Tucker, Irvin B, (2005), *Economics For Today*, 4th ed. Thomson South Western. Call no.: HB171.5 .T82

## **BPA10202 Principles of Management**

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### **Synopsis**

This course covers the area of management through the Practical concepts of organization management; Global management; History of management; Organizational Environments and Culture; Social Responsibilities and Managerial ethics; Decision Making; Planning; Organizational Structure and Design; Managerial Communication and Information Technology; Human Resource Management Managing Change and Innovation; Understanding Group and Teams; Motivating Employees; Leadership; Controlling; Controlling for Organizational Performance.

### **References**

1. Robbins, S.P. & Coulter M., (2007), *Management*, 9th ed. Upper Saddle River, New Jersey, Person. Call no. HD31.R62 2007
2. Schermerhorn, J.R. (2007). *Management*. 9th edition. New York: John Wiley & Sons. Call no. HD31. M36 2007
3. Dessler, G. (2011). *Management: Leading People and Organizations in the 21st Century*. New Jersey: Prentice Hall. Call no. HD31.D47 2001
4. Daft, R.L.. (2008). *Management*, 6th ed., Mason, OH: South-Western. Call no. HD31.D33 2008
5. Kinicki, A, and Williams, K.W., (2007), *Management: A Practical Introduction*, 3rd ed., Irwin McGraw Hill. Call no. HD31.K56 2007

## **BPD10102 Engineering Drawing**

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### **Synopsis**

The course covers the introduction to basic technical and engineering drawing, introduction to engineering drawing, geometrical drawing, projection drawing, and civil engineering drawing and drawing by using computer (CAD).

### **References**

1. Mohd Fadzil Daud & Khairul Anuar Hanafiah (2000). *Panduan Asas Lukisan Kejuruteraan*, Universiti Teknologi Malaysia. (Call no.: TA175 .M42 2000)
2. Khairul Anuar Hanafiah (2000). *Lukisan Kejuruteraan Berbantu Komputer*, Universiti Teknologi Malaysia. (Call no.: TA174 .K42 2006)
3. Bertoline, Gary (1994). *AutoCAD for Engineering Graphics*, 2<sup>nd</sup> Edition, Mcmillan Publishing Co., New York. (Call no.: T385 .B47 1994)
4. Kalameja, A.J. (2008). *The AutoCAD 2008 Tutor for Engineering Graphics*. Clifton Park, New York. (Call no.: T385 .B47 1994)
5. James D. Bethune, J.D. (2004). "Engineering Graphics with AutoCAD 2004." New Jersey: Prentice Hall. (Call no.: T357. B45 2004)

## **BPA21703 Technology Management**

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### **Synopsis**

This course covers a review of technology management, history of technology management, development of technological capabilities, critical factors in managing technology, technology life cycles, technology management and innovation, business strategy and technology strategy, competitiveness, the design of organization, technology planning and the acquisition and exploitation of technology.

### **References**

1. Khalil, T. (2000), *Management of Technology: The Key to Competitiveness and Wealth Creation*. McGraw Hill. Call no.: T49.5 .K42 2000
2. Harrison N. & Samson, D. (2002), *Technology Management: Text and International Cases*. McGraw Hill. Call no.: T49.5 .H37 2002

3. White, M.A & Bruton, G.D., (2007). *The Management of Technology and Innovation: A Strategic Approach*. Thomson. Call no.: HD45 .W44 2007
4. Betz, F. (2000). *Strategic Technology Management*. New York. McGraw-Hill. Call no.: HD45 .B87 2004
5. Bidgoli, Hossein. (2010). *The Handbook of Technology Management*. John Wiley. Call no.: HD45 .H36 2010

## **BPA12303 Statistics for Management**

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### **Synopsis**

This course covers Probability, Conditional probability, Random variable, Probability distribution, Moment generating function, Sampling distribution, Estimation, Hypothesis testing, Simple linear regression.

### **References**

1. Lind, Douglas A., Marchal, William G. and Wathen, Samuel A. (2011). *Statistics for Management and Economics*. Boston: McGraw-Hill. Call no.: HA29 .L56
2. Mario F. Triola. (2011). *Essential of Statistics*. 2nd Ed. Pearson Adison Wesley. Call no.: QA276.12 .T74
3. M.K. Berenson, D.M. Levine & T.C. Krehbiel. (2007). *Basic Business Statistics - Concepts and Application*. 9<sup>th</sup> edition. Prentice Hall. Call no.: HF1017 .B47
4. Douglas A. Lind, William G. Marshall and Samuel A. Wathen (2012) *Basic Statistics Using Excel 2007: For Statistical Techniques In Business & Economics*. New York: McGraw-Hill. Call no.: HA29 .L57
5. Doane, David P. and Seward, Lori E. (2011). *Applied Statistics in Business and Economics*. New York: McGraw-Hill. Call no.: HF1017 .D62 2011

## **UWA10302 Islamic and Asian Civilisations**

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### **Synopsis**

The course discusses the introduction of civilization, its development, the interaction between civilizations; the Islamic civilization, Islam in the Malay civilization; Indian and Chinese civilizations as well as contemporary civilization issues and also the principles of Islam Hadhari.

### **References**

1. Saifullah Mohd Sawi (2009), *Sejarah Dan Tamadun Islam Di Asia Tenggara*, Shah Alam Karisma Publications. Call no.: BP63.A785 .S24 2009
2. Sazelin Arif, (2007), *Tamadun Islam Dan Tamadun Asia*, Shah Alam, Selangor: McGraw Hill. Call no.: 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. Call no.: DS36.85.I32 2005 v.1
4. Mohd Liki Hamid, (2003), *Pengajian Tamadun Islam*, Bentong: PTS Publications and Distributors. Call no.: 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. Call no.: DS721 .L64 1998
6. Rajakrishnan Ramasamy, M Rajantheran, (1994), *Pengantar tamadun India*, Kuala Lumpur: Penerbit Fajar Bakti. (Call no.: DS425 .R34 1994)
7. Arkoun, Mohammed Ruslani, (2001), *kontemporer: menuju dialog antara agama*, Yogyakarta: Pustaka Pelajar. (Call no.: BP163 .A74 2001 N)

## **UWB10202 Effective Communication**

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### **Prerequisite: UWB10102 Academic English**

### **Synopsis**

This course emphasizes on task-based approach and focuses on developing students' delivery of speech in oral interactions and presentations. Importance is given on mastery of self-directed learning, teamwork, research, oral presentations, reasoning and creativity. This course also enables students to acquire knowledge and skills necessary for conducting and participating in meetings, including writing of meeting documents. Students will also be exposed to the techniques of conducting interviews.

## References

1. Cheesebro, T., O'Connor, L. & Rios, F. (2007). *Communication skills: preparing for career success* (3rd ed.) Upper Saddle River, NJ: Pearson. Call no.: HF5718 .C53 2007
2. Davies, W.J. (2001) *Communication skills: a guide for engineering and applied science student* (2nd ed.) London: Prentice Hall. Call no.: T10.5 .D38 2001
3. Joan van Emden, L. (2004). *Presentation skills for students*. New York: Palgrave Macmillan. Call no.: PN4129 .V36 2004
4. Richard Johnson-Sheehan (2005). *Technical Communication Today*. New York: Pearson. Call no.: TK5101 .S26 1997
5. Salbiah Seliman et al. (2004). *English Communication for Learners in Engineering*. Malaysia: Prentice Hall. Call no.: P95 .S24 2002

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## UQ\*1xxx1 Co-Curriculum II

### Synopsis

This course covers various forms of co-curricular activities to be chosen by the students. Eight major activities are Public Speaking, Entrepreneurship, Sports, Community Services, Leadership, Cultural, Initiatives and Innovation.

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## BPA10402 Human Resource Management

### Synopsis

This course covers strategic role in human resource management, human resource planning, job analysis, employee selection and recruitment, employee training and development, compensation system and policy, employee relations and safety, and global issues on human resource management.

### References

1. Dessler, G. (2011). *Human Resource Management*, International Inc., Prentice Hall. Call no.: HF5549 .D47
2. Rue, W. L. and Byars, L. L. (2006). *Human Resource Management*. 6th. Edition, Irwin, McGraw Hill. Call no.: HF5549 .B92
3. Aminuddin, Maimunah (2011). *Human Resource Management: Principles and Practices*. Oxford University Press: Kuala Lumpur. Call no.: HF5549.H9 .M34
4. Nankervis, A., Compton, R. and Baird, M. (2008). *Human Resource Management: Strategies and Processes*. Thomson. Call no.: HF5549 .N36
5. Ivancevich, John M. (2007). *Human Resource Management*. 9th ed, Boston: McGraw-Hill. Call no.: HF5549 .I92

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## BPA10502 Principles of Marketing

### Synopsis

This course covers the basic marketing concepts, market environment analysis, strategy and marketing mix, marketing channels, customer relationships management, 4 P's management, ethics and marketing social responsibilities and marketing scenario in Asia and multi-nationals.

### References

1. Robbins, S.P. & Coulter M., (2007), *Management*, 9th ed. Upper Saddle River, New Jersey, Person. (Call no.: HD31.R62 2007)
2. Schermerhorn, J.R. (2007). *Management*. 9th edition. New York: John Wiley & Sons. (Call no.: HD31. M36 2007)
3. Dessler, G. (2011). "Management: Leading People and Organizations in the 21st Century". New Jersey: Prentice Hall. (Call no.: HD31.D47 2001)
4. Daft, R.L. (2008). *Management*, 6th ed., Mason, OH: South-Western. (Call no.: HD31.D33 2008)

5. Kinicki, A. & Williams, K.W., (2007), *Management: A Practical Introduction*, 3rd ed., Irwin McGraw Hill . (Call no.: HD31.K56 2007)

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### **BPD13103 Construction Technology I**

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#### ***Synopsis***

This course covers the introduction to the construction industry, principal of building construction, site preparation, construction material, building construction, building foundation, brickwork bonding, door and window, concrete and formwork.

#### ***References***

1. Jahiman Badron (2007). *Teknologi Binaan Bangunan*. Petaling Jaya: IBS Buku (Call no.: TH213 .J33 2007)
2. Spence, William Perkins (2011). *Construction materials, methods, and techniques: building for a sustainable future*. New York: Delmar, Cengage Learning. (Call no.: TH145 .S63 2011)
3. Francis, D.C. & Adams, C. (2008). *Building Construction Illustrated*. USA: Wiley, John & Sons. (Call no.: TH146 .C54 2001 N1)
4. Tony Bryan (2010). *Construction technology: Analysis and choice*. 2<sup>nd</sup> edition. Wiley-Blackwell: New York. (Call no.: TH146 .B79 2010)
5. Mike Riley, Alison Cotgrave (2008). *Construction technology 1: House construction*. New York: Palgrave Macmillan. (Call no.: TH4811 .R54 2008)

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### **BPD13502 Architecture Design**

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#### ***Synopsis***

The course covers the introduction to architecture, principle of architecture design, principle of architecture drawing, commant rule in architecture drawing and introduction to drawing with computer aided (CAD).

#### ***References***

1. Hepler, D.E, Wallach, P.R and Hepler. D.J., (1998). "Architecture Drafting and Design". 7<sup>th</sup> ed. Glencoe/ McGraw Hill. (Call no.: NA2700 .H37 1998)
2. Hepler, D.E and Wallach, P.R., (1998). "Architecture Drafting and Design. Student Workbook". McGraw Hill. (Call no.: NA2700 .H44 1998).
3. Jefferis, A. Am. And David, A. (2005). "Architectural Drafting and Design, 5<sup>th</sup> Edition". Thompson. (Call no.: NA2700.J43 2005).
4. Jefferis, A. & Jefefris, J. (2008). "Residential design, drafting and detailing", (Call no.: NA2708.J44 2008).
5. Obermeyer, T. L. (1993). "Architectural Drafting: residential and commercial". (Call no.: NA2708.023 1993)

## **UWB20302 Technical Writing**

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### **Prerequisite: UWB10202 Effective Communication**

#### **Synopsis**

This course introduces students to report writing skills needed at tertiary level. Students will learn basic report writing skills such as proposals, progress report, informational and analytical report. Thus, they will learn how to collect data using questionnaires. The data collected will be analyzed, transferred into graphic forms and presented orally and in writing. Based on the analysis of data, students will be able to draw conclusions and make recommendations.

#### **References**

1. Dorothy Cheung et. al. (1999). Report writing for engineering students. 2nd edition, Singapore: Prentice Hall. PE1475 .R46 1999 N3
2. Finkelstein, J. (2008). Pocket Book of technical writing. 3rd ed. Singapore: McGraw Hill. T11 .F56 2008
3. Gerson, S. J. & Gerson, S. M. (2003). Technical writing: Process and product. 3rd ed. New Jersey: Prentice Hall. PE1475 .G47 2000
4. Kolin, P. C. (2006). Successful writing at work. Concise ed. USA: Houghton Mufflin Company. PE1408 .K64 2009
5. Lakshmy Anantha Krishnan et. al. (2003). Engineering your report: From start to finish. Singapore: Prentice Hall. T11 .E64 2006

## **UWS10103 Nationhood and Current Development of Malaysia**

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#### **Synopsis**

This course will provide students a fundamental concept, the processes of formation and development of Malaysia. The topics covered include the concept of state, Malacca Kingdom, implication of imperialism and colonisation, spirit of patriotism and nationalism, independence and formation of Malaysia. Besides, students will also be exposed to the constitution of Malaysia, Malaysian Government System, Economic and Social Development Policy as the main policy in the national development. At the end of the course students will able to appreciate the roles and responsibilities of a good citizen to the country.

#### **References**

1. Mohd. Ashraf Ibrahim (2004). *Gagasan Bangsa Malayan yang Bersatu 1945-57*. Bangi: Penerbit UKM. Call no.: DS597 .M37 2004
2. Nazaruddin Mohd Jali, Ma'rof Redzuan, Asnarulkhadi Abu Samah dan Ismail Mohd Rashid (2005). *Pengajian Malaysia*. Petaling Jaya: Prentice Hall. Call no.: DS596.6 .P46 2001 N2
3. Noor Aziah Mohd. Awal (2003). *Pengenalan kepada Sistem Perundangan di Malaysia*. Petaling Jaya: International Law Book Services. Call no.: KPG68 .N66 2003
4. Ruslan Zainudin, Mohd Mahadee Ismail dan Zaini Othman (2005). *Kenegaraan Malaysia*. Shah Alam: Fajar Bakti. Call no.: JQ715 .R87 2005
5. Zahrul Akmal Damin, Fauziah Ani, Lutfan Jaes, Khairunesa Isa, Siti Sarawati Johar, Harliana Halim, Khairul Azman Mohd Suhaimy, Shamsaadal Sholeh Saad, Ku Hasnan Ku Halim dan Mohd Akbal Abdullah (2009). *Kenegaraan & Pembangunan Malaysia*. Batu Pahat: Penerbit UTHM. (Modul Kenegaraan dan Pembangunan Mutakhir Malaysia)
6. Andaya, B.W. and Andaya, L.Y. (1982). *A History of Malaysia*. London: Macmillan. (Call no.: DS 596.A52 2001)
7. Abdul Aziz Bari (2002). *Majlis Raja-Raja: Kedudukan dan Peranan dalam Perlembagaan Malaysia*. Kuala Lumpur: Dewan Bahasa & Pustaka. (Call no.: JQ1062.A58 .A39 2002)
8. Aziz Deraman (1992). *Tamadun Melayu dan Pembinaan Bangsa Malaysia*. Kuala Lumpur: Arena Ilmu Sdn. Bhd. (Call no.: HN700.6 .A952 2000)
9. Francis Loh Kok Wah dan Khoo Boo Teik (2002). *Democracy in Malaysia*. Cornwall: Curzon Press.

10. Jurij Jalaludin (1991). *Wawasan 2020: Aspek Politik dan Sosial*. Kuala Lumpur: Arena Ilmu Sdn. Bhd.
11. Lembaga Penyelidikan Undang-undang (2010). *Perlembagaan Persekutuan*. Petaling Jaya: International Law Book Services.

### **\*UWS10303 Malaysian Studies and Culture**

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\*This course is intended for international students

#### **Synopsis**

This course covers basic understanding of Malaysia from various perspectives. Topics to be discussed include Malaysia in relation to its history, achievement and international affairs. In addition, students will also be exposed to the ethnic composition of the country, culture and heritage. Teaching and learning process enables student to acquire knowledge and appreciates the reality of life in Malaysia through experiential learning.

#### **References**

1. Abdul Halim Nasir (2004). "Mosque Architecture in the Malay World." Bangi: Penerbit Universiti Kebangsaan Malaysia. (Call no.: NA4670 .A23 2004).
2. Andaya, B.W. and Andaya, L. Y. (1982). "A *History of Malaysia*." London: Macmillan. (Call no.: DS596 .A52 2001)
3. Francis Loh kok Wah dan Khoo Boo Teik (2002). *Democracy in Malaysia*. Cornwall: Curzon Press
4. Khoo Kay Kim (2001). "Malay Society: Tranformation and Democratisation." Kelana Jaya: Pelanduk Publications
5. Mohamed Noordin Sopiee (1974). "From *Malayan Union to Singapore Separation, Political Unification in the Malaysian Region, 1945-65*." Kuala Lumpur: University of Malaya Press. (Call no.: DS597 .M56 2005)
6. Nazaruddin Mohd. Jali (2003). "Malaysian Studies: Nationhood and Citizenship." Petaling Jaya: Pearson Prentice Hall.
7. Yahaya Ismail (1989). "The Cultural Heritage of Malaysia." Kuala Lumpur: Dinamika Kreatif Sdn. Bhd.

### **BPD24002 Basic Engineering Sciences**

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#### **Synopsis**

This course covers physical quantity and units system, force, work, energy and power, fluid statics, elasticity, thermal expansion of matter, heat, waves.

#### **References**

1. Giambattista, A., Richardson, B. M., Richardson, R. C. (2007). "College Physics" 2<sup>nd</sup> Ed. New York: Mc Graw Hill. (Call no.: QC21.3 .G52 2007)
2. Serway, R. A., Faughn, J. S., Moses, C. J. (2003). "College Physics" 6<sup>th</sup> Ed. USA: Pacific Grove, CA: Thomson Learning. (Call no.: QC21.3 .S47 2003)
3. Bueche, F. J., Hecht, E., Hademenos, G. J. (2006), "Schaums outline of theory and problems of college physics", 10<sup>th</sup> Ed. New York: McGraw-Hill. (Call no.: QC21.2 .B83 2006)
4. Urone, P. P. (2001). "College Physics", 2<sup>nd</sup> Ed. USA: Pacific Grove, CA: Brooks/Cole. (Call no.: QC23 .U76 2001)
5. Edwin R. Jones & Richard L. Childers (1999), "Contemporary college physics", 3<sup>rd</sup> Ed. Boston: McGrawHill. (Call no.: QC21.2 .J66 1999)



## **BPA20703 Management of Information System**

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### **Synopsis**

This course covers an introduction to the field of Management Information Systems (MIS), computer technologies, information development, and impact of information systems on business organization at various levels, technical and managerial aspects of MIS.

### **References**

1. Laudon, K.C. & Laudon, J.P. (2007). *Essentials of Management Information Systems* Pearson International Edition, New Jersey. Call no.: T58.6 .L388
2. Kroenke, D.M. (2009). *Using MIS*. Pearson International Edition, New Jersey. Call no.: HD30.213 .K76
3. Turban, McLean & Wetherbe (2004). *Information Technology for Management: transforming business in the digital economy*. John Wiley & Sons, Inc. Call no.: T58.6 .T87
4. Effy, O. (2009). *Management Information Systems*. Course technology, Thomson Learning. Call no.: HD30.213 .O94
5. Stair, Ralph M. & Reynold, George Walter (2008). *Principles of information systems: A managerial approach*. Boston, MA: Thomson. Call no.: T58.6 .S72

## **BPD23603 Construction Project Management**

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### **Synopsis**

This course covers Introduction to Construction Management, Organizational Structure in Construction Management, Project Selection, Proposal Development, Project Planning and Scheduling Techniques, Resource Management, Project Costing, Project Closure and Delivery and the Current issues in the Construction Industry.

### **References**

1. Sariwati Mohd Shariff, Sodri Ariffin & Ahmanul Mohd. Talib (2007). "Project Management: A Practical Approach." UPENA, UiTM Shah Alam.
2. Omar Osman (2006) "Pengurusan Pembinaan: Konsep, Strategi dan Aplikasi". Penerbit Universiti Sains Malaysia, Pulau Pinang. (Call no.: HD9715 .O42 2006)
3. The Chartered Institute of Building (2002). "Code of Practice for Project Management for Construction and Development." Oxford: Blackwell. (Call no.: TH438 .C62 2003)
4. Andrew A.L Tan (1996) "Project Management in Malaysia: A Comprehensive Approach for Successful Management of Property Development Projects from Inception until Completion." Synergy Book International, Kuala Lumpur. (Call no.: HD890.6.Z7 .T36 1996 r)
5. Clements, J.P dan Gido, J (2006) "Effective Project Management". Thomson, South Western.
6. Frederick E. Gould (2002) "Managing the Construction Process: Estimating, Scheduling and Project Control." Pearson Education, Inc., Upper Saddle River, New Jersey.
7. Norlida Abd. Halim dan Dayang Sopia Ab. Razak (1994). "Mengurus Projek Pembinaan." Dewan Bahasa dan Pustaka, Kuala Lumpur. (Call no.: TH438 .A97 1994)
8. Federick E. Gould, Nancy E. Joyce (2000). "Construction Project Management." New Jersey: Prentice Hall.
9. Anthony Walker (1999). "Project Management in Construction." United Kingdom: Blackwell Science.
10. Gould, Frederick E. Joyce, Nancy E. (2009). "Construction Project Management." New Jersey: Prentice Hall. (Call no.: TH438 .G68 2009)

## **BPD20502 Soil Mechanics**

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### **Synopsis**

This course covers soil definition, soil classification and recognition, compaction, permeability, consolidation and settlement, shear strength, lateral pressure, slope stability, bearing capacity, pile foundation and soil investigation.

### **References**

1. Cheng Liu and Evett, J.B. (2008). "Soils and Foundation". Prentice Hall. (Call no. TA710 .L58 2008)
2. Cernica, John, N. (1995). "Geotechnical Engineering: Soils Mechanics". New York; John Wiley & Sons. (Call no.: TA710 .C47 1995)
3. Muniram Budhu (2007). "Soil Mechanics and Foundations, 2nd ed.". John Wiley & Sons. (Call no.: TA710 .B83 2007)
4. Whitlow, R. (2001). "Basic Soil Mechanics". Longman. (Call no.: TA710 .W54 2001 N1)
5. Braja M. Das (2010). "Principles of Geotechnical Engineering, 7<sup>th</sup> editions". (Call no.: TA710 .D37 2010)

## **BPD22203 Construction Technology II**

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### **Prerequisite: BPD13103 Construction Technology I**

### **Synopsis**

This course covers introduction to floor construction, wall construction, arch, scaffolding, roof, ceiling, staircase, building services, heavy machinery, heavy construction system and road construction.

### **References**

1. Badron, J. (2007). *Teknologi Binaan Bangunan*. Petaling Jaya: IBS Buku. (Call no.: TH213 .J33 2007)
2. Chudley, R., & Greeno, R. (2005). *Construction Technology* (4th ed.). New York: Prentice Hall. (Call no.: TH145 .C48 2005)
3. Chudley, R., & Greeno, R. (2006). *Advanced Construction Technology* (4th ed.). London: Mc Graw-Hill. (Call no.: TH145 .C484 2006)
4. Ching, Francis D. K. (2008). *Building Construction Illustrated*. Hoboken, NJ: John Wiley & Sons. (Call no.: TH146 .C54 2008)
5. Fleming, E. (2005). *Construction Technology: an Illustrated Introduction* .Oxford: Blackwell Publishing. (Call no.: TH146 .F53 2005)

## UWS10202 Ethnic Relations

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### Synopsis

This course focuses on the concept of ethnic relations and its practices in the Malaysian society. Class discussions cover the fundamental of ethnic relations and the history of the construction of a plural society. The Malaysia Constitution will be covered as a core of living in the society. Discussions will be further conducted into detail on the linkages between ethnicity and development in social, political and economic aspects based on top-down and bottom-up approaches by the government and society.

### References

1. Lembaga Penyelidikan Undang-undang (2003). *Perlembagaan Persekutuan*. Petaling Jaya: International Law Book Services. Call no.: KPG 1744.51963.A3.A4 2003 rw
2. Mansor Mohd. Noor, Abdul Rahman Abdul Aziz dan Mohamad Ainuddin Iskandar Lee (2006). *Hubungan Etnik di Malaysia*. Petaling Jaya: Prentice Hall. Call no.: DS595.m37 2006
3. Nazri Muslim & Nasruddin Yunus. (2006). *Hubungan Etnik*. Selangor: Fulson Trading Co.
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 dan Ruslan Zainuddin (2006). *Hubungan Etnik di Malaysia*. Shah Alam: Oxford Fajar Sdn. Bhd.
6. Wan Hashim. (2011). *Hubungan Etnik di Malaysia*. Kuala Lumpur: Institut Terjemahan Negara Malaysia. (Call no.: XX (1302391))

## UWB11002 Malay Language

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### 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
2. Asmah Hj. Omar (1993). *Susur Galur Bahasa Melayu*. DBP: KL. PL5127 .A85 1993 N1
3. Asmah Hj. Omar (1993). *Nahu Melayu Mutakhir*. DBP: KL. PL5137 .A85 1993
4. Ainun Mohd (2011). *Tesaurus Bahasa Melayu*. PTS Professional Publishing. PL5123 .A364 2011
5. Nik Safiah Karim (2008). *Tatabahasa Dewan*. DBP. PL5108 .T37 2008 r
6. Kamaruddin Saad (2009). *105 karangan bahasa melayu UPSR*. Minerva Publishing. PL 5108 KAM 2009

## UWB20402 Creativity and Innovation

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### 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 solving problems and making decisions in the future. In this course, students will be exposed to various creativity and problem solving techniques. Some of the skills to be covered throughout the course are problem solving, techniques in creativity and techniques in innovation.

### References

1. Bernacki, E. (2002). *Wow! That's a Great Idea!* Prentice Hall, Singapore. Call no.: HD53 .B47

2. De Bono, E. (2003). *Serious Creativity 1: Lateral Thinking Tools, Techniques and Application*. Allscript Books, Singapore. Call no.: BF408 .D366
3. De Bono, E. (2003). *Serious Creativity 2: Lateral Thinking Tools, Techniques and Application*. Allscript Books, Singapore. Call no.: BF408 .D367
4. Ceserani, J. & Greatwood, P. (1995). *Innovation and Creativity*. Kogan Page, London. Call no.: HD58.8 .C47 1995
5. Ceserani, J. & Greatwood, P. (2001). *Innovation and Creativity*. Crest Publishing House, New Delhi. Call no.: HD58.8 .C47

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### **BPK20802 Entrepreneurship**

#### **Synopsis**

This course cover various topics related to basic entrepreneurship including introduction to entrepreneurship, entrepreneurs 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 no.: 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 no.: HD2341 .E57 2011
3. Hisrich, R.D., Peter, M.P., Shepherd, D.A., (2010). *Entrepreneurship*, 8th Edition. McGraw Hill. Call no.: HD62.5 .H57 2010
4. Donald F. Kuratko, Richard M. Hodgetts. (2007). *Entrepreneurship: Theory, Process, Practice*, 7th Edition. Mason: Thomson South-Western. Call no.: HB615 .K87 2007
5. John. B., Tidd. J. (2011). *Innovation And Entrepreneurship*. 2nd Edition. Chichester, West Sussex, UK. Call no.: HD53 .B48 2011

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### **BPD20302 Construction Law**

#### **Synopsis**

This course covers an introduction to the legal aspects of land law, contract, contract a variety of criteria, duties and responsibilities, the implications of the contract clauses, procedures, instructions, variations, payment and certification, demand and prevention, dispute resolution methods, building control, legal safety and industrial laws, acts and related laws.

#### **References**

1. Nor Ainah Abdullah (2001). "Pengenalan Kepada Kontrak Binaan." Shah Alam: UPENA UiTM. (Call no.: KPG861.B84 .N67 2001)
2. H. Abdul Aziz dan A.A. Abdul Rashid (2001). "Undang-undang Pembinaan: Bon-bon Gerenti dalam Kontrak Pembinaan." Pulau Pinang: Penerbit USM. (Call no.: KF4604 .A29 2001)
3. H. Abdul Aziz dan A.A. Abdul Rashid (2001). "Aspek Undang-undang Tort Dalam Projek Pembinaan." Pulau Pinang: Penerbit USM. (Call no.: KPG940 .A29 2000)
4. Robinson, N.M. et al (1996). "Construction Law in Singapore and Malaysia." 2nd.ed. Singapore: Butterworths. (Call no.: K891.B8 .C66 1996)
5. Lim, C.F. (2004). "The Malaysia PWD Form of Construction Contract." Selangor: Sweet & Maxwell Asia. (Call no.: K891.B8 .L55 2004)

## **BPD20403 Structural Analysis**

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### **Synopsis**

This course covers an introduction to force and moment, structural behaviour, supports, load, structural frame, shear force and bending moment diagram, bending stress and slope and bending deflection.

### **References**

1. Hibbeler, R.C. (2006). "Structural Analysis." 6th ed. New Jersey: Prentice Hall. (Call no.: TA645 .H52 2006)
2. Aslam Kassimali (2004). "Structural Analysis (With CD-Rom)." 3<sup>rd</sup> ed. Thomson-Engineering. (Call no.: TA645 .K37 2005)
3. West, H. and Geschwinder, L. (2001). "Fundamentals of Structural Analysis." 2nd ed. USA: John Wiley & Sons Ltd. (Call no.: TA 645 . W48 2002)
4. Yusof Ahmad (2001). Mekanik Bahan & Struktur. UTM. (Call no.: TA409 .Y87 2001)
5. Chajes, A. (1990). "Structural Analysis". New Jersey, Prentice Hall. (Call no.: TA645 .C37 1990)

## **BPD20203 Construction Land Surveying**

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### **Synopsis**

This course covers introduction to the survey and its principles, land surveying equipment, surveying wage scale, coordinate systems, distance measurement, angle measurement, measure the height, and the introduction to the application of geographic information systems (GIS).

### **References**

1. Kavanagh, B.F dan Glenn Bird, S.J (2006) "Surveying: Principle and Applications" 7<sup>th</sup> Edition, Prentice Hall, USA. (Call no.: TA545 .K37 2009)
2. Kavanagh, B.F dan Glenn Bird, S.J (2007) "Surveying with Construction Application" 6<sup>th</sup> Edition, Prentice Hall, USA. (Call no.: TA625 .K38 2010)
3. Charles D. Ghilani (2002) "Elementary Surveying: An Introduction to Geomatics" 13<sup>th</sup> Edition, Prentice Hall, USA. (Call no.: 013615431X)
4. Watson, P, (2008). "Surveying and engineering: principles and practice" Blackwell. (Call no.: TH438 .S97 2008)
5. Institut Tanah dan Ukur Negara, (2010) "Program latihan Institut Tanah dan Ukur Negara". (Call no.: HD890.6 .I57 2010)

## **BPD21602 Construction Equipment**

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### **Synopsis**

This course covers construction equipment such as construction machinery, equipment economics, basic components, Tractors, Dozers and the Rippers, Scrapers for the movement of the soil, Haulers and Loaders, Graders and Compactors, Excavator, Lifting and Hoisting, Conveyors and the equipment for production of argregat, concrete, and asphalt.

### **References**

1. Nannaly, S. W. (1977). *Managing construction equipment*. New Jersey: Prentice-Hall. (Call no.: TH900 .N85 1977 N1)
2. Peurifoy, R., & Schexnayder, C. (2002). *Construction planning, equipment and methods* (6<sup>th</sup> ed.). New York: McGraw-Hill. (Call no.: TH145 .P48 2002)
3. Russell, J. E. (1985). *Construction equipment*. Reston, Virginia: Reston Pub. (Call no.: TH900 .R69 1985)
4. Smith, R.C, & Andres, K.C. (1986). *Principles and practices of heavy construction* (3<sup>rd</sup> ed.). Prentice Hall: Englewood Cliffs. (Call no.: TH145 .S54 1986)
5. Spence, W. P. (1998). *Construction methods, materials and techniques*. Delmar Publishing: Thomson. (Call no.: TH145 .S64 1998)

### **Synopsis**

This course covers introduction to financial management; construction demand and supply; the terms of the contract and the analysis of financial implications, the financial statements; measurement of building projects capacity; project financing; controlling costs and life cycle cost.

### **References**

1. Halpin, D. W. & Senior, B. A. (2009) *Financial management and accounting fundamentals for construction*. Hoboken, NJ: John Wiley. (Call no.: TH435 .H34 2009)
2. Steven, J. P. (2005) *Construction Accounting and Financial Management*. Penerbit Prentice Hall Selangor, Malaysia. (Call no.: HF5686.B7 .P47 2005)
3. Ahmad, K. H. (2005) *Ekonomi Binaan*. Penerbit Prentice Hall Selangor Malaysia. (Call no.: HD9715.A2 .K44 2005)
4. Eun, C. S. & Resnick, Bruce G. (2009) *International financial management*. Boston, MA: McGraw-Hill. (Call no.: HG3881 .E96 2009)
5. Bekaert, G. H. & Robert J. (2009) *International financial management*. Upper Saddle River, NJ: Pearson. (Call no.: HG3881 .B44 2009)

## **UWB10602 French Language**

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### **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.
6. Grégoir, Maïa et al, 1995. *Grammaire Progressive du Français avec 500 exercices*. Paris: CLE International.
7. Miquel, Claire Leroy et al, 1995. *Vocabulaire Progressive du Français avec 250 exercices*. Paris: CLE International.
8. Capelle, Guy et Gidon, Noëlle, 1995. *Méthod de français: Le Nouvel Espaces 1*. Paris: Hachette F.L.E.
9. Hatier. 2002. *Le Nouveau Bescherelle 12,000 French Verbs. English Edition*. Paris: Librairie Hatier.
10. French Dictionary 1999. *The New Collins Robert 5<sup>th</sup> Edition*. Paris: Harper Collins Publishers.

## **UWB10902 Mandarin Language**

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### **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 (2005). *Conversational Chinese 301*. China: Beijing Language and Culture University Press. (PL1121.C5 .K36 2005)
4. Kang Yuhua (2007). *Conversational Chinese 301:Vol. 2*. China:Beijing Language and Culture University Press. (PL1121.C5 .K364 2007)
5. Liu Xun (2010). *New Practical Chinese Reader: Textbook*. China: Beijing Language and Culture University Press. (PL1129.E5 .L58 2010)

## **UWB11202 Arabic Language**

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### **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. *Bahasa Arab UMR 1312*. Batu Pahat: Penerbit UTHM. (PJ6115 .M445 2008 a)
2. Mohd Hisyam bin Abdul Rahim. 2005. *Senang Berbahasa Arab*. Batu Pahat: Penerbit KUiTTTHO. (PJ6115 .M44 2005 a)
3. Ab. Halim Mohammed; Rabiyyah Hajimaming; Wan Muhammad Wan Sulong. 2007. *Bahasa Arab Permulaan*. Serdang: Penerbit UPM. (PJ6065 .A32 2007)
4. Fuad Ni'mat. 1973. *Mulakhas qawa'id al-lughatul 'arabiyyah*. Damsyik: Darul Hikmah. (PJ5161 .F62 1973)
5. Abdullah, Mustaffa Siti Rohaya Sarnap Siti Sujinah Sarnap. 2006. *Cara mudah belajar Bahasa Arab*. Singapore: Jahabersa. (PJ6106 .A22 2006)
6. Abu 'Amiir 'Izzat. 2008. *Kamus adik: bahasa Melayu-bahasa Inggeris-bahasa Arab*. Kuala Terengganu: Pustaka Darul Iman. (PJ6640 ABU 2008)
7. Mohd Azani Ghazali, Abdul Aziz Hassan @ Yahya. 2000. *Kamus ringkas Bahasa Melayu-Bahasa Arab*. Johor Bahru: Jahabersa. (PL5091.8 .A7 .M393 2000 rd)

## **UWB10802 Japanese Language**

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### **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 (2<sup>nd</sup> 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)
6. Surie, Network (2009). *AE Minna no Nihongo 1-1 Elementary: Translation and Grammatical Notes*, Tokyo: 3A Corporation. (PL539.3 .M567 2009)
7. Surie, Network (2009). *AE Minna no Nihongo 1-2 Elementary: Main Textbook*, Tokyo : 3A Corporation. (PL539.3 .M569 2009)
8. Surie, Network (2010). *AE Minna no Nihongo 1-2 Elementary: Translation and Grammatical Notes*, Tokyo: 3A Corporation. (PL539.3 .M57 2010)
9. The AOTS, (1977). *Shin Nihongo no Kiso: Japanese Kana Workbook*, Tokyo: 3A Corporation. (PL539.3 .S54 1977)
10. Yoshida, Masatoshi Nakamura, Yoshikatsu, (1996). *Kodansha's Furigana English-Japanese dictionary: The essential dictionary for all students of Japanese*, Tokyo: Kodansha International. (PL679 . Y67 2006rd)

## **UWB10702 German Language**

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### **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)

## **UWB11102 Spanish Language**

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### **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
6. Vox modern Spanish and English dictionary: English-Spanish/Spanish-English (1986) National Textbook. Co. XX(131882.1)

## **UWB11302 Javanese Language**

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### **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, jilid 2*. 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)

## **BPA31102 Leadership and Supervision**

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### **Synopsis**

This course covers topics related to leadership from three perspectives; Individual as a leader, Leadership trait and ethics, and Leadership Theories, Team leadership; Team leadership, Leading self-managed teams, Organizational leadership; Charismatic and Transformational Leader, Strategic leadership and managing crisis and Supervision; What is a supervisor, Modern Supervision Challenges, Functions of the supervisor, Skills of supervisor, and Supervisor and Human Resource.

### **References**

1. Nahavandi, A. (2009). *The Art and Science of Leadership*, 5th Edition, Pearson Prentice Hall. (Call no.: BF637.L4.N33)
2. Daft, R. L. (2008). *The Leadership Experience*. 4th Edition. South-Western, Cengage Learning. (Call no.: HD57.7.D33)
3. Certo, S. C. (2010). *Supervision: Concepts and Skill-Building*. 7Th Edition, McGraw-Hill, International Edition. (Call no.: HF5549.12.C47)
4. Rue, L. W. and Byars, L. L (2009). *Supervision: Key link to productivity*. 9th Edition. Irwin, McGraw-Hill. (Call no.: HF5549.12. R83)
5. Robbins, S.P. and Decenzo, D. A. (2010). *Supervision Today*. 6th Edition. Prentice Hall. (Call no.: HF5549.12.R62)

## **BPD30703 Construction Procurement**

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### **Synopsis**

This course covers Introduction to Construction Project, the Party is involved in Construction, Introduction to Construction Procurement, Construction Procurement Processes, Systems Construction Procurement, Procurement System Based Separation System Based Acquisition Management, System Selection and Design Procurement Construction Procurement Project Future.

### **References**

1. Masterman, J.W.E (2002). "Introduction to Building Procurement Systems, 2<sup>nd</sup> Ed." London: Taylor & Francis Inc. (Call no.: HD39.5 .M35 2002)
2. Khairuddin Abd. Rashid (2002). "Construction Procurement In Malaysia: Processes and System." Kuala Lumpur : IIUM (Call no.: HD9715.1 .K42 2002)
3. Roy Morledge, Andrian Smith, Dean T. Kashiwagi (2006). "Building Procurement" UK : Blackwell Publishing (Call no.: HD9715.G72 .M67 2006)
4. Franks, J. (1998). "Building Procurement Systems." London : The Chartered Institute of Building (Call no.: TH438 .F72 1998)
5. Bower, D. (2002). "Management of procurement." Book News, Inc., Portland. (Call no.: HD39.5 .M36 2003)

## **BPD30802 Structural Design**

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### **Synopsis**

This course covers an introduction to structural design, structural design of reinforces concrete, structural steel design and wood structural design.

### **References**

1. BS5950: Part 1:1990. *Structural Use of Steelwork in Building*.
2. BS8110: Part 1: 1997. *Structural Use of Concrete – Code of Practice for Design and Construction*.
3. MS544: Part 2: 1999 *Draf. Code of Practice for Structural Use of Timber-Permissible Stress Design, For Solid Timber*.

- David Yeoh Eng Chuan, Koh Heng Boon & Lee Yee Loon (2006). "Reinforced Concrete Design- A Problem and Solution Approach". McGraw Hill. (Call no.: TA683.2 .Y46 2006)
- Frixos Joannides & Alan Weller (2002). "Structural Steel Design to BS5950: Part 1." Thomas Telford, London. (Call no.: TA684 .J63 2002)
- Dennis Lam, Thien-Cheong Ang & Sin Peng Chiew (2004). "Structural Steelwork Design to Limit State Theory". 3<sup>rd</sup> ed. Elsevier Butterworth-Heinemann, Oxford. (Call no.: TA684 .L35 2004)

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### **BPD30903 Construction Materials and Testing**

#### **Synopsis**

This course covers the following topics: introduction to concrete, bricks and brickwork, timber, ferrous metals, non-ferrous metals, building materials including Green building materials.

#### **References**

- Edward A. (2004). "Fundamentals of Buildings Construction, Materials and Method." 4th edition. New York: John Wiley & Sons. (Call no.: TH145. A44 2004)
- Spiegel, R. & Meadows, D. (2006). "Green Building Materials: A Guide to Product Selection and Specification." 2<sup>nd</sup> edition. New York: John Wiley & Sons, Inc. (Call no.: TH455.S64 2006)
- Smith W.F. (1996). "Principles of Materials Science and Engineering." 3rd edition. New York: McGraw-Hill. (Call no.: TA403.S54 1996)
- Vernon John (1997). "Pengenalan kepada Bahan Kejuruteraan." Terjemahan oleh Ani Idris dan Jasmine Hashim, Skudai: UTM. (Call no.: NONE)
- Callister W.D. Jr. (2007). "Material Science and Engineering: An Introduction." 7th edition. New York: John Wiley & Sons. (Call no.: TA403.C33 2007)
- Mat Lazim Zakaria (1997). "Bahan Dan Binaan." Kuala Lumpur: Dewan Bahasa dan Pustaka. (Call no.: TA403.M37 1987)

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### **BPD33702 Construction Safety and Health Management**

#### **Synopsis**

This course covers accidents, accidents cause and theory, safety acts, accidents costs, hazard and risk assessment, safety in construction, safety programs, safety performance measurement, and safety obligation in construction.

#### **References**

- Hughes, P & Ferret, E. 2005. Introduction to Health and Safety in Construction. Elsevier. (Call no.: RC965.C75 .H83 2005)
- Ismail Bahari. 2006. *Pengurusan Keselamatan dan Kesihatan Pekerjaan*. Edisi Kedua. Mc Graw Malaysia. (Call no.: T55 .I85 2006)
- James S. Angle. 2005. *Occupational Safety and Health in the Emergency Services*. Thomas Delmar Learning. United States of America. (Call no.: RA645.5 .A53 1999)
- Jimmie, W. H. 2008. *Construction Planning and Scheduling*. 3rd ed. Pearson Education International. Penerbit Prentice Hall Malaysia. (Call no.: TH438.4 .H56 2008)
- Sariwati Mohd Shafirr. 2007. *Occupational Safety and Health Management*. 2 nd. Edition. University Publication Centre (UPENA). Universiti Teknologi MARA. Shah Alam.

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### **BPD33802 Risks Management**

#### **Synopsis**

This course covers an introduction to risk, risk management terminology, risk management processes, risk management tools, managing type I risk, decision-making in managing risks, create useful information, in retrospect risk management and discussions and case studies.

### **References**

1. Andersen, T.J., & Schroder, P. W. (2010). *Strategic risk management practice: how to deal effectively with major corporate exposures*. Cambridge, UK: Cambridge University Press. (Call no.: HD61 .A52 2010)
2. Doherty, N.A (2000). *Integrated risk management: techniques and strategies for managing corporate risk*. McGraw-Hill Professional Publishing. (Call no.: HD61 .D64 2000)
3. Garvey, P.R. (2009). *Analytical methods for risk management: a systems engineering perspective*. Boca Raton, FL: CRC Press. (Call no.: T174.5 .G37 2009)
4. Loosemore, M. (2006). *Risk management for projects*. London: Taylor and Francis. (Call no.: TH438 .R57 2006)
5. Thompson, P.A., & Perry, J.G. (1992). *Engineering construction risks: a guide to project risk analysis and assessment: implications for project managers*. London: Thomas Telford. (Call no.: HD9715 .E53 1992)

## **BPD32902 Building Services**

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### **Synopsis**

This course covers an introduction to building services, water supply system, sewage disposal system (piping), and sewage disposal system, building ventilation systems, air-conditioning system, fire protection systems, electric systems, telecommunications systems, transportation systems and legal provisions for services in the building.

### **References**

1. Hall, F. (1994). "Building Services and Equipment, Vol.3." London: Longman Group Ltd. (Call no.: TH6025 .H34 1994)
2. David Chaddeerton (2000). "Build Services Engineering." London: Spon Press Ltd. (Call no.: TH6010 .C42 2000)
3. Mat Lazim Zakaria (1987). "Bahan dan Binaan." Kuala Lumpur: Dewan Bahasa dan Pustaka. (Call no.: TA403 .M37 1987)
4. Oughton, D.R., Hodkinson, S. (2008). "Faber and Kell's Heating and Air Conditioning of Building." London: Butterworth-Heinemann. (Call no.: TH7222 .O93 2008)
5. Roger Greeno, Frederick E. Hall (2001). "Building Services Handbook." London: Butterworth-Heinemann. (Call no.: TH151 .H34 2001)

## **BPD31003 Construction Cost Estimation**

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### **Synopsis**

This course covers of introduction to construction cost estimation, types of cost estimation, specification for construction works, information resources required in undertaking estimation cost for construction, cost estimation for construction works such as excavation work, concrete works, masonry, plumbing works, roof works, wood works and finishes.

### **References**

1. Dagostino, F.R. and Feigenbaum, L. 2003. *Estimating in building construction*. 6<sup>th</sup> ed. Prentice Hall, Upper Saddle River, N.J., USA. (Call no.: TH435 .D33 2003).
2. Fatzinger, J.A.S. 2004. *Basic estimating for construction*. 2<sup>nd</sup> ed. Prentice Hall, Upper Saddle River, N.J., USA. (Call no.: TH435 .F37 2004).
3. Pratt, D.J. 2004. *Fundamentals of construction estimating*. 2<sup>nd</sup> ed. Thomson Learning, Clifton Park, NY, USA. (Call no.: TH435 .P72 2004).
4. Abdullah, A. 2006. *Anggaran Kos Kerja Bangunan*. Edisi kedua. Prentice Hall, Petaling Jaya, Selangor, Malaysia.
5. Peterson, S.J. 2007. *Construction estimating using Excel*. Prentice Hall, Upper Saddle River, N.J., USA. (Call no.: TH437 .P47 2007).

## **BPD33903 Project Planning and Scheduling**

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### **Synopsis**

This course covers knowledge areas regarding introduction to construction planning and scheduling, administration of construction works, work programme and Gantt Chart, priority method, critical path method, CPM calculations and event scheduling, resource management, estimating durations and float calculation, construction project financial management, control of construction projects and schedule formulation.

### **References**

1. Fletcher Griffis (2000). "Construction Planning for Engineers." New York: McGraw Hill. (Call no.: TA194.G74 2000)
2. Norlida dan Dayang Sopia (1994). "Mengurus Projek Pembinaan." Kuala Lumpur: Dewan Bahasa dan Pustaka. (Call no.: TH438.A97 1994)
3. Hojjat Adeli, Asim Karim (2001). "Construction Scheduling, Cost Optimazition And Management." England: Spoon Press. (Call no.: TH438.4. A33 2001)
4. Gould, F.E. (2002). "Managing the Construction Process: Estimating, Scheduling and Project Control." London: Prentice Hall. (Call no.: TH438.G68 2002)
5. Jimmie W. Hinze (2004). "Construction Planning & Scheduling" 2<sup>nd</sup> ed. New Jersey; Prentice Hall. (Call no.: TH438.4.H56 2004)
6. Halpin, D.W. (2005). "Construction Management". 3<sup>rd</sup> ed. John Wiley & Sons. (Call no.: HD9715.U52.H34 2006)

## **BPD32702 Construction Professional Ethics**

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### **Synopsis**

This course covers of Introduction to Ethics, Professional Ethics, Professional Rights, and Behavior and Conduct.

### **References**

1. Abd. Manaf, A. R. (1999). *Alam jurutera*. Kuala Lumpur: Universiti Malaya. (No.panggilan: TA190. A44 1999)
2. Daud, M. (1996). *Etika pengurusan*. Kuala Lumpur: Utusan Publication & Distribution Sdn. Bhd. (No.panggilan: HF5387 .M97 1996)
3. Fewings, P. (2007). *Ethics for the built environment*. London: Taylor & Francis. (No.panggilan: HD9715.A2 .F48 2009)

4. Johari, M. J. (2001). *Etika profesional*. Johor Bahru: Universiti Teknologi Malaysia. (No.panggilan: KE6533.4 .M63 2001)
5. Mike, W. M., & Schhinger, R. (1996). *Ethics in engineering*. New York, Mc Graw Hill. (No.panggilan: TA157 .M36 1996)

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### **BPD33002 Environmental Management**

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#### **Synopsis**

This course covers introduction to environment, growth and human population, principle ecology, forestry, hydrology, introduction to atmosphere, disaster, city, waste, environment and construction, sustainable development, ethic, policy and environmental law, environmental management system and auditing, environmental impact assessment, waste prevention and minimization, safety and health, challenges of environmental management in Malaysia.

#### **References**

1. Malaysia (2005). "Akta Kualiti Alam Sekeliling." Kuala Lumpur: International Laws Book Services. (Call no.: KPG1507.A28 .A4 2004 rw.).
2. Louis P. Pojman (2005). "Environmental Ethics. Reading in theory and Application". Canada.Thomson Wadsworth. (Call no.: GE42 .P64 2008).
3. Agarwala S. P. (2006). "Environmental Studies". United Kingdom. Alpha Science International Ltd.Oxford, U.K. (Call no.: GE105 .A33 2006).
4. Kiran B.Chhokar, Mamata Pandya & Meena Raghunathan (2004). "Understanding Environment". New Delhi. SAGE Publications. (Call no.: GE90.I4 .U52 2004).
5. Ahluwalia V.K & Sunita Malhotra (2008). "Environmental Science". India. CRC Press Taylor &Francis Group. (Call no.: GE105 .A34 2008).

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### **BPA31902 Final Year Project I**

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#### **Synopsis**

This course covers introduction to PSM; introduction to research; formulation of research problem, literature review and research proposal, submission of research title proposal and PSM I seminar, and writing process of research proposal report for chapter I, II, III.

#### **References**

1. Neuman, W. L. (2010). *Social Research Methods - Qualitative and Quantitative Approaches*, 5th Edition, Allyn and Bacon Publication. Call no.: HM571 .N48 2004
2. Sekaran, U. (2009). *Research Methods for Business - A Skill Building Approach*, 4th Edition, John Wiley Publication. Call no.: HD30.4 .S44 2003
3. Donald R. Cooper, Pamela S. Schindler (2008). *Business Research Methods*. 10th Edition, Boston: McGraw-Hill. Call no.: HD30.4 .C66 2011
4. Salkind, N.J. (2011). *Statistics for people who (think they) hate statistics*. Call no.: HA29 .S25 2011
5. Panduan Menulis Tesis. Universiti Tun Hussein Onn Malaysia

## Elective I

### **BPF34003 Principle of Landscape Architecture Design**

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#### **Synopsis**

This course covers an introduction to landscape, definition, the importance of landscape development, history of landscape development. Landscape development; planning, landscape master plan, site inventory. Analysis and site planning; planning and design of the terrain, inventory analysis, flow water planning, social and psychological factors, concept plan development. Landscape design; concepts and themes, hard and soft landscaping, main entrance access, circulation, lymph nodes and sub-major, eleven dominant, rhythm and pattern in the of landscape, scale, texture.

#### **References**

1. Aldrin Abdullah. "Perancangan Lanskap." dlm. Badaruddin Mohamed et. al. (2003). "Prinsip-Prinsip Perancangan." Selangor: Prentice Hall. (Call no.: HT169.M4 .P74 2001 N2)
2. Motloch, J.L. (2001) "Introduction to Landscape Design." 2nd. ed. New York: John Wiley & Sons, Inc. (Call no.: SB472. M67 2001)
3. Norman K. Booth (2005) "Residential Landscape Architecture" Prentice Hall, USA. (Call no.: SB473 .B66 2005)
4. Leroy G. Hannebaum (1998) "Landscape Design". Prentice Hall, USA.
5. John Ormsbee Simonds (1997) "Landscape Architecture". McGraw-Hill, USA

### **BPF31603 Town Planning for Construction**

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#### **Synopsis**

This course covers definition, history and 21<sup>st</sup> century concept of town planning and development, town planning components, Malaysian planning development policy, Malaysian town planning system, planning rules and regulations, development control, development control process, site planning, planning evaluation report and planning authorization.

#### **References**

1. Ratcliffe, J., Stubbs, M., & Keeping, M. (2009). *Urban Planning and Real Estate Development* (3rd ed.). London: Routledge. (Call no.: HT165.5 .R37 2009)
2. Levy, J. M. (2011). *Contemporary Urban Planning*. (9th ed.). Boston: Longman. (Call no.: HT167 .L48 2011)
3. Hall, K. B., & Porterfield, G. A. (2001). *Community by design: new urbanism for suburbs and small communities*. New York: McGraw-Hill. (Call no.: HT167 .H29 2001)
4. Mohamed, B. & Mustapha, R. A. (2001). *Prinsip-prinsip Perancangan*. Petaling Jaya: Prentice Hall. (Call no.: HT169.M4 .P74 2001)
5. Malaysia Legal Research Board. (as at 20th October 2001). *Town and Country Planning Act 1976 (Act 172)*. Petaling Jaya: International Law Book Services. (Call no.: KPG2578.A31976 .A4 2001 rw N1)

### **BPF31703 Land Economics for Construction**

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#### **Synopsis**

This course covers Introduction to Economics of Land: Land and Real Estate: Land Use; urbanisation; Theory Development and Urban Growth, Function and Activity of the City Economic, Development, Financing for Development, Urban Planning, Policy and Development Control and Urban Issues.

#### **References**

1. McKenzie, DJ & Betts RM (2001). "Essentials of Real Estate Economics". Ohio: Thomson Learning.

2. Paul N. Balchin, Gregory H. Bull and Jeffrey L. Kieve (1995). "Urban Land Economics and Public Policy". London: Macmillan. (Call no.: HD596 .B34 1995)
3. Jack Harvey (2000). "Urban Land Economics". London: Palgrave. (Call no.: HD596 .H37 2000)
4. Barrie Needham (2006). "Planning, Law and Economics: The Rules We Make for Using Land". New York: Routledge. (Call no.:K3534 .N43 2006)
5. Kamarudin Ngah (1993). "Peraturan dan Kawalan Guna Tanah Bandar". Selangor, Dewan Bahasa dan Pustaka (Call no.: HD890.6 .K35 1993)
6. Darlow, Clive. Ismail Omar (1995). "Penilaian dan Penaksiran Pembangunan". Kuala Lumpur: Dewan Bahasa dan Pustaka. (Call no.: TH435 .D37 1995 N1)

### **BPF31803 Traffic and Transportation Management**

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#### ***Synopsis***

This subject covers introduction transportation, humanity and vehicle, Traffic Flow, Traffic Measurement, Geometry Design, Geometry crossing and Junction Design, Design of Parking Geometry and Loading Facilities, Rules of Driver and Vehicles, Traffic Control Device and Traffic Control Method.

#### ***References***

1. Myer Kutz (2011), "Handbook of transportation engineering", New York: 2<sup>nd</sup> edition McGraw-Hill (Call no.: TA1151 .H36 2011)
2. C. A. O'Flaherty (1997), "Transport planning and traffic engineering", London: Arnold. (Call no.: HE333 .T72 1997)
3. C. S. Papacostas, P. D. Prevedouros (2001). "Transportation engineering and planning", New Jersey : Prentice Hall. (Call no.: TA1145 .P36 2001 N1)
4. G. Venkatappa Rao (1996), "Principles of transportation and highway engineering", New Delhi : Tata McGraw-Hill (Call no.: TA1145 .R36 1996)
5. Fred L. Mannering, Scott S. Washburn, Walter P. Kilareski (2009), "Principles of highway engineering and traffic analysis", New Jersey: John Wiley. (Call no.: TE145 .M36 2009)



## **BPD41902 Computer Application for Construction**

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### **Synopsis**

This course covers introduction to computer application in construction, project management information system (PMIS) also computer software has been used in construction project management such as Microsoft Access, Microsoft Project and Primavera Project Planner (P3).

### **References**

1. Atchison, S. & Kennemer, B. (2010). "Using Microsoft Project". (Call no.: HD69.P75 .A82 2011)
2. Heong, N.K. (2002). "Primevara Project Planner Version 3.0; a practical guide in plain english". Kuala Lumpur: Venton Publishing. (Call no.: TA1 .C167 .N3 N1)
3. Marmel, E. J. (2004). "Master Visually Project 2003".Canada: Wiley Publishing, Inc. (Call no.: HD69.P75 .M376 2004)
4. Sun, M. & Howard, R. (2004). "Understanding IT in Construction". New York: Spon Press, Taylor & Francis Group. (Call no.: TH215.S96 2004)
5. Lambert, S., Lambert, M.D. & Preppernau, J. (2007). "Microsoft Office Access 2007 step by step". Boston: McGraw Hill. (Call no.: QA76.9.D3 .L35 2007)

## **BPD42502 Construction Facilities Management**

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### **Synopsis**

This course covers an introduction to facilities management, practice facilities, the life cycle of facilities, maintenance of internal versus outsourcing services, management of change, the implications for human resource management, design-build cycle, operation and maintenance.

### **References**

1. Barret P, and Baldry D. (2003), Facilities Management: Towards Best Practice, 2<sup>nd</sup> Edition, Blackwell Publishing, UK. (Call no.: HD1394 .B37 2003)
2. Atkin B, & Brooks, A. (2005), Total Facilities Management, 2<sup>nd</sup> Edition, Blackwell Publishing, UK. (Call no.: HD1394 .A84 2005)
3. Park, Alan (1998), Facilities management: An explanation, Macmillan Press. TS177 .P37 1998 n.1
4. Langston, C, (2003), Workplace strategies and facilities management. Butterworth Heinemann. (Call no.: TS177 .W67 2003 n.1)
5. Facilities Maintenance and Management Strategies Conference: (2006) "Facilities Maintenance and Management Strategies Conference, 6-7 September 2006", The Asia Business Forum Kuala Lumpur. (Call no.: HD1394 .F32 2006)

## **BPD42802 Construction Economics**

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### **Synopsis**

This course covers an introduction to the economy of construction, the construction industry, market demand and supply factors, the role of government in economic, investment and real estate market, property development, industrialisation and pre-fabrication methods, aspects of construction costs in the development, financial development, feasibility and method of valuation of property.

### **References**

1. Ahmad, K.H. (2011). *Construction economics*. Petaling Jaya: Pearson Malaysia. (Call no.: HD9715.A2 .K43 2011)
2. Valence, G.D. (2011) *Modern construction economics: theory and application*. London; New York: SPON Press. (Call no.: HD9715.A2 .M62 2011)
3. Myers, D. (2004) *Construction economics: a new approach*. New York: Spon Press. (Call no.: HD9715.A2 .M93 2004)

4. Eccles, T., Sayce, S. & Smith, J. (1999) *Property and construction economics*. London: International Thomson Business Press. (Call no.: HD1375 .E22 1999)
5. Gruneberg, S. L. (1997) *Construction economics: an introduction*. Basingstoke: Macmillan. (Call no.: HD9715 .G78 1997)

### **BPD42902 Construction Strategic Management**

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#### **Synopsis**

This course covers Strategic Management; Process in strategic management; Internal environment assessment; External environment assessment; Business strategies; Strategic legislation; Matrix and Analysis; Strategic implementation; Performance appraisal and measurement.

#### **References**

1. Langford, D.A. and Male, S. 2001. *Strategic management in construction*. 2<sup>nd</sup>. Ed. Blackwell Science, Malden, MA, USA. (Call no.: TH438 .L36 2001).
2. Howes, R. and Tah, J.H.M. 2003. *Strategic management applied to international construction*. Thomas Telford, London, UK. (Call no.: HD9715.A2 .H68 2003).
3. McCabe, S. 2010. *Corporate strategy in construction: understanding todays theory and practice*. Wiley-Blackwell, Malden, MA, USA. (Call no.: HD9715.A2 .M32 2010).
4. Osman, O. 2010. *Pengurusan projek dan kelestarian titik pertemuan*. Penerbit Universiti Sains Malaysia, Minden, Pulau Pinang, Malaysia. (Call no.: HD69.P75 .O52 2010).
5. Pearce, J.A and Robinson, R.B. 2011. *Strategic management: formulation, implementation, and control*. 12<sup>th</sup>. Ed. McGraw-Hill, Boston, USA. (Call no.: HD30.28 .P42 2011).

### **BPA42004 Final Year Project II**

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#### **Prerequisite: BPA31902 Final Year Project I**

#### **Synopsis**

This course covers various aspects related to implementation of final project II including explanation on PSM II, statistical application, preparation of PSM II, seminar, submission of Log Book, final PSM II report and submission of PSM II report.

#### **References**

1. Neuman, W. L. (2010). *Social Research Methods - Qualitative and Quantitative Approaches*, 5th Edition, Allyn and Bacon Publication. Call no.: HM571 .N48 2004
2. Sekaran, U. (2009). *Research Methods for Business - A Skill Building Approach*, 4th Edition, John Wiley Publication. Call no.: HD30.4 .S44 2003
3. Donald R. Cooper, Pamela S. Schindler (2008). *Business Research Methods*. 10th Edition, Boston: McGraw-Hill. Call no.: HD30.4 .C66 2011
4. Salkind, N.J. (2011). *Statistics for people who (think they) hate statistics*. Call no.: HA29 .S25 2011
5. Panduan Menulis Tesis. Universiti Tun Hussein Onn Malaysia

## Elective II

### **BPF44103 Sustainable Construction**

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#### *Synopsis*

This course covers introduction to building technology for the health and comfort of the building including an introduction to the topics of building technology, health and comfort, indoor air quality, thermodynamics, odor, noise control and hearing, the building materials for comfort and health and legal aspects in health and comfort of the building.

#### *References*

1. Coble, R.J., Hinze, J. and Haupt, T.C. (2000). "Construction Safety and Health Management". USA: Prentice Hall. (Call no.: HD7269 .B89 .C66 2000)
2. CIBSE Guide H. (2000). "Building Control Systems". London: Butterworth-Heinemann. (Call no.: TH6021 .B84 2000)
3. Binggeli, C. (2003). "Building Systems for Interior Designers". Canada: John Wiley & Sons. (Call no.: TH6014 .B56 2003)
4. Lechner, N. (2001). "Heating, Cooling, Lighting: Design Methods for Architects". Canada: John Wiley and Sons. (Call no.: TH7222 .L43 2001)
5. Stein, B. and Reynolds, J.S. (2000). "Mechanical and Electrical Equipment for Buildings, 9<sup>th</sup> Edition". USA: John Wiley and Sons. (Call no.: TH6010 .S74 2000)

### **BPF41003 Water Resources and Treatment**

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#### *Synopsis*

This course covers introduction to water quality, hydrology, wastewater characteristic, sewage system, design and principles of sewage treatment plants, sewage treatment plants and non dangerous industry waste, sewage treatment plants and treatment, cheaper wastewater system in hot climate, health and water quality, law, management and water treatment issues in Malaysia.

#### *References*

1. Droste, R.L. 1996. "Theory and Practice of Water and Wastewater Treatment." John Wiley & Sons Ltd: Boston. (Call no.: TD430 .D78 1997).
2. Khi V. Thai, Dianne Rahm & Jerrell D.Coggburn (2007). "Handbook of Globalization and the Environment". United States of America. CRC Press. Taylor & Francis Group. (Call no.: GE170 .H364 2007).
3. Tanmoy Rudra & Gurusamy Ghandi (2010). "Marine Pollution Control and Management". New Delhi. Jnanada Prakashan (P&P). (Call no.: GC1085 .R82 2010).
4. Simon Bell & Stephen Morse (2008). "Sustainability Indicators. Measuring the Immeasurable?" Second Edition. London. Earthscan. (Call no.: GE140 .B44 2008).
5. Travis Wagner & Robert Sanford (2010). "Environmental Science." Second Edition. United States of America. Wiley. John Wiley & Sons, Inc. (Call no.: GE70 .W33 2010).

### **BPF42003 Environmental Technology**

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#### *Synopsis*

This course covers introduction to environmental history, terminology and definition, environmental technology, types of waste, waste management, waste minimization, environmental technique and control, environmental and biotechnology and sustainable development.

#### *References*

1. William P. Cunningham & Mary Ann Cunningham (2006). "Environmental Sciences. Inquiry and Applications. Third Edition. United States. MC Graw Hill. (Call no.: GE105 .C86 2008).

2. Anastasia Nikolopoulou, Taisha Abraham & Farid Mirbagheri (2010). "Education for Sustainable Development". India. SAGE Publications Inc. (Call no.: GE70 .E39 2010).
3. Travis Wagner & Robert Sanford (2010). "Environmental Science." Second Edition. United States of America. Wiley. John Wiley & Sons, Inc. (Call no.: GE70 .W33 2010).
4. H. D. Kumar (2002). "Environmental Technology and Biosphere Management". USA. Enfield (NH). (Call no.: GE170 .K85 2002)
5. Maczulak, Anne (2010). 'Environmental Engineering: Designing A Sustainable Future'. Facts on File. (Call no.: TA170 M32 2010).

### **BPF44203 Real Estate Development**

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#### ***Synopsis***

This course covers Introduction to Property Development: Design and Product Types: Market-Tip, and Cycle; Capital: Preliminary Analysis: Budget and Proforma: Analysis of Site and Site Acquisition: Concept Development and Development Group; and Project Approval Process Entitlements; Construction; Marketing, Leasing, Property Management and Sales.

#### ***References***

1. Akta Pembangunan Perumahan. 2002. (Call no.: KPG2570.A31966 .A4 2000 rw n.1)
2. Hosak, W. M. 2001. *Land Development Calculations: Interactive Tools and Techniques for Site Planning, Analysis and Design*. USA: McGraw-Hill Professional. (Call no.: HD1390 .H67 2001)
3. Abdullah Mahmood, Abdul Aziz Hussin. 2004. *Pembangunan Harta Tanah: Perundangan dan Prosedur Pengurusan*. Pulau Pinang: Universiti Sains Malaysia. (Call no.: HD890.6 .A42 2004)
4. Steve Tiesdell, David Adams. 2011. *Urban Design in the Real Estate Development Process*. Chichester; Ames, Iowa: Wiley-Blackwell (Call no.: HT165.5 .U72 2011)
5. John Ratcliffe, Michael Stubbs & Mark Shepherd. 2002. *Urban Planning and Real Estate Development*. New York : Spon Press (Call no.: HT165.5 .R37 2002)

## **BPA42108 Industrial Training**

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### ***Synopsis***

Student will undergo practical training at related firm or organization. The students will be supervised and evaluated based on their performance during practical training by industry and faculty supervisor. The firm or organization will facilitate and give hands-on training such as office management, business management, operation and production management, work ethic and culture throughout the student attachment.

### ***References***

1. UTHM Practical Training Log Book



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