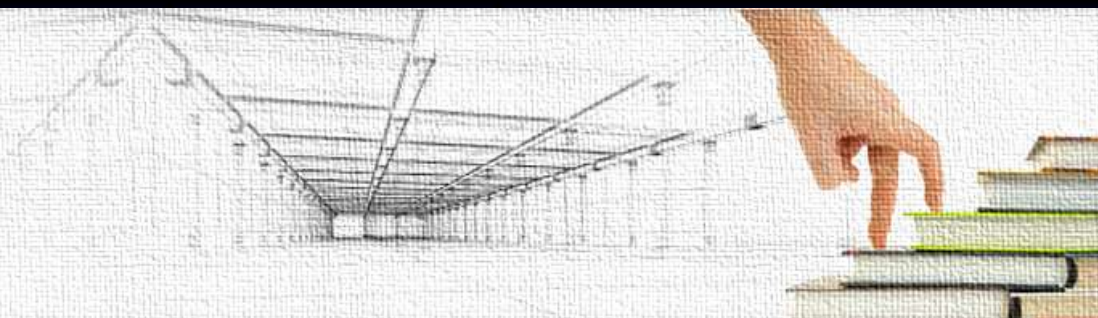




# STUDENT STUDY GUIDE DIPLOMA IN QUANTITY SURVEYING (DQS)

First Edition 2017

CAREER



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: Politeknik Sultan Azlan Shah

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**ORGANIZATION OF QUANTITY SURVEYING PROGRAMME  
SULTAN AZLAN SHAH POLYTECHNIC**

**HEAD OF DEPARTMENT**



**Ts. Sr. Mohammad Anuar Bin Safian**

**HEAD OF PROGRAMME**



**Ts. Noor Afzila Binti Mohamad**

**PPPT DH 44**

**Bachelor of Housing, Building & Planning (Hons) (Quantity Surveying)  
Diploma in Education with Civil Engineering**

**LECTURERS**



**Norleeza Binti Muhammad**

**PPPT DH 48**

**Master of Technical and Vocational  
Education (UTHM)  
Bachelor of Quantity Surveying  
(UTM)  
Diploma in Quantity Surveying  
(UTM)**



**Ayuni Binti Md. Yusof**

**PPPT DH 44**


**Master of Technical and Vocational  
Education  
Bachelor of Quantity Surveying**



**Azirah Binti Adnan**

**PPPT DH 44**

**Bachelor of Quantity Surveying  
Diploma in Quantity Surveying**

| LECTURERS  |   |   |  |
|--|---|---|--|
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|  <p><b>Shahrol Faizal Bin Abdullah</b></p> <p>PPPT DH 41<br/>Bachelor of Quantity Surveying<br/>Diploma in Civil Engineering (Education)</p>                                       |  <p><b>Hadzira Binti M.Nor</b></p> <p>PPPT DH 44 (M)<br/>Master of Science (Construction Contract Management)<br/>Bachelor of Quantity Surveying</p>  |  <p><b>Nurul Aqilah Binti Ibrahim</b></p> <p>PPPT DH 41<br/>Bachelor of Quantity Surveying<br/>Diploma in Quantity Surveying</p>                                      |  |
|  <p><b>Che Norhayati Binti Mohd Salleh</b></p> <p>PPPT DH 44<br/>Bachelor of Engineering (Geomatics)<br/>Diploma in Land Surveying</p>  |  <p><b>Khairul Anuar Bin Abdul Manap</b></p> <p>PPPT DH 44<br/>Master of Technical and Vocational Education<br/>Bachelor of Science Civil Engineering</p>                                  |  <p><b>Suriyani Binti Jamirin @Jamereli</b></p> <p>PPPT DH 44<br/>Bachelor of Education in Civil Engineering<br/>Diploma in Civil Engineering Skill and Education</p> |  <p><b>Nurul Ashikin Binti Shuhaimi</b></p> <p>PPPT DH 44 (M)<br/>Bachelor of Land Administration and Development<br/>Diploma in Land Surveying</p> |



## SUMMARY COURSES FOR DIPLOMA IN QUANTITY SURVEYING

| NO.        | COMPONENTS      | COURSE CODE | COURSE   | CONTACT HOURS |   |   | CREDIT |
|------------|-----------------|-------------|--|---------------|---|---|--------|
|            |                 |             |  | L             | P | T |        |
| SEMESTER 1 |                 |             |  |               |   |   |        |
| 1          | Compulsory      | DUB1012     | Pengajian Malaysia                             | 1             | 0 | 2 | 2      |
| 2          |                 | DUE1012     | Communicative English 1                        | 1             | 0 | 2 | 2      |
| 3          |                 | DRB1XX0     | Asas Unit Beruniform                           | 0             | 2 | 0 | 0      |
| 4          | Common Core     | DUW1012     | Occupational, Safety & Health                  | 2             | 0 | 0 | 2      |
| 5          | Discipline Core | DCQ1012     | Drafting Fundamentals                          | 1             | 2 | 0 | 2      |
| 6          |                 | DCQ1023     | Construction Technology 1                      | 3             | 0 | 0 | 3      |
| 7          |                 | DCQ1053     | Building Work Measurement 1                    | 2             | 2 | 0 | 3      |
| 8          |                 | DCQ1102     | Principles Of Structure                        | 2             | 0 | 1 | 2      |
| 9          |                 | DCQ1112     | Professional Practice 1                        | 2             | 0 | 0 | 2      |
| TOTAL      |                 |             |  | 25            |   |   | 18     |
| SEMESTER 2 |                 |             |  |               |   |   |        |
| 1          | Compulsory      | DUA2012     | Sains, Teknologi dan Kejuruteraan Dalam Islam* | 1             | 0 | 2 | 2      |
| 2          |                 | DUB2012     | Nilai Masyarakat Malaysia**                    | 1             | 0 | 2 | 2      |
| 3          |                 | DRS2XX1     | Sukan  | 0             | 2 | 0 | 1      |
| 4          |                 | DRB2XX1     | Unit Beruniform 1                              | 0             | 2 | 0 | 1      |
| 5          | Common Core     | DPB2012     | Entrepreneurship                               | 2             | 1 | 0 | 2      |
| 6          | Discipline Core | DCQ2033     | Construction Technology 2                      | 3             | 0 | 0 | 3      |
| 7          |                 | DCQ2064     | Building Works Measurement 2                   | 2             | 4 | 0 | 4      |
| 8          |                 | DCQ2142     | Building Services 1                            | 2             | 0 | 0 | 2      |
| 9          |                 | DCQ2162     | Principles of Law                              | 2             | 0 | 0 | 2      |
| 10         |                 | DCQ2172     | Basic Engineering Survey                       | 1             | 3 | 0 | 2      |
| TOTAL      |                 |             |  | 25            |   |   | 18     |
| SEMESTER 3 |                 |             |  |               |   |   |        |
| 1          | Compulsory      | DUE3012     | Communicative English 2                        | 1             | 0 | 2 | 2      |
| 2          |                 | DRK3XX2     | Kelab/ Persatuan                               | 0             | 4 | 0 | 2      |
| 3          |                 | DRB3XX2     | Unit Beruniform 2                              | 0             | 4 | 0 | 2      |
| 4          | Discipline Core | DCQ3043     | Construction Technology 3                      | 3             | 0 | 0 | 3      |
| 5          |                 | DCQ3074     | Building Works Measurement 3                   | 2             | 4 | 0 | 4      |
| 6          |                 | DCQ3122     | Professional Practice 2                        | 2             | 0 | 0 | 2      |
| 7          |                 | DCQ3152     | Building Services 2                            | 2             | 0 | 0 | 2      |
| 8          |                 | DCQ3182     | Estimating 1                                   | 2             | 0 | 1 | 2      |
| 9          |                 | DCQ3202     | Principles of Economics                        | 2             | 0 | 0 | 2      |
| TOTAL      |                 |             |  | 25            |   |   | 19     |
| SEMESTER 4 |                 |             |  |               |   |   |        |
| 1          | Compulsory      | DUE5012     | Communicative English 3                        | 1             | 0 | 2 | 2      |
| 2          | Common Core     | DCC3132     | Statistics                                     | 2             | 0 | 0 | 2      |
| 3          | Discipline Core | DCQ5083     | Building Works Measurement 4                   | 2             | 2 | 0 | 3      |
| 4          |                 | DCQ5192     | Estimating 2                                   | 2             | 0 | 1 | 2      |
| 5          |                 | DCQ5212     | Construction Economics                         | 2             | 0 | 0 | 2      |
| 6          |                 | DCQ5222     | Civil Engineering Works Measurement 1          | 1             | 2 | 0 | 2      |
| 7          |                 | DCQ5232     | Contract Administration                        | 2             | 0 | 0 | 2      |
| 8          |                 | DCQ5242     | Principles of Management                       | 2             | 0 | 0 | 2      |
| TOTAL      |                 |             |  | 21            |   |   | 17     |

| NO.        | COMPONENTS      | COURSE CODE             | COURSE                                | CONTACT HOURS    |    |   | CREDIT |
|------------|-----------------|-------------------------|---------------------------------------|------------------|----|---|--------|
|            |                 |                         |                                       | L                | P  | T |        |
| SEMESTER 5 |                 |                         |                                       |                  |    |   |        |
| 1          | Compulsory      | DUA6022                 | Komunikasi dan Penyiaran Islam        | 1                | 0  | 2 | 2      |
| 2          | Discipline Core | DCQ6094                 | Building Works Measurement 5          | 2                | 4  | 0 | 4      |
| 3          |                 | DCQ6132                 | Professional Practice 3               | 2                | 0  | 1 | 2      |
| 4          |                 | DCQ6253                 | Quantity Surveying Project            | 1                | 4  | 0 | 3      |
| 5          |                 | DCQ6262                 | Construction Management               | 2                | 0  | 1 | 2      |
| 6          |                 | Elective<br>*select two | DCQ6272                               | Value Management | 2  | 0 | 0      |
| 7          | DCQ6282         |                         | Civil Engineering Works Measurement 2 | 1                | 2  | 0 | 2      |
| 8          | DBC2012         |                         | Computer Application                  | 1                | 2  | 0 | 2      |
| 9          | DCA6272         |                         | Multimedia Production                 | 1                | 2  | 0 | 2      |
| 10         | DCC6252         |                         | Introduction to Green Construction    | 2                | 0  | 0 | 2      |
| 11         | DCG3092         |                         | Land Laws and Regulation              | 2                | 0  | 0 | 2      |
| 12         | DUFXXX2         |                         | Foreign Language                      | 1                | 0  | 2 | 2      |
| TOTAL      |                 |                         |                                       | 26               |    |   | 17     |
| SEMESTER 6 |                 |                         |                                       |                  |    |   |        |
| 1          |                 | DUT40110                | Industrial Training                   | 0                | 10 | 0 | 10     |
| TOTAL      |                 |                         |                                       | 10               |    |   | 10     |

|              |                     |  | Total Credit | %          |
|--------------|---------------------|--|--------------|------------|
| i.           | Compulsory          |  | 15           | 15         |
| ii.          | Common Care         |  | 6            | 6          |
| iii.         | Discipline Core     |  | 64           | 65         |
| iv.          | Elective            |  | 4            | 4          |
| v.           | Industrial Training |  | 10           | 10         |
| <b>TOTAL</b> |                     |  | <b>99</b>    | <b>100</b> |

|      |                                  |  | Total | %  |
|------|----------------------------------|--|-------|----|
| i.   | Lecture                          |  | 65    | 53 |
| ii.  | Practical (Practical + Tutorial) |  | 57    | 47 |
| iii. | Contact Hours                    |  | 122   | -  |

Name :  
Reg. No :

## CHECK LIST COURSES FOR DIPLOMA IN QUANTITY SURVEYING

| NO. | COMPONENTS      | COURSE CODE | COURSE   | CREDIT | SESSION: | SESSION: | SESSION: | SESSION: | SESSION: | SESSION: |
|-----|-----------------|-------------|--|--------|----------|----------|----------|----------|----------|----------|
| 1   | Compulsory      | DUB1012     | Pengajian Malaysia                             | 2      |          |          |          |          |          |          |
| 2   |                 | DUE1012     | Communicative English 1                        | 2      |          |          |          |          |          |          |
| 3   |                 | DRB1XX0     | Asas Unit Beruniform                           | 0      |          |          |          |          |          |          |
| 4   | Common Core     | DUW1012     | Occupational, Safety & Health                  | 2      |          |          |          |          |          |          |
| 5   | Discipline Core | DCQ1012     | Drafting Fundamental                           | 2      |          |          |          |          |          |          |
| 6   |                 | DCQ1023     | Construction Technology 1                      | 3      |          |          |          |          |          |          |
| 7   |                 | DCQ1053     | Building Works Measurement 1                   | 3      |          |          |          |          |          |          |
| 8   |                 | DCQ1102     | Principles Of Structure                        | 2      |          |          |          |          |          |          |
| 9   |                 | DCQ1112     | Professional Practice 1                        | 2      |          |          |          |          |          |          |
| 10  | Compulsory      | DUA2012     | Sains, Teknologi dan Kejuruteraan Dalam Islam* | 2      |          |          |          |          |          |          |
| 11  |                 | DUB2012     | Nilai Masyarakat Malaysia**                    | 2      |          |          |          |          |          |          |
| 12  |                 | DRS2XX1     | Sukan  | 1      |          |          |          |          |          |          |
| 13  |                 | DRB2XX1     | Unit Beruniform 1                              | 1      |          |          |          |          |          |          |
| 14  | Common Core     | DPB2012     | Entrepreneurship                               | 2      |          |          |          |          |          |          |
| 15  | Discipline Core | DCQ2033     | Construction Technology 2                      | 3      |          |          |          |          |          |          |
| 16  |                 | DCQ2064     | Building Works Measurement 2                   | 4      |          |          |          |          |          |          |
| 17  |                 | DCQ2142     | Building Services 1                            | 2      |          |          |          |          |          |          |
| 18  |                 | DCQ2162     | Principles Of Law                              | 2      |          |          |          |          |          |          |
| 19  |                 | DCQ2172     | Basic Engineering Survey                       | 2      |          |          |          |          |          |          |
| 20  | Compulsory      | DUE3012     | Communicative English 2                        | 2      |          |          |          |          |          |          |
| 21  |                 | DRK3XX2     | Kelab / Persatuan                              | 2      |          |          |          |          |          |          |
| 22  |                 | DRB3XX2     | Unit Beruniform 2                              | 2      |          |          |          |          |          |          |
| 23  | Discipline Core | DCQ3043     | Construction Technology 3                      | 3      |          |          |          |          |          |          |
| 24  |                 | DCQ3074     | Building Works Measurement 3                   | 4      |          |          |          |          |          |          |
| 25  |                 | DCQ3122     | Professional Practice 2                        | 2      |          |          |          |          |          |          |
| 26  |                 | DCQ3152     | Building Services 2                            | 2      |          |          |          |          |          |          |
| 27  |                 | DCQ3182     | Estimating 1                                   | 2      |          |          |          |          |          |          |
| 28  |                 | DCQ3202     | Principles Of Economics                        | 2      |          |          |          |          |          |          |
| 29  | Compulsory      | DUE5012     | Communicative English 3                        | 2      |          |          |          |          |          |          |
| 30  | Common Core     | DCC3132     | Statistics                                     | 2      |          |          |          |          |          |          |
| 31  | Discipline Core | DCQ5083     | Building Works Measurement 5                   | 3      |          |          |          |          |          |          |
| 32  |                 | DCQ5192     | Estimating 2                                   | 2      |          |          |          |          |          |          |
| 33  |                 | DCQ5212     | Construction Economics                         | 2      |          |          |          |          |          |          |
| 34  |                 | DCQ5222     | Civil Engineering Works Measurement 1          | 2      |          |          |          |          |          |          |
| 35  |                 | DCQ5232     | Contract Administration                        | 2      |          |          |          |          |          |          |
| 36  |                 | DCQ5242     | Principles of Management                       | 2      |          |          |          |          |          |          |

INDUSTRIAL TRAINING

| NO.   | COMPONENTS              | COURSE CODE | COURSE                                | CREDIT | SESSION: | SESSION: | SESSION: | SESSION: | SESSION: | SESSION:            |
|-------|-------------------------|-------------|---------------------------------------|--------|----------|----------|----------|----------|----------|---------------------|
| 37    | Compulsory              | DUA6022     | Komunikasi dan Penyiaran Islam        | 2      |          |          |          |          |          | INDUSTRIAL TRAINING |
| 38    | Discipline Core         | DCQ6094     | Building Works Measurement 5          | 4      |          |          |          |          |          |                     |
| 39    |                         | DCQ6132     | Professional Practice 3               | 2      |          |          |          |          |          |                     |
| 40    |                         | DCQ6253     | Quantity Surveying Project            | 3      |          |          |          |          |          |                     |
| 41    |                         | DCQ6262     | Construction Management               | 2      |          |          |          |          |          |                     |
| 42    | Elective<br>*select two | DCQ6272     | Value Management                      | 2      |          |          |          |          |          |                     |
| 43    |                         | DCQ6282     | Civil Engineering Works Measurement 2 | 2      |          |          |          |          |          |                     |
| 44    |                         | DBC2012     | Computer Application                  | 2      |          |          |          |          |          |                     |
| 45    |                         | DCA6272     | Multimedia Production                 | 2      |          |          |          |          |          |                     |
| 46    |                         | DCC6252     | Introduction to Green Construction    | 2      |          |          |          |          |          |                     |
| 47    |                         | DCG3092     | Land Laws and Regulation              | 2      |          |          |          |          |          |                     |
| 48    |                         | DUFXXX2     | Foreign Language                      | 2      |          |          |          |          |          |                     |
| TOTAL |                         |             |                                       | 99     | 18       | 18       | 19       | 17       | 17       |                     |

## 1.0 INTRODUCTION DEPARTMENT OF POLYTECHNIC EDUCATION (JPP)

Polytechnic education began in Malaysia with establishment of the Ungku Omar Polytechnic, Ipoh in 1969 under the United Nations Development Plan. The need to provide wider access to technical education and training for the country was given prominence by the Cabinet Committee on Education in 1979 and in the First National Industrial Plan (1985-1995).

In addition to decisions made by these committees, the Cabinet Committee on Training (1991) paved the way for the significant development in Polytechnic education. As a result, there was an increase in the number of Polytechnics and these institutions were able to offer more programmes to cater the demands of semi-professional personnel in the engineering, commerce and service sectors.

On 26th March 2010, the Cabinet further deliberated and approved the Higher Education Memorandum (No. 198/2685/2010) to establish four METrO Polytechnics in the 9th Malaysian Plan and another six in the 10th Malaysia Plan.

Polytechnic Transformation Roadmap which has been launched on 25 February 2010 by the Deputy Prime Minister was the beginning efforts to develop polytechnic's new endeavours to preserve the human capital development. The Cabinet has agreed on four thrusts in Polytechnic Transformation Roadmap as follows:

- a) Enhancing Polytechnics towards becoming the student's choice and preferred institution that is at par with universities;
- b) Development of programmes and research in niche areas, representing the different strengths of each Polytechnic;
- c) Equipping Polytechnic teaching personnel and support staff with high skills and competency; and
- d) Development of an excellent work culture and image.

### 2.0 VISION & MISSION DEPARTMENT OF POLYTECHNIC EDUCATION (JPP)

**Vision:**

To be the Premier Industry- led TVET institution

**Mision:**

- a) To provide access to quality and recognised TVET programme
- b) To develop industry-led curriculum and enhance graduate readiness through coordinated industry engagement
- c) To produce balanced and enterprising graduate through dynamic and sustainable study programme
- d) To gain international recognition through collaboration and active participations in TVET community.

### 3.0 INTRODUCTION POLITEKNIK SULTAN AZLAN SHAH (PSAS)

Politeknik Sultan Azlan Shah (PSAS) is a polytechnic established by the Government of Malaysia at the beginning of the 21st century. This 15th polytechnic in Malaysia is registered as Politeknik Sultan Azlan Shah (formerly known as Politeknik Tanjong Malim). One of the goals of the establishment of PSAS are to build new polytechnics which developed human resources that meet the needs of the New Economic Model (NEM), which focuses on innovation and creativity.

PSAS has 4 Academic Department, which are:

- Mechanical Engineering Department
- Civil Engineering Department
- Electrical Engineering Department
- Commerce Department

and 2 support department, which are:

- Mathematics, Science and Communication Department
- General Studies Department

In addition, PSAS now offers Bachelor and diploma courses.

#### 4.0 VISION & MISSION POLITEKNIK SULTAN AZLAN SHAH (PSAS)

**Vision:**

To become a premier industry led TVET institution by 2020

**Mission:**

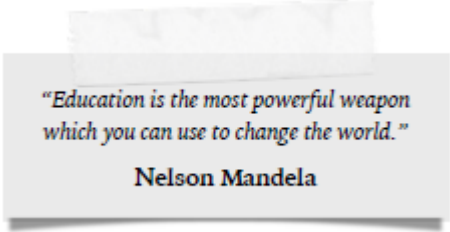
To produce holistic entrepreneurial and balanced graduates via globally recognized industry led curriculum through and innovative, dynamic and quality teaching and learning ecosystem.

#### 5.0 QUALITY POLICY

PSAS are committed to provide education and training in the field of technical and vocational education through the implementation of quality management system effectiveness enhanced continuously to produce a holistic human capital, entrepreneurial and balanced in line with the diverse traditions.

### 6.0 INTRODUCTION TO OUTCOMES BASED EDUCATION

Ministry of Higher Education, Malaysian Qualification Agency (MQA) and related professional bodies require all programs offered by Institution of Higher Learnings to adopt the Outcome Based Education approach in their teaching and learning activities. This is in line with the paradigm shift mooted by the Ministry of Higher Education to enhance the quality of education in Malaysia.



*"Education is the most powerful weapon  
which you can use to change the world."*

**Nelson Mandela**

Outcome-Based Education (OBE) has been the emphasis here in the Civil Engineering Department (JKA) primarily in Curriculum design and delivery. OBE is simply a concept that sets each part of an educational system around targeted goals or outcomes. These targeted goals or outcomes which should

be tangible and measurable are then translated into a quantity with the purpose to reflect the quality of the educational system. Every student is deemed to have achieved these targeted goals or outcomes by the end of their educational experience in JKA, PSAS.

### 6.1 What is OBE?

"Outcome-Based Education (OBE) is an academic process and approach focuses in developing expected outcomes (i.e. knowledge, skills and values) for the students to achieve prior to graduation."

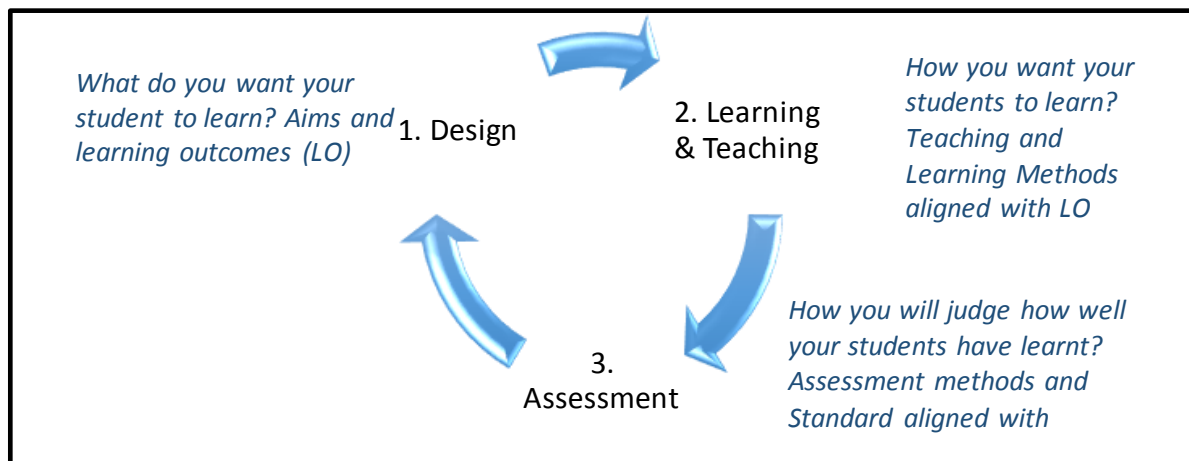
In brief, OBE answers the following questions:

- What must the student learn?
- What do the teachers or lecturers want the student to learn?
- How does what student learn affect the overall educational outcome?
- How do the teachers or lecturers make sure that the students learn what they are intended to learn?



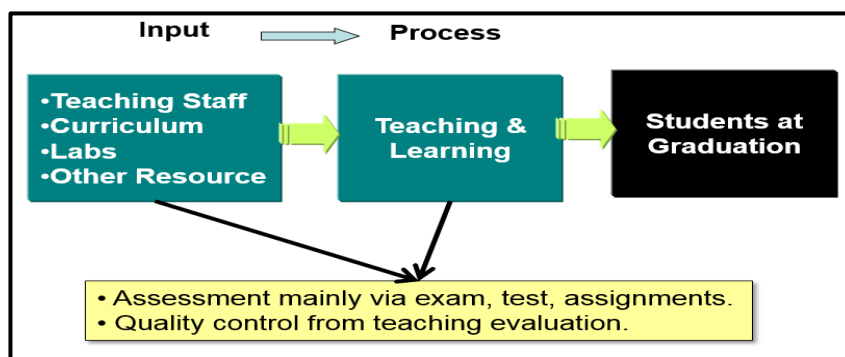


## 6.2 OBE Philosophy



Thus, OBE outlines the guidance for planning, delivering and evaluating teaching and learning activities to achieve the results expressed in terms of individual student learning outcomes as shown in **Figure 1** below.

Traditional education process focuses on the inputs



OBE shifts from measuring input and process to include measuring the output (outcome)

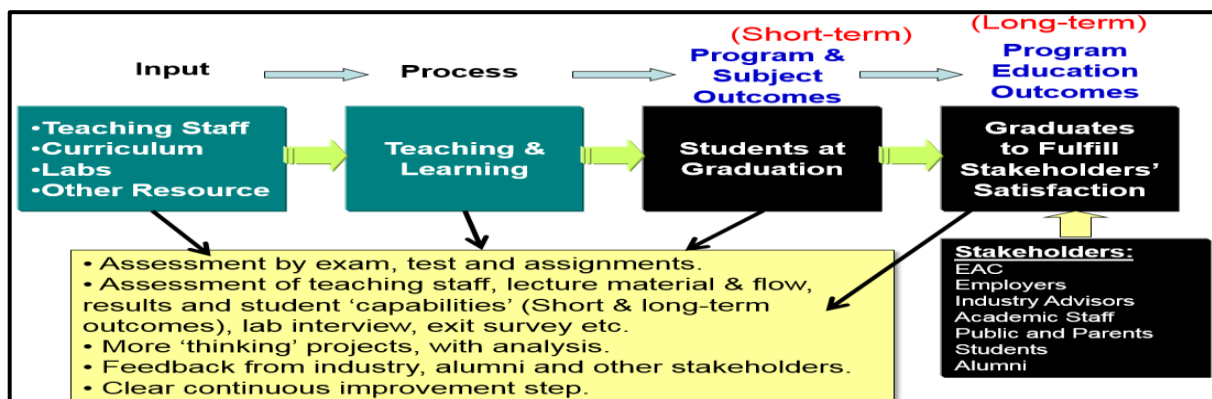


Figure 1: Outcome-Based Education versus Traditional Education Process

### 6.3 Why Implement OBE?

“OBE, like most concepts in education, has been interpreted in many ways” - (Killen, 2000).

Talking about OBE, there are 3 levels:

- a) Philosophy / Theory / Broad Perspective
- b) Curricula / structures / procedures
- c) Classroom practice (PBL, CL, AL, etc.)

An educational philosophy that states education ought to be aimed at producing particular educational outcomes is giving students a particular, minimum level of knowledge and abilities. OBE addresses the following questions:

- a) What do you want the students to learn?
- b) Why do you want them to learn?
- c) How can you best make students learn it?
- d) How will you know what they have learnt?

Outcomes Based Education focuses on student learning by:

- a) Using learning outcome statements to make explicit what the student is expected to be able to know, understand or do;
- b) Providing learning activities which will help the student to reach these outcomes;
- c) Assessing the extent to which the student meets these outcomes through the use of explicit assessment criteria.

Undergraduate curriculum needs to be transformed into adopting OBE in accordance with requirements from:

- a) Engineering Accreditation Council (EAC), Board of Engineers Malaysia (BEM) (Malaysia is the signatory of Washington Accord in 2009)
- b) Malaysian Qualifications Framework of Malaysian Qualifications Agency (MQA)
- c) Sector of Higher Education, Ministry of Education Malaysia

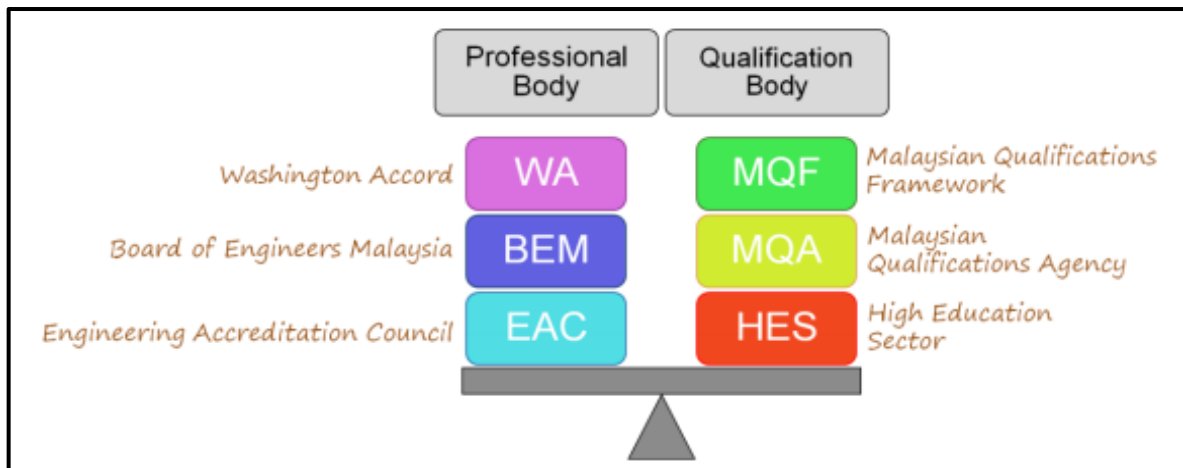


Figure 2: OBE in Education Engineering – Professional and Qualification Bodies

#### 6.4 Key Purpose of OBE

- EQUIP - ALL students with the competencies and orientations needed for future success
- IMPLEMENT - Programmes and conditions that maximize learning success for ALL students

#### 6.5 OBE Principles

- Clarity of focus* – fokus kepada apa yang pelajar boleh buat dengan jayanya. (Adakah pelajar tahu dengan jelas sebelum mereka memulakan pembelajaran apa yang mereka sepatutnya tahu dan boleh buat apabila selesai pembelajaran?)
- Design down* – rekabentuk kurikulum bermula dari definisi yang jelas mengenai apa yang pelajar akan capai di akhir pendidikan formal mereka. (Adakah kurikulum telah digubal bermula dari hasil pembelajaran dengan cara yang sistematik supaya laluan untuk mencapainya jelas?)
- High expectation* – pensyarah meletakkan standard prestasi yang tinggi kepada pelajar. (Adakah harapan dan cabaran untuk berjaya diberikan kepada semua pelajar secara saksama – tiada *bell curve*?)
- Expanded opportunities* – Pensyarah mesti menyediakan peluang yang secukupnya untuk berjaya. (Adakah pelajar diberi lebih dari satu peluang untuk mencapai standard yang ditetapkan?)

## 6.6 Flow of OBE

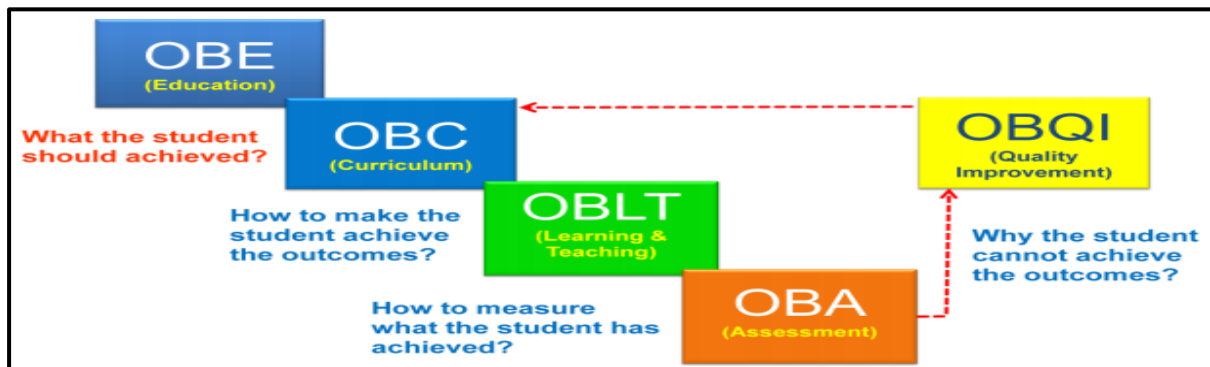


Figure 3: Flow of OBE

## 6.7 How Is OBE Implemented?

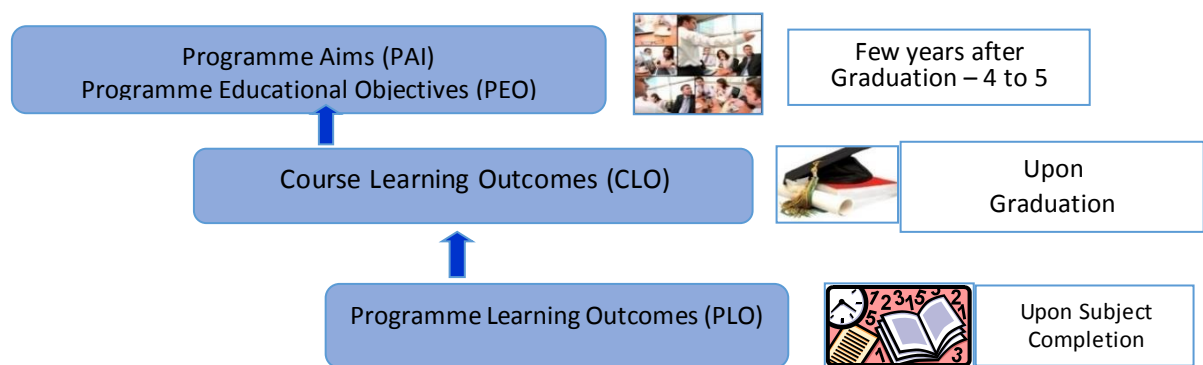


Figure 4: OBE Implemented

## 6.8 Learning Outcomes: The shift from teachers to students

Table 1: The Shift from Teachers to Students

| Teacher – Students         | Teacher – Student  |
|----------------------------|--|
| Concerns for self          | Concerns for students/ impact of teaching on students  |
| What will I teach?         | Are they learning what I teach?/What are the impacts of my teaching?/ What can they do as a result of my teaching? |
| What will I teach next?    |  |
| Content                    |  |
| Non-behavioural objectives | Behavioural objectives/ learning outcomes  |

**6.9 Differences Between Based Learning System And OBE System**

| Content Based Learning System  | Outcomes Based Learning System   |
|--|--|
| Passive students   | Active learners  |
| Assessment process – exam & grade driven   | Continuous assessment  |
| Rote learning  | Critical thinking, reasoning, reflection & action  |
| Content based/broken into subjects   | Integration knowledge, learning relevant/connected real life situations  |
| Textbook/worksheet focused & teacher centered  | Learner centered & educator/ facilitator use group/ teamwork   |
| See syllabus as rigid & non negotiable   | Learning programmes seen as guides that allow educators to be innovative & creative in designing programmes/activities     |
| Teachers/trainers responsible for learning - motivated by personality of teacher           | Learners take responsibility for their learning, learners motivated by constant feedback/ affirmation of worth             |
| Emphasis what teacher hopes to achieve   | Emphasis outcomes – what learner becomes & understands   |
| Content placed in rigid time frames  | Flexible time frames - learners work at own pace   |
| Stay in single learning institution until complete   | Learners can gather credits different institutions until achieve Qualification   |
| Previous knowledge & experience in learning field ignored – Each time attends whole course | Recognition of prior learning: after pre-assessment, learners credited outcomes demonstrated or transfer credits elsewhere |

**7.0 LEARNING OUTCOMES****In simple terms....**

Specific, understandable, measurable, assessable and student-centered statements as to what a student will be able to do at the end of a period of study.

**Why are these important?**

- Lead to a more student-centered approach;
- Mark a shift from the content of a course (what the teacher wants to teach) towards the outcome (what the student is able to do on successful completion of the programme/course);

- Guide students in learning;
- Help staff focus on what they want students to achieve;
- Provide useful information to potential students and employers.

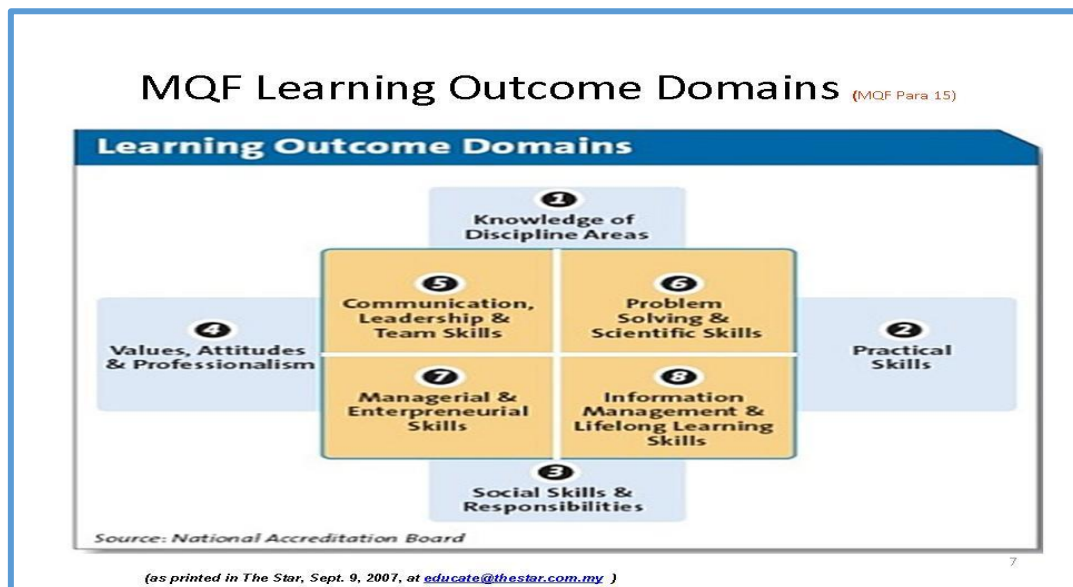


Figure 5 (a) : MQF Learning Outcome Domains

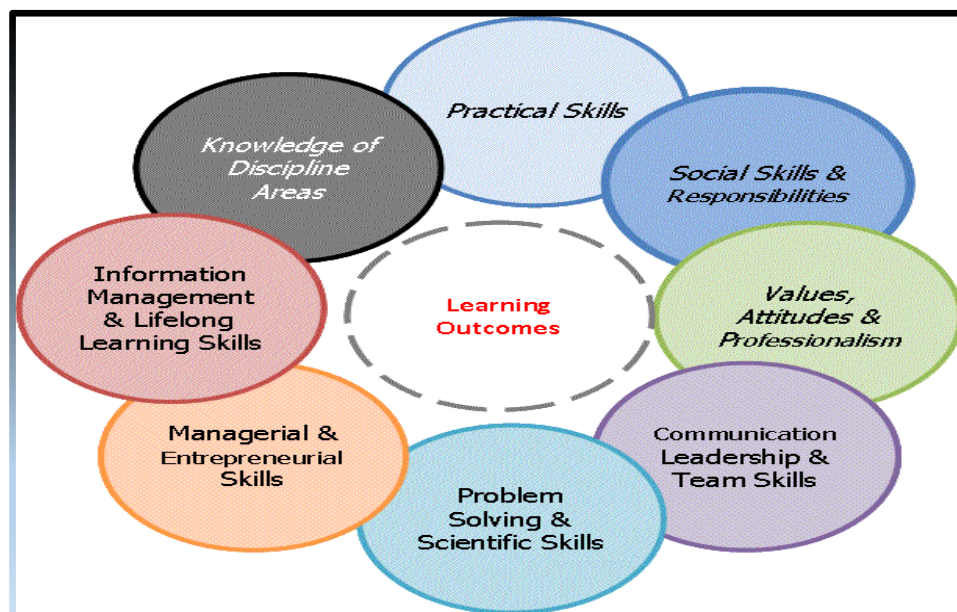


Figure 5 (b) : MQF Learning Outcome Domains

Table 2: MQF Learning Outcome Domains

|  |  |
|--|--|
| <b>Knowledge of Discipline Areas</b>   | <b>Practical Skills</b>  |
| <ul style="list-style-type: none"> <li>• The knowing of major ideas</li> <li>• Mastery of the subject matter</li> <li>• Observing and recalling information</li> <li>• Recognizing concepts</li> </ul>   | <ul style="list-style-type: none"> <li>• Carrying out a professional task e.g. running, dancing, and diagnosis;</li> <li>• Reading and understanding instructions;</li> <li>• Perceiving and responding effectively</li> <li>• Applying learnt skills in a safe environment</li> </ul>                                     |
| <b>Social Skills &amp; Responsibilities</b>  | <b>Values, Attitudes &amp; Professionalism</b>   |
| <ul style="list-style-type: none"> <li>• Demonstrating skills required in meeting people, and networking</li> <li>• Showing an interest in and concern of others</li> <li>• Being comfortable in talking with and accepting guidance and directions</li> <li>• Responding sympathetically and emphatically to others.</li> </ul> | <ul style="list-style-type: none"> <li>• Having feelings, perceptions, opinions and attitudes about oneself, towards others and the organization;</li> <li>• Having the capacity to show sympathy</li> <li>• Having empathy and the capacity for tolerance</li> <li>• Good time management and respect for time</li> </ul> |
| <b>Communication, Leadership &amp; Team Skills</b>   | <b>Problem Solving &amp; Scientific Skills</b>   |
| <ul style="list-style-type: none"> <li>• Being able to write, speak and listen</li> <li>• Being responsible and dignified</li> <li>• Being a Team player</li> <li>• Having multicultural and multiracial competencies</li> </ul>   | <ul style="list-style-type: none"> <li>• Projecting critical and lateral thinking and logical reasoning</li> <li>• Being creative and explorative</li> <li>• Being inspired</li> <li>• Producing new ideas and technologies based on existing skills</li> </ul>  |
| <b>Managerial &amp; Entrepreneurial Skills</b>   | <b>Information Management &amp; Lifelong Learning Skills</b>   |
| <ul style="list-style-type: none"> <li>• Planning and implementing effectively</li> <li>• Knowing what to do and how to do at the right time and place</li> <li>• Making judgments and decisions</li> <li>• Having good time management</li> </ul>   | <ul style="list-style-type: none"> <li>• Using ICT in the location and evaluation of information</li> <li>• Using information management systems</li> <li>• learning how to learn</li> <li>• Adopting a continuous professional development approach</li> </ul>  |

### 8.0 STUDENT LEARNING TIME (SLT)

A period of time that a student should spend on the learning-teaching activities for a given credit which comprises guided learning, independent learning and assessment time.

- a) Effective learning time or student effort in learning or the learning volume (a quantitative measurement of all learning activities), in order to achieve the specified learning outcomes;
- b) Inclusive all learning time components (learning activities), i.e. formal and non-formal. Total time required by student to learn a particular component of curriculum; i.e. Official Contact Time + Guided Learning Time + Self Study Time (Independent learning) + Assessment Time.
- c) Synonymous to student's academic load, e.g. credit hours; subjects; modules; etc.



### 9.0 ACADEMIC SYSTEM DIPLOMA IN QUANTITY SURVEYING

#### 9.1 Duration of Study

Diploma in Quantity Surveying (DUB) conducted during the three (3) years which involves 6 (Six) semester. In semester 6 (Six) students are required to attend training industry.

#### 9.2 Academic Year

The academic year Diploma in Quantity Surveying (DUB) is divided into 2 (Two) semester:

- a) Semester June and
- b) Semester December.

#### 9.3 Principle Calculation of Credits

The calculation is based on credit and are unable to meet face to face interaction that involves theory, practical, tutorials and professional practices which allocated 40 hours of learning equivalent to 1 credit hour. This can be consulted in the Student Learning Time (SLT) for each course.

Each student is required to complete for 6 (six) semesters which should enhance learning 99 credit hours for the award of the Diploma in Quantity Surveying.

## 10.0 PROGRAMME OVERVIEW

### 10.1 Programme Introduction

The goal of New Economic Model (NEM), is to transform the Malaysian economy to become one with high incomes and quality growth by 2020. It stimulates economic growth by improving worker productivity across all sectors including construction. Hence, Construction Industry Master Plan (CIMP) was planned to focus on the enhancement of productivity, efficiency, image, environment awareness, higher quality standard, safety and health employment and in another hand to develop high quality human capital.

Therefore, those parties involved in construction industry for instance Architect, Engineer, Quantity Surveyor and Contractor need to enhance their knowledge and skills through participating courses offered by training centers and education institution.

Thus, polytechnic are moving forwards to develop Diploma in Quantity Surveying programme to fulfill the needs. Quantity Surveyor is a professional who involve directly in financial management and construction contract administration from the initial stage to the completion. A part of that, Quantity Surveyor is also involve in consultation services of project cost, selection of contract, measurement of quantities and preparation of tender document.

Diploma in Quantity Surveying programme is conducted to produce assistant quantity surveying graduates with knowledge, skills and attitude regarded to be a launch pad to future carrier progression and graduates employability.

### 10.2 Programme Synopsis

Diploma in Quantity Surveying course will expose the students to the basic aspects of knowledge in Quantity Surveying theoretically and practically. The programme will be carried out in both theoretically and practically such as lecture, studio work, computer theories and practical training at firms. The scope of the programme covers as following area:

- a) Measurement
- b) Construction economics
- c) Professional practice
- d) Management
- e) Construction legal and law
- f) Procurement and contract
- g) Construction and services

The graduates from this programme will have the potential to work in both private and government sector. In addition, they will also have opportunities to further their studies in other higher learning institutions.

### 10.3 Job Prospect

This programme provides the knowledge and skills in Quantity Surveying and can also be applied to a broad range of careers. The knowledge and skills that the students acquire from the programme will enable him or her to participate in the job market as:

- a) Assistant Quantity Surveyor
- b) Contractor
- c) Lecturer/Teacher/Trainer
- d) Taker off/Measurer
- e) Contract Officer
- f) Assistant Contract Manager
- g) Purchasing Officer
- h) Insurance Officer
- i) Assistant Project Manager
- j) Assistant Project Coordinator
- k) Site Supervisor

### 10.4 Vision

To be Malaysia's number one provider of an innovative human capital through transformational education and training for the global workforce for 2015

### 10.5 Mission

Breaking boundaries for the creation of transformative and creative learning environment for an innovation lead economy.

### 10.6 Programme Aims (PAI)

The Diploma in Quantity Surveying graduates in Polytechnics, Ministry of Higher Education will have knowledge, technical skills and good attitude to adapt themselves with new technological advancement and challenges in construction industry.

**10.7 Programme Educational Objectives (PEO)**

The Diploma in Quantity Surveying programme shall produce semiprofessionals who are:

- a) Knowledgeable, technically, competence in Quantity Surveying discipline and able to adapt themselves with new technological advancement and challenge in construction industry.
- b) Effective in communication and able to prepares them with social skills, leadership qualities, good moral and behavior and willing to be responsible towards developing country and community.
- c) Capable to participate in solving problems related to Quantity Surveying matters innovatively, creatively and ethically to secure organizations against internal and external security threats.
- d) Able to demonstrate entrepreneurship skills and recognize the need of lifelong learning for successful career advancement.

**10.8 Programme Learning Outcomes (PLO)**

Upon completion of the programme, the graduates should be able to:

- a) Apply technical knowledge and social science/humanities knowledge to well defined quantity surveying problem and to the personality development of individual respectively.
- b) Demonstrate technical skills in quantity surveying practices.
- c) Communicate effectively with other community, professionals and society at large.
- d) Solve well defined quantity surveying related problems systematically by applying critical thinking skill and using appropriate tools and techniques.
- e) Apply the social skill and responsibilities.
- f) Recognize the contemporary knowledge and technologies in term of lifelong learning.
- g) Apply basic entrepreneurship skills for future career development.
- h) Apply the Quantity Surveyor's professional role and ethical responsibilities.
- i) Contribute effective leadership and teamwork responsibility.

**11.0 MATRIX OF PROGRAMME EDUCATIONAL OBJECTIVES (PEO) VS PROGRAMME LEARNING OUTCOME (PLO)****Programme Educational Objectives (PEO) :**

The Diploma in Quantity Surveying programme shall produce semi-professional who are:

| PEO |   | PLO1 | PLO2 | PLO3 | PLO4 | PLO5 | PLO6 | PLO7 | PLO8 | PLO9 |
|-----|---|------|------|------|------|------|------|------|------|------|
|     |   | LD1  | LD2  | LD3  | LD4  | LD5  | LD6  | LD7  | LD8  | LD9  |
| 1   | Knowledgeable, technically competent in quantity surveying discipline and able to adapt themselves with new technological advancement and challenges in construction industry.                  | /    | /    |      |      |      |      |      |      |      |
| 2   | Effective in communication and able to prepares them with social skills, leadership qualities, good moral and behavior and willing to be responsible towards developing country and community.  |      |      |      | /    | /    |      |      |      | /    |
| 3   | Capable to participate in solving problems related to quantity surveying matters innovatively, creatively and ethically to secure organizations against internal and external security threats. |      |      | /    |      |      |      | /    |      |      |
| 4   | Able to demonstrate entrepreneurship skills and recognize the need of lifelong learning for successful career advancement.  |      |      |      |      |      | /    |      | /    |      |

**Learning Domain**

LD1 : Knowledge

LD2 : Practical Skills

LD3 : Communication Skills

LD4 : Critical thinking and Problem Solving

LD5 : Social Skills and Responsibilities

LD6 : Continuous Learning and Information Management Skills

LD7 : Management and Entrepreneurial Skills

LD8 : Professionalism, Ethics and Moral

LD9 : Leadership and Teamwork Skills

LD6 : Continuous Learning and Information Management Skills

## 12.0 MATRIX OF COURSES VS PROGRAMME LERNING OUTCOME (PLO)

| NO         | COURSES |   | PROGRAMME LEARNING OUTCOME (PLO) |                  |                      |  |                       |                                      |                  |                     |                              |
|------------|---------|---|----------------------------------|------------------|----------------------|--|-----------------------|--------------------------------------|------------------|---------------------|------------------------------|
|            |         |   | PLO1                             | PLO2             | PLO3                 | PLO4                                       | PLO5                  | PLO6                                 | PLO7             | PLO8                | PLO9                         |
|            |         |   | Knowledge                        | Practical Skills | Communication Skills | Critical Thinking / Problem Solving Skills | Social Responsibility | Life-long Learning / Management Info | Entrepreneurship | Professional Ethics | Leadership / Teamwork Skills |
| COMPULSORY |         |   |                                  |                  |                      |  |                       |                                      |                  |                     |                              |
| 1          | DUB1012 | Pengajian Malaysia                            | /                                |                  |                      |  | /                     |                                      |                  |                     |                              |
| 2          | DUW1012 | Communicative English 1                       | /                                |                  | /                    |  |                       |                                      |                  |                     |                              |
| 3          | DRB1XX0 | Asas Unit Beruniform                          |                                  | /                |                      | /  |                       |                                      |                  |                     | /                            |
| 4          | DUA2012 | Sains, Teknologi Dan Kejuruteraan Dalam Islam | /                                |                  |                      |  | /                     |                                      |                  |                     |                              |
| 5          | DUB2012 | Nilai Masyarakat Malaysia                     | /                                |                  |                      |  | /                     |                                      |                  |                     |                              |
| 6          | DRS2XX1 | Sukan   |                                  | /                |                      | /  |                       |                                      |                  |                     | /                            |
| 7          | DRB2XX1 | Unit Beruniform 1                             |                                  | /                |                      | /  |                       |                                      |                  |                     | /                            |
| 8          | DUE3012 | Communicative English 2                       | /                                |                  | /                    |  |                       |                                      |                  |                     |                              |
| 9          | DRK3XX2 | Kelab/ Persatuan                              |                                  | /                |                      | /  |                       |                                      |                  |                     | /                            |
| 10         | DRB3XX2 | Unit Beruniform 2                             |                                  | /                |                      | /  |                       |                                      |                  |                     | /                            |
| 11         | DUE5012 | Communicative English 3                       | /                                |                  | /                    |  |                       |                                      |                  |                     |                              |
| 12         | DUA6022 | Komunikasi dan Penyiaran Islam                |                                  |                  |                      |  | /                     |                                      |                  |                     |                              |

| NO              | COURSES |                               | PROGRAMME LEARNING OUTCOME (PLO) |                  |                      |  |                       |                                      |                  |                     |                              |
|-----------------|---------|-------------------------------|----------------------------------|------------------|----------------------|--|-----------------------|--------------------------------------|------------------|---------------------|------------------------------|
|                 |         |                               | PLO1                             | PLO2             | PLO3                 | PLO4                                       | PLO5                  | PLO6                                 | PLO7             | PLO8                | PLO9                         |
|                 |         |                               | Knowledge                        | Practical Skills | Communication Skills | Critical Thinking / Problem Solving Skills | Social Responsibility | Life-long Learning / Management Info | Entrepreneurship | Professional Ethics | Leadership / Teamwork Skills |
| COMMON CORE     |         |                               |                                  |                  |                      |  |                       |                                      |                  |                     |                              |
| 13              | DCC3132 | Statistics                    | /                                |                  |                      |  |                       |                                      |                  |                     | /                            |
| 14              | DPB2012 | Entrepreneurship              | /                                | /                |                      |  |                       |                                      | /                |                     |                              |
| 15              | DUW1012 | Occupational, Safety & Health | /                                |                  |                      | /  |                       |                                      |                  | /                   |                              |
| DISCIPLINE CORE |         |                               |                                  |                  |                      |  |                       |                                      |                  |                     |                              |
| 16              | DCQ1012 | Drafting Fundamentals         | /                                | /                |                      |  |                       |                                      |                  | /                   |                              |
| 17              | DCQ1023 | Construction Technology 1     | /                                |                  | /                    |  |                       |                                      |                  |                     |                              |
| 18              | DCQ2033 | Construction Technology 2     | /                                |                  | /                    |  |                       |                                      |                  |                     |                              |
| 19              | DCQ3043 | Construction Technology 3     | /                                |                  | /                    |  |                       |                                      |                  |                     |                              |
| 20              | DCQ1053 | Building Works Measurement 1  | /                                | /                |                      |  |                       |                                      |                  | /                   |                              |
| 21              | DCQ2064 | Building Works Measurement 2  | /                                | /                |                      |  |                       |                                      |                  | /                   |                              |
| 22              | DCQ3074 | Building Works Measurement 3  | /                                | /                |                      |  |                       |                                      |                  | /                   |                              |
| 23              | DCQ5083 | Building Works Measurement 4  | /                                | /                |                      |  |                       |                                      |                  | /                   |                              |
| 24              | DCQ6094 | Building Works Measurement 5  | /                                | /                |                      |  |                       |                                      |                  | /                   |                              |
| 25              | DCQ1102 | Principles of Structure       | /                                |                  |                      | /  |                       |                                      |                  |                     |                              |

| NO | COURSES |                                       | PROGRAMME LEARNING OUTCOME (PLO) |                  |                      |  |                       |                                 |                  |                     |                              |
|----|---------|---------------------------------------|----------------------------------|------------------|----------------------|--|-----------------------|---------------------------------|------------------|---------------------|------------------------------|
|    |         |                                       | PLO1                             | PLO2             | PLO3                 | PLO4                                       | PLO5                  | PLO6                            | PLO7             | PLO8                | PLO9                         |
|    |         |                                       | Knowledge                        | Practical Skills | Communication Skills | Critical Thinking / Problem Solving Skills | Social Responsibility | Life-long Learning / Management | Entrepreneurship | Professional Ethics | Leadership / Teamwork Skills |
| 26 | DCQ1112 | Professional Practice 1               | /                                |                  | /                    |  |                       |                                 |                  |                     | /                            |
| 27 | DCQ3122 | Professional Practice 2               | /                                |                  | /                    |  |                       |                                 |                  |                     | /                            |
| 28 | DCQ6132 | Professional Practice 3               | /                                |                  | /                    |  |                       |                                 |                  |                     | /                            |
| 29 | DCQ2142 | Building Services 1                   | /                                |                  | /                    |  |                       |                                 |                  |                     | /                            |
| 30 | DCQ3152 | Building Services 2                   | /                                |                  | /                    |  |                       |                                 |                  |                     | /                            |
| 31 | DCQ2162 | Principles of Law                     | /                                |                  |                      | /  |                       |                                 |                  |                     | /                            |
| 32 | DCQ2172 | Basic Engineering Surveying           | /                                | /                |                      |  |                       |                                 |                  |                     |                              |
| 33 | DCQ3182 | Estimating 1                          | /                                |                  |                      | /  |                       | /                               |                  |                     | /                            |
| 34 | DCQ5192 | Estimating 2                          | /                                |                  |                      | /  |                       | /                               |                  |                     |                              |
| 35 | DCQ3202 | Principles of Economics               | /                                |                  |                      |  |                       |                                 |                  |                     | /                            |
| 36 | DCQ5212 | Construction Economics                | /                                |                  | /                    |  |                       |                                 |                  |                     | /                            |
| 37 | DCQ5222 | Civil Engineering Works Measurement 1 | /                                | /                |                      |  |                       |                                 |                  | /                   |                              |
| 38 | DCQ5232 | Contract Administration               | /                                |                  | /                    | /  |                       |                                 |                  |                     |                              |
| 39 | DCQ5242 | Principles of Management              | /                                |                  |                      |  | /                     |                                 |                  |                     | /                            |
| 40 | DCQ6253 | Quantity Surveying Project            | /                                |                  |                      |  |                       |                                 |                  |                     |                              |
| 41 | DCQ6262 | Construction Management               | /                                |                  | /                    |  |                       |                                 |                  |                     | /                            |



| NO                  | COURSES  |                                       | PROGRAMME LEARNING OUTCOME (PLO) |                  |                      |  |                       |                                      |                  |                     |                              |
|---------------------|----------|---------------------------------------|----------------------------------|------------------|----------------------|--|-----------------------|--------------------------------------|------------------|---------------------|------------------------------|
|                     |          |                                       | PLO1                             | PLO2             | PLO3                 | PLO4                                       | PLO5                  | PLO6                                 | PLO7             | PLO8                | PLO9                         |
|                     |          |                                       | Knowledge                        | Practical Skills | Communication Skills | Critical Thinking / Problem Solving Skills | Social Responsibility | Life-long Learning / Management Info | Entrepreneurship | Professional Ethics | Leadership / Teamwork Skills |
| ELECTIVE            |          |                                       |                                  |                  |                      |  |                       |                                      |                  |                     |                              |
| 42                  | DCQ6272  | Value Management                      | /                                |                  | /                    |  |                       | /                                    |                  |                     |                              |
| 43                  | DCQ6282  | Civil Engineering Works Measurement 2 | /                                | /                |                      |  |                       |                                      |                  | /                   |                              |
| 44                  | DCC6252  | Introduction to Green Construction    | /                                |                  |                      |  |                       |                                      |                  | /                   |                              |
| 45                  | DCG3092  | Land Laws & Regulation                | /                                |                  | /                    |  |                       |                                      |                  |                     |                              |
| 46                  | DCA6272  | Multimedia Production                 | /                                | /                |                      |  | /                     |                                      |                  |                     |                              |
| 47                  | DBC2012  | Computer Application                  | /                                | /                |                      |  |                       |                                      |                  |                     |                              |
| 48                  | DUF1XX2  | Foreign Language                      | /                                |                  | /                    |  |                       |                                      |                  |                     |                              |
| INDUSTRIAL TRAINING |          |                                       |                                  |                  |                      |  |                       |                                      |                  |                     |                              |
| 49                  | DUT40110 | Industrial Training                   |                                  | /                | /                    |  |                       |                                      |                  | /                   | /                            |

**13.0 STRUCTURE FRAMEWORK PROGRAMME FOR DIPLOMA IN QUANTITY SURVEYING**

The structure of the framework programme and curriculum components that define the courses offered and the number of credits and merits. The program structure is as follows:

| No.   | Components          | Total Credit | %   |
|-------|---------------------|--------------|-----|
| 1     | Compulsory          | 15           | 15  |
| 2     | Common Core         | 6            | 6   |
| 3     | Discipline Core     | 64           | 65  |
| 4     | Elective            | 4            | 4   |
| 5     | Industrial Training | 10           | 10  |
| TOTAL |                     | 99           | 100 |

**14.0 PROGRAMME STRUCTURE FOR DIPLOMA IN QUANTITY SURVEYING**

| COMPONENTS      | COURSE CODE | COURSE   | CONTACT HOURS |   |   | CREDIT HOURS |
|-----------------|-------------|--|---------------|---|---|--------------|
|                 |             |  | L             | P | T |              |
| SEMESTER 1      |             |  |               |   |   |              |
| COMPULSORY      | DUB1012     | PENGAJIAN MALAYSIA                             | 1             | 0 | 2 | 2            |
|                 | DUE1012     | COMMUNICATIVE ENGLISH 1                        | 1             | 0 | 2 | 2            |
|                 | DRB1XX0     | ASAS UNIT BERUNIFORM                           | 0             | 2 | 0 | 0            |
| COMMON CORE     | DUW1012     | OCCUPATIONAL, SAFETY AND HEALTH                | 2             | 0 | 0 | 2            |
| DISCIPLINE CORE | DCQ1012     | DRAFTING FUNDAMENTALS                          | 1             | 2 | 0 | 2            |
|                 | DCQ1023     | CONSTRUCTION TECHNOLOGY 1                      | 3             | 0 | 0 | 3            |
|                 | DCQ1053     | BUILDING WORKS MEASUREMENT 1                   | 2             | 2 | 0 | 3            |
|                 | DCQ1102     | PRINCIPLE OF STRUCTURE                         | 2             | 0 | 1 | 2            |
|                 | DCQ1112     | PROFESSIONAL PRACTICE 1                        | 2             | 0 | 0 | 2            |
| TOTAL           |             |  | 25            |   |   | 18           |
| SEMESTER 2      |             |  |               |   |   |              |
| COMPULSORY      | DUA2012     | SAINS TEKNOLOGI DAN KEJURUTERAAN DALAM ISLAM * | 1             | 0 | 2 | 2            |
|                 | DUB2012     | NILAI MASYARAKAT MALAYSIA **                   | 1             | 0 | 2 | 2            |
|                 | DRS2XX1     | SUKAN  | 0             | 2 | 0 | 1            |
|                 | DRB2XX1     | BADAN BERUNIFORM 1                             | 0             | 2 | 0 | 1            |
| COMMON CORE     | DPB2012     | ENTREPRENEURSHIP                               | 2             | 1 | 0 | 2            |
| DISCIPLINE CORE | DCQ2033     | CONSTRUCTION TECHNOLOGY 2                      | 3             | 0 | 0 | 3            |
|                 | DCQ2064     | BUILDING WORKS MEASUREMENT 2                   | 2             | 4 | 0 | 4            |
|                 | DCQ2142     | BUILDING SERVICES 1                            | 2             | 0 | 0 | 2            |
|                 | DCQ2162     | PRINCIPLE OF LAW                               | 2             | 0 | 0 | 2            |
|                 | DCQ2172     | BASIC ENGINEERING SURVEYING                    | 1             | 3 | 0 | 2            |
| TOTAL           |             |  | 25            |   |   | 18           |

| COMPONENTS      | COURSE CODE | COURSE                                | CONTACT HOURS |   |   | CREDIT HOURS |
|-----------------|-------------|---------------------------------------|---------------|---|---|--------------|
|                 |             |                                       | L             | P | T |              |
| SEMESTER 3      |             |                                       |               |   |   |              |
| COMPULSORY      | DUE3012     | COMMUNICATIVE ENGLISH 2               | 1             | 0 | 2 | 2            |
|                 | DRK3XX2     | KELAB / PERSATUAN                     | 0             | 4 | 0 | 2            |
|                 | DRB3XX2     | UNIT BERUNIFORM 2                     | 0             | 4 | 0 | 2            |
| DISCIPLINE CORE | DCQ3043     | CONSTRUCTION TECHNOLOGY 3             | 3             | 0 | 0 | 3            |
|                 | DCQ3074     | BUILDING WORKS MEASUREMENT 3          | 2             | 4 | 0 | 4            |
|                 | DCQ3122     | PROFESSIONAL PRACTICE 2               | 2             | 0 | 0 | 2            |
|                 | DCQ3152     | BUILDING SERVICES 2                   | 2             | 0 | 0 | 2            |
|                 | DCQ3182     | ESTIMATING 1                          | 2             | 0 | 1 | 2            |
|                 | DCQ3202     | PRINCIPLE OF ECONOMICS                | 2             | 0 | 0 | 2            |
| TOTAL           |             |                                       | 25            |   |   | 19           |
| SEMESTER 4      |             |                                       |               |   |   |              |
| COMPULSORY      | DUE5012     | COMMUNICATIVE ENGLISH 3               | 1             | 0 | 2 | 2            |
| COMMON CORE     | DCC3132     | STATISTICS                            | 2             | 0 | 0 | 2            |
| DISCIPLINE CORE | DCQ5083     | BUILDING WORKS MEASUREMENT 4          | 2             | 2 | 0 | 3            |
|                 | DCQ5192     | ESTIMATING 2                          | 2             | 0 | 1 | 2            |
|                 | DCQ5212     | CONSTRUCTION ECONOMICS                | 2             | 0 | 0 | 2            |
|                 | DCQ5222     | CIVIL ENGINEERING WORKS MEASUREMENT 1 | 1             | 2 | 0 | 2            |
|                 | DCQ5232     | CONTRACT ADMINISTRATION               | 2             | 0 | 0 | 2            |
|                 | DCQ5242     | PRINCIPLE OF MANAGEMENT               | 2             | 0 | 0 | 2            |
| TOTAL           |             |                                       | 25            |   |   | 17           |

| COMPONENTS      | COURSE CODE | COURSE                                | CONTACT HOURS |    |   | CREDIT HOURS |
|-----------------|-------------|---------------------------------------|---------------|----|---|--------------|
|                 |             |                                       | L             | P  | T |              |
| SEMESTER 5      |             |                                       |               |    |   |              |
| COMPULSORY      | DUA6022     | KOMUNIKASI DAN PENYIARAN ISLAM        | 1             | 0  | 2 | 2            |
| DISCIPLINE CORE | DCQ6094     | BUILDING WORKS MEASUREMENT 5          | 2             | 4  | 0 | 4            |
|                 | DCQ6132     | PROFESSIONAL PRACTICE 3               | 2             | 0  | 1 | 2            |
|                 | DCQ6253     | QUANTITY SURVEYING PROJECT            | 1             | 4  | 0 | 3            |
|                 | DCQ6262     | CONSTRUCTION MANAGEMENT               | 2             | 0  | 1 | 2            |
| ELECTIVE        | DCQ6272     | VALUE MANAGEMENT                      | 2             | 0  | 0 | 2            |
|                 | DCQ6282     | CIVIL ENGINEERING WORKS MEASUREMENT 2 | 1             | 2  | 0 | 2            |
|                 | DCC6252     | INTRODUCTION TO GREEN CONSTRUCTION    | 2             | 0  | 0 | 2            |
|                 | DCG3092     | LAND LAWS & REGULATIONS               | 2             | 0  | 0 | 2            |
|                 | DCA6272     | MULTIMEDIA PRODUCTION                 | 1             | 2  | 0 | 2            |
|                 | DBC2012     | COMPUTER APPLICATION                  | 1             | 2  | 0 | 2            |
|                 | DUFXXX2     | FOREIGN LANGUAGE                      | 1             | 0  | 2 | 2            |
| TOTAL           |             |                                       | 26            |    |   | 17           |
| SEMESTER 6      |             |                                       |               |    |   |              |
|                 | DUT40110    | INDUSTRIAL TRAINING                   | 0             | 10 | 0 | 10           |
| TOTAL           |             |                                       | 10            |    |   | 10           |

| NO | COMPONENT                        | TOTAL | %  |
|----|----------------------------------|-------|----|
| 1  | Lecture                          | 65    | 53 |
| 2  | Practical (Practical + Tutorial) | 57    | 47 |
| 3  | Contact Hours                    | 122   | -  |

### Legend / Notes :

**L** : Lecture

**P** : Practical / Lab

**T** : Tutorial

The numbers indicated under **L, P & T** represent the contact hours per week, to be used as a guide for time table preparation

### Elective Course

Student are required to take a **minimum of 4 (Four)** credits of elective courses.

\*For Muslim Students

\*\*For Non Muslim Students

### For Co-Curriculum

1. Path 1 : Sport and Club
2. Path 2 : Uniform Unit

### Uniform Unit

Students who choose Uniform Unit are required to **complete 5 (Five) modules** for commissioning.

1. DRB1XX0 : Asas Unit Beruniform is a **prerequisite** to DRB2XX1:Unit Beruniform 1
2. DRB2XX1 and DRB3XX2 are graded.
3. DRB5XX0 and DRB6XX0 are optional, non-graded and audited courses with full assessment. Upon completion, students are entitled for commissioning.

## 15.0 SUMMARY OF PROGRAMME STRUCTURE VS ASSESMENT

| NO                 | COURSE CODE | COURSE                          | COMPONENTS      | CREDIT HOURS | CA  | FE   |
|--------------------|-------------|---------------------------------|-----------------|--------------|-----|------|
| SEMESTER 1         |             |                                 |                 |              |     |      |
| 1.                 | DUB1012     | PENGAJIAN MALAYSIA              | COMPULSORY      | 2            | 70  | 30   |
| 2.                 | DUE1012     | COMMUNICATIVE ENGLISH 1         |                 | 2            | 100 | None |
| 3.                 | DRB1XX0     | ASAS UNIT BERUNIFORM            |                 | 0            |     |      |
| 4.                 | DUW1012     | OCCUPATIONAL, SAFETY AND HEALTH | COMMON CORE     | 2            | 100 | None |
| 5.                 | DCQ1012     | DRAFTING FUNDAMENTALS           | DISCIPLINE CORE | 2            | 100 | None |
| 6.                 | DCQ1023     | CONSTRUCTION TECHNOLOGY 1       |                 | 3            | 50  | 50   |
| 7.                 | DCQ1053     | BUILDING WORKS MEASUREMENT 1    |                 | 3            | 60  | 40   |
| 8.                 | DCQ1102     | PRINCIPLE OF STRUCTURE          |                 | 2            | 50  | 50   |
| 9.                 | DCQ1112     | PROFESSIONAL PRACTICE 1         |                 | 2            | 50  | 50   |
| TOTAL CREDIT HOURS |             |                                 |                 | 18           |     |      |

| NO                 | COURSE CODE | COURSE   | COMPONENTS      | CREDIT HOURS | CA  | FE   |
|--------------------|-------------|--|-----------------|--------------|-----|------|
| SEMESTER 2         |             |  |                 |              |     |      |
| 1.                 | DUA2012     | SAINS TEKNOLOGI DAN KEJURUTERAAN DALAM ISLAM * | COMPULSORY      | 2            | 100 | None |
| 2.                 | DUB2012     | NILAI MASYARAKAT MALAYSIA **                   |                 | 2            | 100 | None |
| 3.                 | DRS2XX1     | SUKAN  |                 | 1            |     |      |
| 4.                 | DRB2XX1     | BADAN BERUNIFORM 1                             |                 | 1            |     |      |
| 5.                 | DPB2012     | ENTREPRENEURSHIP                               | COMMON CORE     | 2            |     |      |
| 6.                 | DCQ2033     | CONSTRUCTION TECHNOLOGY 2                      | DISCIPLINE CORE | 3            | 50  | 50   |
| 7.                 | DCQ2064     | BUILDING WORKS MEASUREMENT 2                   |                 | 4            | 60  | 40   |
| 8.                 | DCQ2142     | BUILDING SERVICES 1                            |                 | 2            | 50  | 50   |
| 9.                 | DCQ2162     | PRINCIPLE OF LAW                               |                 | 2            | 50  | 50   |
| TOTAL CREDIT HOURS |             |  |                 | 18           |     |      |

\* FOR MUSLIM STUDENTS

\*\* FOR NON MUSLIM STUDENTS



| NO                 | COURSE CODE | COURSE                       | COMPONENTS      | CREDIT HOURS | CA  | FE   |
|--------------------|-------------|------------------------------|-----------------|--------------|-----|------|
| SEMESTER 3         |             |                              |                 |              |     |      |
| 1.                 | DUE3012     | COMMUNICATIVE ENGLISH 2      | COMPULSORY      | 2            | 100 | None |
| 2.                 | DRK3XX2     | KELAB / PERSATUAN            |                 | 2            |     |      |
| 3.                 | DRB3XX2     | UNIT BERUNIFORM 2            |                 | 2            |     |      |
| 4.                 | DCQ3043     | CONSTRUCTION TECHNOLOGY 3    | DISCIPLINE CORE | 3            | 50  | 50   |
| 5.                 | DCQ3074     | BUILDING WORKS MEASUREMENT 3 |                 | 4            | 60  | 40   |
| 6.                 | DCQ3122     | PROFESSIONAL PRACTICE 2      |                 | 2            | 50  | 50   |
| 7.                 | DCQ3152     | BUILDING SERVICES 2          |                 | 2            | 50  | 50   |
| 8.                 | DCQ3182     | ESTIMATING 1                 |                 | 2            | 50  | 50   |
| 9.                 | DCQ3202     | PRINCIPLE OF ECONOMICS       |                 | 2            | 50  | 50   |
| TOTAL CREDIT HOURS |             |                              |                 | 19           |     |      |

| NO                 | COURSE CODE | COURSE                                | COMPONENTS      | CREDIT HOURS | CA  | FE   |
|--------------------|-------------|---------------------------------------|-----------------|--------------|-----|------|
| SEMESTER 4         |             |                                       |                 |              |     |      |
| 1.                 | DUE5012     | COMMUNICATIVE ENGLISH 3               | COMPULSORY      | 2            | 100 | None |
| 2.                 | DCC3132     | STATISTICS                            | COMMON CORE     | 2            | 50  | 50   |
| 3.                 | DCQ5083     | BUILDING WORKS MEASUREMENT 4          | DISCIPLINE CORE | 3            | 60  | 40   |
| 4.                 | DCQ5192     | ESTIMATING 2                          |                 | 2            | 50  | 50   |
| 5.                 | DCQ5212     | CONSTRUCTION ECONOMICS                |                 | 2            | 50  | 50   |
| 6.                 | DCQ5222     | CIVIL ENGINEERING WORKS MEASUREMENT 1 |                 | 2            | 60  | 40   |
| 7.                 | DCQ5232     | CONTRACT ADMINISTRATION               |                 | 2            | 50  | 50   |
| 8.                 | DCQ5242     | PRINCIPLE OF MANAGEMENT               |                 | 2            | 50  | 50   |
| TOTAL CREDIT HOURS |             |                                       |                 | 17           |     |      |

| NO                | COURSE CODE | COURSE                                | COMPONENTS      | CREDIT HOURS | CA  | FE   |
|-------------------|-------------|---------------------------------------|-----------------|--------------|-----|------|
| SEMESTER 5        |             |                                       |                 |              |     |      |
| 1.                | DUA6022     | KOMUNIKASI DAN PENYIARAN ISLAM        | COMPULSORY      | 2            | 100 | None |
| 2.                | DCQ6094     | BUILDING WORKS MEASUREMENT 5          | DISCIPLINE CORE | 4            | 60  | 40   |
| 3.                | DCQ6132     | PROFESSIONAL PRACTICE 3               |                 | 2            | 50  | 50   |
| 4.                | DCQ6253     | QUANTITY SURVEYING PROJECT            |                 | 3            | 100 | None |
| 5.                | DCQ6262     | CONSTRUCTION MANAGEMENT               |                 | 2            | 50  | 50   |
| 6.                | DCQ6272     | VALUE MANAGEMENT                      |                 | ELECTIVE     | 2   | 50   |
| 7.                | DCQ6282     | CIVIL ENGINEERING WORKS MEASUREMENT 2 | 2               |              | 60  | 40   |
| 8.                | DCC6252     | INTRODUCTION TO GREEN CONSTRUCTION    | 2               |              | 50  | 50   |
| 9.                | DCG3092     | LAND LAWS & REGULATIONS               | 2               |              | 50  | 50   |
| 10.               | DCA6272     | MULTIMEDIA PRODUCTION                 | 2               |              | 100 | None |
| 11.               | DBC2012     | COMPUTER APPLICATION                  | 2               |              | 100 | None |
| 12.               | DUFXXX2     | FOREIGN LANGUAGE                      | 2               |              | 100 | None |
| TOTAL CREDIT HOUR |             |                                       |                 | 17           |     |      |

| NO         | COURSE<br>CODE | COURSE              | COMPONENTS | CREDIT<br>HOURS | CA  | FE   |
|------------|----------------|---------------------|------------|-----------------|-----|------|
| SEMESTER 6 |                |                     |            |                 |     |      |
| 1.         | DUT40110       | INDUSTRIAL TRAINING |            | 10              | 100 | None |

**16.0 COURSES SYNOPSIS AND COURSES ASSESSMENT**

The course assessment comprises two components, namely:

a) **Coursework Assessment (CA)**

Coursework assessments that measures knowledge, practical skills and generic skills are carried out in the form of continuous assessment. Coursework assessments total score comprises the knowledge and practical marks ONLY. It does not include the mark of generic skills.

b) **Final Examination Assessment (FE)**

Final examination is carried out at the end of the semester.

**KURSUS** : **DUB1012 - PENGAJIAN MALAYSIA**  
**KREDIT** : **2**  
**PRASYARAT** : **TIADA**

#### SINOPSIS

**PENGAJIAN MALAYSIA** memupuk penghayatan ke arah melahirkan generasi yang cintakan negara. Kursus ini juga dapat mendidik kelompok masyarakat yang mempunyai daya juang yang tinggi dan mampu menghadapi cabaran di peringkat antarabangsa. Kursus ini memberi penghayatan tentang sejarah dan politik, perlembagaan Malaysia, kemasyarakatan dan perpaduan, pembangunan negara dan isu-isu keprihatinan negara. Objektif kursus ini adalah untuk melahirkan warganegara yang setia dan cintakan negara, berwawasan serta bangga menjadi rakyat Malaysia.

#### HASIL PEMBELAJARAN KURSUS (CLO)

Di akhir kursus ini, pelajar akan dapat :

1. Menerangkan dengan baik sejarah bangsa dan negara. (C2, LD1)
2. Menjelaskan Perlembagaan Malaysia dan sistem pemerintahan negara. (C2, LD1)
3. Melaksanakan aktiviti berkaitan kenegaraan ke arah peningkatan patriotisme pelajar. (C3, LD1: A3, LD6)

#### RINGKASAN KURSUS:

- TOPIK 1 : Sejarah Dan Politik
- TOPIK 2 : Perlembagaan Malaysia Dan Sistem Pemerintahan Negara
- TOPIK 3 : Kemasyarakatan Dan Perpaduan
- TOPIK 4 : Pembangunan Negara
- TOPIK 5 : Isu-Isu Keprihatinan Negara

#### PENILAIAN KURSUS:

Pentaksiran Kerja Kursus (KK) – 70%, Peperiksaan Akhir (PA) – 30%

| TOPIK |   |   |   |   | KAEDAH PENTAKSIRAN UNTUK KERJA KURSUS (KK) |          |              |
|-------|---|---|---|---|--|----------|--------------|
| 1     | 2 | 3 | 4 | 5 | Kuiz                                       | E-Folio  | Pembentangan |
|       |   |   |   |   | *(2) 20%                                   | *(1) 30% | *(1) 20%     |
| ●     |   |   |   |   | √  |          |              |
|       | ● |   |   |   | √  |          |              |
|       |   | ● |   |   |  | √        | **√          |

**COURSE** : **DUE1012 COMMUNICATIVE ENGLISH 1**  
**CREDIT(S)** : **2**  
**PRE REQUISITE(S)** : **NONE**

### SYNOPSIS

**COMMUNICATIVE ENGLISH 1** focuses on developing students' speaking skills to enable them to communicate effectively and confidently in group discussions and in a variety of social interactions. It is designed to provide students with appropriate reading skills to comprehend a variety of texts. It is also aimed to equip students with effective presentation skills.

### COURSE LEARNING OUTCOMES (CLO):

Upon completion of this course, students should be able to:

1. Apply appropriate language and communication skills in discussions and conversations. (C3)
2. Apply effective listening skills to demonstrate comprehension of audio recordings in a variety of situations. (C3)
3. Comprehend a variety of reading texts by applying effective reading skills. (C2)
4. Write in response to a stimulus using appropriate language. (C3)
5. Deliver an effective presentation using appropriate visual aids, verbal and non-verbal communication skills. (C3, A3)

### COURSE SUMMARY:

TOPIC 1 : Oral Communication  
 TOPIC 2 : Current Issues / Topics of Interest  
 TOPIC 3 : Oral Presentation

### COURSE ASSESSMENT:

Coursework Assessment (CA) - 100%

| TOPICS |   |   | ASSESSMENT TASKS FOR COURSEWORK ASSESSMENT (CA) |                    |                  |                  |              |
|--------|---|---|---|--------------------|------------------|------------------|--------------|
| 1      | 2 | 3 | Group Discussion                                | Test 1 (Listening) | Test 2 (Reading) | Test 3 (Writing) | Presentation |
|        |   |   | *(1) 20%  | *(1) 20%           | *(1) 20%         | *(1) 10%         | *(1) 30%     |
| ●      |   |   | ✓   |                    |                  |                  |              |
| ●      |   |   |   | ✓                  |                  |                  |              |
|        | ● |   |   |                    | ✓                |                  |              |
|        | ● |   |   |                    |                  | ✓                |              |
|        |   | ● |   |                    |                  |                  | ✓            |
|        |   |   |   |                    |                  |                  | **✓          |

|                         |          |  |
|-------------------------|----------|--|
| <b>COURSE</b>           | <b>:</b> | <b>DUW1012 OCCUPATIONAL, SAFETY &amp; HEALTH</b> |
| <b>CREDIT(S)</b>        | <b>:</b> | <b>2</b>   |
| <b>PRE REQUISITE(S)</b> | <b>:</b> | <b>NONE</b>                                      |

**SYNOPSIS**

**OCCUPATIONAL SAFETY AND HEALTH** course is designed to impart understanding of the self-regulatory concepts and provisions under the Occupational Safety & Health Act (OSHA). This course presents the responsibilities of employers and employees in implementing and complying with the safety procedures at work. This course provide an understanding of the key issues in OSH management, incident prevention, Emergency Preparedness and Response (EPR), fire safety, occupational first aid, Hazard Identification, Risk Assessment and Risk Control (HIRARC) and guide the students gradually into this multi-disciplinary science.

**COURSE LEARNING OUTCOMES (CLO):**

Upon completion of this course, students should be able to:

1. Identify the OSH legislation and its compliance in Malaysia. (C2, LD1)
2. Explain briefly incident hazards, risks and safe work practices in order to maintain health and safe work environment. (C2, LD1)
3. Discuss cooperatively in responding to an accident action at workplace. (C3,LD1; A2,LD4)
4. Adhere to the safety procedures in respective fields. (A3, LD8)

**COURSE SUMMARY:**

|           |  |
|-----------|--|
| TOPIC 1 : | Introduction to Occupational Safety & Health Legislation       |
| TOPIC 2 : | Occupational Safety & Health Management System                 |
| TOPIC 3 : | Incident Prevention  |
| TOPIC 4 : | Emergency Preparedness, Respond & Fire Safety                  |
| TOPIC 5 : | Occupational First Aid   |
| TOPIC 6   | Hazard Identification, Risk Assessment & Risk Control (HIRARC) |

**OPTIONAL:**

*Select the optional topic regarding student's related field. This is compulsory to fulfill the courses requirement of SIX (6) topics from the general section and ONE (1) topic from the optional section*

|           |                                    |
|-----------|------------------------------------|
| TOPIC 7 : | Workplace Environment & Ergonomics |
| TOPIC 8 : | Chemical Safety                    |



TOPIC 9 : Kitchen Safety

TOPIC 10 : Tourism & Adventure Safety

TOPIC 11 : Electrical Safety

TOPIC 12 : Construction Safety

TOPIC 13 : Automotive Workshop Safety

TOPIC 14 : Tools & Machinery Safety

### COURSE ASSESSMENT:

Coursework Assessment (CA) - 100%

| TOPICS |   |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK |          |            |                  |
|--------|---|---|---|---|---|---|---------------------------------|----------|------------|------------------|
| 1      | 2 | 3 | 4 | 5 | 6 | 7 | Test                            | Quiz     | Case Study | Group Discussion |
|        |   |   |   |   |   |   | *(1) 20%                        | *(2) 10% | *(3) 60%   | *(1) 10%         |
| ●      | ● |   |   |   |   |   | ✓                               | ✓        |            |                  |
|        |   | ● | ● |   |   |   | ✓                               | ✓        |            |                  |
|        |   |   |   |   | ● |   |                                 |          | ✓          |                  |
|        |   |   |   | ● |   |   | ✓                               |          | ✓          |                  |
|        |   |   |   |   | ● |   |                                 |          |            | ✓                |
|        |   |   |   |   |   | ● |                                 |          | ✓          |                  |

**COURSE :** DCQ1012 DRAFTING FUNDAMENTALS

**CREDIT(S) :** 2

**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**DRAFTING FUNDAMENTALS** provides students' knowledge regarding the basic principles of architectural and structural drawings. The course emphasizes on basic drawings such as orthographic projection, isometric and section. It also covers construction drawings, structural drawings, diagrammatic plumbing and sanitary and layout.

### COURSE LEARNING OUTCOMES (CLO):

Upon completion of this course, students should be able to:

1. Classify clearly the usage of drawing tools and methods of basic drawing. (C3, PLO1)
2. Perform the architectural and structural drawing according to the drafting technique. (P4, PLO2)
3. Demonstrate professionalism, good ethics and responsibility in every task given. (A3, PLO8)

### COURSE SUMMARY:

TOPIC 1 : Fundamental Of Drawing

TOPIC 2 : Orthographic Projection

TOPIC 3 : Isometric

TOPIC 4 : Sectional View

TOPIC 5 : Construction Drawing

TOPIC 6 : Structural Drawing

### COURSE ASSESSMENT:

Coursework Assessment (CA) - 100%

| TOPICS |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |          |                  |
|--------|---|---|---|---|---|--------------------------------------|----------|----------|------------------|
| 1      | 2 | 3 | 4 | 5 | 6 | Test                                 | Quiz     | Project  | Practical Studio |
|        |   |   |   |   |   | *(1) 10%                             | *(2) 10% | *(1) 40% | *(2) 40%         |
|        |   | ● |   |   |   | ✓                                    |          |          |                  |
|        |   |   | ● |   |   |                                      | ✓        |          |                  |
|        |   |   |   |   | ● |                                      |          | ✓        |                  |
|        |   |   | ● |   |   |                                      |          |          | ✓                |
|        |   |   |   |   | ● |                                      |          |          | **✓              |

**COURSE :** DCQ1023 CONSTRUCTION TECHNOLOGY 1

**CREDIT(S) :** 3

**PRE-REQUISITE(S) :** NONE

### SYNOPSIS

**CONSTRUCTION TECHNOLOGY 1** course exposes student to the concept and the basic principles of construction technology in building works. The course emphasizes on piling works, work below lowest floor finish and structural frame. Students are given information on the latest construction technology.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, the students should be able to:

1. Explain correctly the uses of basic construction materials in a building. (C2, PLO1)
2. Explain clearly the construction of temporary structures, substructure works and structural frame. (C3, PLO1)
3. Demonstrate good communication skills in oral presentation on assigned topic(s) within a stipulated time frame. (A3, PLO3)

### COURSE SUMMARY:

TOPIC 1 : Basic Construction Materials

TOPIC 2 : Temporary Structures

TOPIC 3 : Substructure Works

TOPIC 4 : Structural Frame

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |                  |                          |
|--------|---|---|---|--------------------------------------|------------------|--------------------------|
| 1      | 2 | 3 | 4 | Test<br>*(2) 20%                     | Quiz<br>*(2) 10% | Presentation<br>*(1) 20% |
| ●      |   |   |   | √                                    |                  |                          |
| ●      |   |   |   |                                      | √                |                          |
|        |   | ● |   | √                                    |                  |                          |
|        |   | ● |   |                                      | √                |                          |
|        |   | ● |   |                                      |                  |                          |
|        | ● |   |   |                                      |                  | **√                      |

|                         |   |   |
|-------------------------|---|---|
| <b>COURSE</b>           | : | <b>DCQ1053 BUILDING WORKS MEASUREMENT 1</b> |
| <b>CREDIT(S)</b>        | : | <b>3</b>                                    |
| <b>PRE REQUISITE(S)</b> | : | <b>NONE</b>                                 |

**SYNOPSIS**

**BUILDING WORKS MEASUREMENT 1** course provides students' knowledge on the development and the importance of quantity surveying profession globally. This content comprises of the basic principles of quantity measurement, method of recording measurement in the dimension paper, procedures related to standard method of measurement, preliminaries and preamble. It also provides students the skills and expertise to practice basic quantity measurement studies.

**COURSE LEARNING OUTCOMES (CLO)**

Upon completion of this course, students should be able to:

1. Explain the importance of bill of quantities, standard method of measurement, preliminaries and preamble in quantity surveying profession. (C2, PLO1)
2. Apply the procedure to produce the bill of quantities for substructure works according to Standard Method of Measurement 2 (SMM2). (C3, PLO1)
3. Measure the quantities for substructure works according to SMM2. (P4, PLO2)
4. Demonstrate an understanding of quantity surveying professional code of conduct in building measurement works based on SMM2. (A3, PLO8)

**COURSE SUMMARY:**

- TOPIC 1 : Introduction To Building Works Measurement
- TOPIC 2 : Introduction To Principles Of Measurement And Billing Procedure
- TOPIC 3 : Preliminaries And Preamble
- TOPIC 4 : Substructure Works Measurement

**COURSE ASSESSMENT:**

Coursework (CA) - 60%, Final Examination (FE) - 40%

| COURSE LEARNING OUTCOMES (CLO)  | TOPICS |   |   |   | ASSESSMENT METHODS FOR COURSEWORK (CA) |         |                         |                         |
|---|--------|---|---|---|--|---------|-------------------------|-------------------------|
|   | 1      | 2 | 3 | 4 | Test                                   | Quiz    | Studio Work (Slip sort) | Practical (Studio Work) |
|   |        |   |   |   | *(1) 10%                               | *(1) 5% | *(1) 10%                | *1 (35%)                |
| 1. Explain the importance of bill of quantities, standard method of measurement, preliminaries and preamble in quantity surveying profession. |        | ● |   |   |  | √       |                         |                         |
| 2. Apply the procedure to produce the bill of quantities for substructure works according to Standard Method of Measurement 2 (SMM2).         |        |   |   | ● | √                                      |         | √                       |                         |
| 3. Measure accurately the quantities for substructure works according to SMM2.  |        |   |   | ● |  |         |                         |                         |
| 4. Demonstrate an understanding of quantity surveying professional code of conduct in building measurement works based on SMM2.               |        |   |   | ● |  |         |                         | **√                     |

**COURSE :** DCQ1102 PRINCIPLE OF STRUCTURE

**CREDIT(S) :** 2

**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**PRINCIPLE OF STRUCTURE** course provides knowledge regarding the ability and moment, ability and balance, shear force and bending moment and characteristics of structural parts.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Explain the appropriate structures analysis in the application of building construction. (C2, PLO1)
2. Apply the shear force and bending moment for simply supported beam. (C3, PLO1)
3. Demonstrate ability to participate in critical thinking to solve problems of structures within a stipulated time frame. (A3, PLO4)

### COURSE SUMMARY:

TOPIC 1 : Force And Moment

TOPIC 2 : Force And Equilibrium

TOPIC 3 : Shear Force And Bending Moment

TOPIC 4 : Behavior Of Structure

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |                   |
|--------|---|---|---|--------------------------------------|----------|-------------------|
| 1      | 2 | 3 | 4 | Test                                 | Quiz     | Tutorial Exercise |
|        |   |   |   | *(2) 20%                             | *(2) 10% | *(2) 20%          |
| ●      |   |   |   | ✓                                    |          |                   |
| ●      |   |   | ● |                                      | ✓        |                   |
|        |   |   | ● | ✓                                    |          |                   |
| ●      |   |   | ● |                                      |          | ✓                 |
|        | ● |   |   |                                      |          | **✓               |

**COURSE :** DCQ1112 PROFESSIONAL PRACTICE 1

**CREDIT(S) :** 2

**PRE-REQUISITE(S) :** NONE

### SYNOPSIS

**PROFESSIONAL PRACTICE 1** course exposes student to the introduction to quantity surveying profession, introduction to pre contract procedure, stages of a project and roles of building team members in construction project. This course also focusing on types and procedure of tender.

### COURSE LEARNING OUTCOMES

Upon completion of this course, the students should be able to:

1. Explain clearly the background of quantity surveying profession, the role of building team members, stages of a project and the involvement of a quantity surveyor in pre-contract stages. (C2, PLO1)
2. Demonstrate good communication skill in oral presentation assigned topic(s) within a stipulated time frame. (A3, PLO3)
3. Demonstrate ability to lead a team to complete assigned task within a stipulated time frame. (A3, PLO9)

### COURSE SUMMARY:

TOPIC 1 : Introduction To The Quantity Surveying Profession

TOPIC 2 : The Building Team

TOPIC 3 : Stages Of A Project

TOPIC 4 : Introduction To Pre Contract Procedure

TOPIC 5 : Tender Procedure

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |              |
|--------|---|---|---|---|--------------------------------------|----------|--------------|
| 1      | 2 | 3 | 4 | 5 | Test                                 | Quiz     | Presentation |
|        |   |   |   |   | *(2) 20%                             | *(2) 10% | *(1) 20%     |
|        |   |   |   |   | ✓                                    | ✓        |              |
|        |   |   |   |   |                                      |          | **✓          |
|        |   |   |   |   |                                      |          |              |
|        |   |   |   |   |                                      |          |              |

**KURSUS** : **DUA2012 SAINS, TEKNOLOGI & KEJURUTERAAN DALAM ISLAM**

**KREDIT** : **2**

**PRASYARAT** : **TIADA**

#### SINOPSIS

**SAINS, TEKNOLOGI DAN KEJURUTERAAN DALAM ISLAM** memberi pengetahuan tentang konsep Islam sebagai al-Din dan seterusnya membincangkan konsep sains, teknologi dan kejuruteraan dalam Islam serta impaknya, pencapaiannya dalam tamadun Islam, prinsip serta peranan syariah dan etika Islam, peranan kaedah fiqh serta aplikasinya.

#### HASIL PEMBELAJARAN KURSUS (CLO) :

Di akhir kursus ini, pelajar akan dapat :

1. Menjelaskan konsep sains, teknologi dan kejuruteraan dalam Islam. (C2, LD1)
2. Menunjuk cara ibadah solat dan bacaannya dengan betul. (C2, P2 : LD1, LD2)
3. Membincangkan prinsip syariah dan kaedah fiqh dalam sains, teknologi dan kejuruteraan. (C3, A3: LD1, LD6)

#### RINGKASAN KURSUS:

- TOPIK 1 : Konsep Asas Islam
- TOPIK 2 : Sains, Teknologi & Kejuruteraan Dalam Islam
- TOPIK 3 : Wahyu Sebagai Sumber Sains, Teknologi & Kejuruteraan
- TOPIK 4 : Prinsip Syariah & Etika Islam Dalam Sains, Teknologi & Kejuruteraan
- TOPIK 5 : Kaedah Fiqh Dalam Sains, Teknologi & Kejuruteraan

#### PENILAIAN KURSUS:

Pentaksiran Kerja Kursus (KK) – 100%

| TOPIK |   |   |   |   | KAEDAH PENTAKSIRAN UNTUK KERJA KURSUS (KK) |                         |                         |                          |
|-------|---|---|---|---|--|-------------------------|-------------------------|--------------------------|
| 1     | 2 | 3 | 4 | 5 | Kuiz<br>*(2) 10%                           | Ujian amali<br>*(1) 30% | Ujian akhir<br>*(1) 30% | Pembentangan<br>*(1) 30% |
|       | ● |   |   |   | ✓  |                         | ✓                       |                          |
| ●     |   |   |   |   | ✓  | ✓                       | ✓                       |                          |
|       |   |   | ● |   |  |                         | ✓                       | **✓                      |

|                  |   |  |
|------------------|---|--|
| <b>KURSUS</b>    | : | <b>DUB2012 NILAI MASYARAKAT MALAYSIA</b> |
| <b>KREDIT</b>    | : | <b>2</b>                                 |
| <b>PRASYARAT</b> | : | <b>TIADA</b>                             |

**SINOPSIS**

**NILAI MASYARAKAT MALAYSIA** membincangkan aspek sejarah pembentukan masyarakat Malaysia, nilai-nilai agama serta adat resam dan budaya masyarakat majmuk. Selain itu, pelajar diberi kefahaman mengenai tanggungjawab individu dalam kehidupan dan cabaran-cabaran dalam membangunkan masyarakat Malaysia.

**HASIL PEMBELAJARAN KURSUS (CLO):**

Di akhir kursus ini, pelajar akan dapat:

1. Menerangkan sejarah pembentukan masyarakat dan nilai agama di Malaysia. (C2)
2. Menghubungkan kait tanggungjawab individu dalam kehidupan masyarakat dan negara. (A3, C3)
3. Mengenal pasti cabaran-cabaran dalam membangunkan masyarakat Malaysia. (A3, C4)

**RINGKASAN KURSUS:**

|           |   |
|-----------|---|
| TOPIK 1 : | Sejarah Pembentukan Masyarakat Malaysia                             |
| TOPIK 2 : | Nilai Agama Masyarakat Majmuk Di Malaysia                           |
| TOPIK 3 : | Tanggungjawab Individu Terhadap Diri, Keluarga, Masyarakat & Negara |
| TOPIK 4 : | Konsep Nilai & Perpaduan Masyarakat Malaysia                        |
| TOPIK 5 : | Cabaran- Cabaran Dalam Membangunkan Masyarakat Malaysia             |

**PENILAIAN KURSUS:**

Pentaksiran Kerja Kursus (KK) – 100%

| TOPIK |   |   |   |   | KAEDAH PENILAIAN UNTUK KERJA KURSUS (KK) |                    |                         |                        |                          |
|-------|---|---|---|---|--|--------------------|-------------------------|------------------------|--------------------------|
| 1     | 2 | 3 | 4 | 5 | Kuiz<br>(2) 20%                          | Pidato<br>(1) 20 % | Kertas Kerja<br>(1) 20% | Ujian akhir<br>(1) 30% | Pembentangan<br>(1) 10 % |
| ●     | ● |   |   |   | ✓  |                    |                         | ✓                      |                          |
|       |   | ● |   |   |  |                    | ✓                       | ✓                      | **✓                      |
|       |   |   |   | ● |  | ✓                  |                         | ✓                      |                          |



|                         |   |                                 |
|-------------------------|---|---------------------------------|
| <b>COURSE</b>           | : | <b>DPB2012 ENTREPRENEURSHIP</b> |
| <b>CREDIT(S)</b>        | : | <b>2</b>                        |
| <b>PRE-REQUISITE(S)</b> | : | <b>NONE</b>                     |

**SYNOPSIS**

**ENTREPRENEURSHIP** focuses the principles and concept of entrepreneurship. This course concentrates on the systematic methods of getting business ideas. This course also prepares the students on ways to conduct and control the business including fundamental of management, marketing and financing. It also emphasizes on the preparation of business plan, thus developing their entrepreneurial skills.

**COURSE LEARNING OUTCOMES (CLO)**

Upon completion of this course, the students should be able to:

1. Explain clearly the concept of entrepreneurship, process and procedures involved in developing effective business plan. (C2, LD1)
2. Work cooperatively in group to complete the assigned project based on entrepreneurial skills. (P3, LD2) (A3, LD7)
3. Present business plan creatively using knowledge gained via group. (A2, LD3)

**COURSE SUMMARY:**

|           |  |
|-----------|--|
| TOPIC 1 : | Introduction to Entrepreneurship                   |
| TOPIC 2 : | Entrepreneurial Ideas & Opportunities              |
| TOPIC 3 : | Business Ownership                                 |
| TOPIC 4 : | Overview of Business Management                    |
| TOPIC 5 : | Overview of Marketing                              |
| TOPIC 6 : | Basic of Accounting                                |
| TOPIC 7 : | Entrepreneurial Source of Capital & Support System |

**COURSE ASSESSMENT:**

Coursework (CA) - 100%

| COURSE LEARNING OUTCOMES (CLO)  | TOPIC |   |   |   |   |   | ASSESSMENT METHODS FOR COURSEWORK (CA) |         |                       |                |                              |
|---|-------|---|---|---|---|---|--|---------|-----------------------|----------------|------------------------------|
|   | 1     | 2 | 3 | 4 | 5 | 6 | Case Study                             | Test    | Business Plan Project | Practical Work | Business Report Presentation |
|   |       |   |   |   |   |   | *(1)10%                                | *(1)10% | *(1)30%               | *(2)20%        | (1)30%                       |
| 1. Explain clearly the concept of entrepreneurship and process in developing effective business.(C2, LD1) | ●     |   |   |   |   |   | ✓                                      |         |                       |                |                              |
| 2. Prepare completely business plan according to standard format (P2,LD2)                                 |       |   | ● |   | ● |   |  | ✓       | ✓                     |                |                              |
| 3. Build the online business presence using the social media marketing (P3,LD2) (A4, LD7)                 |       |   |   |   |   | ● |  |         |                       | ✓              |                              |
|   |       |   |   |   | ● | ● |  |         |                       |                | **✓                          |

|                         |   |  |
|-------------------------|---|--|
| <b>COURSE</b>           | : | <b>DCQ2033 CONSTRUCTION TECHNOLOGY 2</b> |
| <b>CREDIT(S)</b>        | : | <b>3</b>                                 |
| <b>PRE-REQUISITE(S)</b> | : | <b>NONE</b>                              |

**SYNOPSIS**

**CONSTRUCTION TECHNOLOGY 2** course gives students the knowledge on the concepts and the basic principle of the construction technology in building works. The course emphasizes on the construction of reinforced concrete upper floor, pre-cast concrete upper floor, timber upper floor, roof and roof finishes, staircases, wall, window, door, finishing works, furniture and fittings works. This course also gives students knowledge on the latest construction technology.

**COURSE LEARNING OUTCOMES (CLO)**

Upon completion of this course, the students should be able to:

1. Explain clearly the construction of building superstructure. (C3, PLO1)
2. Explain correctly the installation of finishing works and the construction of furniture and fittings works. (C3, PLO1)
3. Demonstrate good communication skill in oral presentation on assigned topic(s) within a stipulated time frame. (A2, PLO3)

**COURSE SUMMARY:**

|           |                             |
|-----------|-----------------------------|
| TOPIC 1 : | Upper Floor                 |
| TOPIC 2 : | Staircase And Ramp          |
| TOPIC 3 : | Roof And Roof Finishes      |
| TOPIC 4 : | Wall                        |
| TOPIC 5 : | Door & Window               |
| TOPIC 6 : | Finishing Works             |
| TOPIC 7 : | Furniture And Fitting Works |

**COURSE ASSESSMENT:**

Coursework (CA) - 50%, Final Examination (FE) - 50%

| COURSE LEARNING OUTCOMES (CLO)  | TOPICS |   |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |              |
|---|--------|---|---|---|---|---|---|--------------------------------------|----------|--------------|
|   | 1      | 2 | 3 | 4 | 5 | 6 | 7 | Test                                 | Quiz     | Presentation |
|   |        |   |   |   |   |   |   | *(2) 20%                             | *(2) 10% | *(1) 20%     |
| 1. explain clearly the construction of building superstructure.   | ●      |   | ● |   |   |   |   | √                                    |          |              |
| 2. explain correctly the installation of finishing works and the construction of furniture and fittings works.    |        |   | ● |   |   | ● |   |                                      | √        |              |
| 3. demonstrate good communication skill in oral presentation on assigned topic(s) within a stipulated time frame. |        |   | ● |   |   |   |   |                                      |          | **√          |

**COURSE : DCQ2064 BUILDING WORKS MEASUREMENT 2**

**CREDIT(S) : 4**

**PRE REQUISITE(S) : DCQ1053 BUILDING WORKS MEASUREMENT 1**

### SYNOPSIS

**BUILDING WORKS MEASUREMENT 2** course provides student knowledge on the quantity measurement for buildings and civil engineering works based on Standard Method of Measurement. This content comprises of superstructure works. It covers building frame, upper floor, staircase construction, roof construction, internal and external wall, door and window.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, students should be able to:

1. Arrange the procedure to produce the bill of quantities for superstructure works according to Standard Method of Measurement 2 (SMM2). (C4, PLO1)
2. Measure the quantities for superstructure works according to SMM2. (P4, PLO2)
3. Demonstrate an understanding of quantity surveying professional code of conduct in building works measurement based on SMM2.(A3, PLO8)

### COURSE SUMMARY:

TOPIC 1 : Superstructure Works Measurement

### COURSE ASSESSMENT:

Coursework (CA) - 60%, Final Examination (FE) - 40%

| COURSE LEARNING OUTCOMES (CLO)  | TOPIC | ASSESSMENT TASKS FOR COURSEWORK (CA) |         |                         |                         |
|---|-------|--------------------------------------|---------|-------------------------|-------------------------|
|   | 1     | Test                                 | Quiz    | Studio Work (Slip sort) | Practical (Studio Work) |
|   |       | *(1) 10%                             | *(1) 5% | *(1) 10%                | (35%)                   |
| 1. Arrange the procedure to produce the bill of quantities for superstructure works according to Standard Method of Measurement 2 (SMM2). | ●     | √                                    |         |                         |                         |
|   |       |                                      | √       |                         |                         |
| 2. Measure the quantities for superstructure works according to SMM2.   | ●     |                                      |         | √                       |                         |
|   |       |                                      |         |                         | √                       |
| 3. Demonstrate an understanding of quantity surveying professional code of conduct in building works measurement based on SMM2.           | ●     |                                      |         |                         | **√                     |

**COURSE :** DCQ2142 BUILDING SERVICES 1

**CREDIT(S) :** 2

**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**BUILDING SERVICES 1** course provides knowledge to the students on the concept and basic principle in building services. The course focuses on ventilation, air conditioning system, cold and hot water supply systems, gas supply system, telecommunication system and drainage system. This course also exposes students to the knowledge on firefighting system and refuses disposal system for multi-storey building.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, the students should be able to:

1. Illustrate clearly the importance and uses of building services elements to produce a high functional building. (C3,PLO1)
2. Demonstrate good communication skill in oral presentation on assigned topic(s) within a stipulated time frame. (A3,PLO3)
3. Demonstrate ability to work in team to complete assigned task within a stipulated time frame. (A3,PLO9)

### COURSE SUMMARY:

TOPIC 1 : Ventilation And Air Conditioning System

TOPIC 2 : Cold And Hot Water Supply System

TOPIC 3 : Fire Fighting System

TOPIC 4 : Gas Supply System

TOPIC 5 : Telecommunication System

TOPIC 6 : Drainage System

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| COURSE LEARNING OUTCOMES (CLO)   | TOPICS |   |   |   |   |   | ASSESSMENT TASK FOR COURSEWORK (CA) |          |              |
|--|--------|---|---|---|---|---|-------------------------------------|----------|--------------|
|  | 1      | 2 | 3 | 4 | 5 | 6 | Test                                | Quiz     | Presentation |
|  |        |   |   |   |   |   | *(2) 20%                            | *(2) 10% | *(1) 20%     |
| 1. Illustrate clearly the importance and uses of building services elements to produce a high functional building. | ●      | ● |   |   | ● |   | √                                   |          |              |
|  | ●      |   | ● | ● |   |   |                                     | √        | √            |
| 2. Demonstrate good communication skill in oral presentation on assigned topic (s) within a stipulated time frame. |        |   | ● | ● |   |   |                                     |          | **√          |
| 3. Demonstrate ability to work in team to complete assigned task within a stipulated time frame.                   |        |   | ● | ● |   |   |                                     |          |              |

**COURSE** : **DCQ2162 PRINCIPLES OF LAW**

**CREDIT(S)** : **2**

**PRE REQUISITE(S)** : **NONE**

### SYNOPSIS

**PRINCIPLES OF LAW** course provides student the basic knowledge on the legal system in Malaysia and law concepts. The course emphasizes on the use of Law of Contract, Law of Tort and the Uniform Building by-Laws in the execution of construction project. This course also provides students with a broad range of perspectives and information in real construction task.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, students should be able to:

1. Apply concisely the principles of Malaysian legal system, Law of Contract and Law of Tort in the execution of construction project. (C3, PLO1)
2. Describe correctly the role and function of the Uniform Building by-Laws in the execution of construction project. (C2, PLO1)
3. Demonstrate ability to participate in critical thinking to solve problem related to the principle of law. (A3, PLO4)

### COURSE SUMMARY:

TOPIC 1 : Introduction To Malaysian Legal System

TOPIC 2 : Law Of Contract

TOPIC 3 : Law Of Tort

TOPIC 4 : Uniform Building By-Laws

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| COURSE LEARNING OUTCOMES (CLO)  | TOPICS |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |                |
|---|--------|---|---|---|--------------------------------------|----------|----------------|
|   | 1      | 2 | 3 | 4 | Test                                 | Quiz     | Essay Question |
|   |        |   |   |   | *(2) 20%                             | *(2) 10% | *(1) 20%       |
| 1. Apply concisely the principles of Malaysian legal system, Law of Contract and Law of Tort in the execution of construction project |        | ● |   |   | √                                    |          |                |
|   |        | ● |   |   |                                      | √        |                |
|   |        | ● |   |   |                                      |          | √              |
| 2. Describe correctly the role and function of the Uniform Building by Laws in the execution of construction project                  |        |   |   | ● |                                      | √        |                |
| 3. Demonstrate ability to participate in critical thinking to solve problem related to the principle of law.                          |        |   | ● |   |                                      |          | **√            |

|                         |   |  |
|-------------------------|---|--|
| <b>COURSE</b>           | : | <b>DCQ2172 BASIC ENGINEERING SURVEYING</b> |
| <b>CREDIT(S)</b>        | : | <b>2</b>                                   |
| <b>PRE REQUISITE(S)</b> | : | <b>NONE</b>                                |

**SYNOPSIS**

**BASIC ENGINEERING SURVEYING** course aims to provide students knowledge on matters relating with survey and construction. It assists students understanding in practicing and demonstrates knowledge and understanding of measuring distances and angles by using levels and theodolite. This course will focus on use of survey instruments; levels and theodolite equipments.

**COURSE LEARNING OUTCOMES (CLO)**

Upon completion of this course, students should be able to:

1. Apply the surveying work for compass survey, levelling, theodolite survey and setting out according to surveying technique. (C3, PLO1)
2. Conduct setting up and used surveying equipment correctly according to manuals. (P4, PLO2)
3. Demonstrate ability to work in team to complete assigned tasks during practical work session. (A3, PLO9)

**COURSE SUMMARY:**

TOPIC 1 : Introduction Of Engineering Surveying

TOPIC 2 : Compass Surveying

TOPIC 3 : Levelling

TOPIC 4 : Theodolite

TOPIC 5 : Setting Out

**COURSE ASSESSMENT:**

Coursework (CA) - 100%, Final Examination (FE) – None

| COURSE LEARNING OUTCOMES (CLO)   | TOPICS |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |                            |      |      |                       |
|--|--------|---|---|---|---|--------------------------------------|----------------------------|------|------|-----------------------|
|  | 1      | 2 | 3 | 4 | 5 | Practical Work                       |                            | Quiz | Test | Other Assessment Task |
|  |        |   |   |   |   | Equipment setting up test            | Field work & survey report |      |      | Tutorial              |
|  |        |   |   |   |   |                                      |                            |      |      |                       |
| 1. Apply the surveying work for compass survey, levelling, theodolite survey and setting out according to surveying technique. |        | ● |   |   | ● |                                      |                            | √    |      |                       |
|  |        |   | ● |   |   |                                      |                            |      | √    |                       |
|  |        |   | ● |   |   |                                      |                            |      |      | √                     |
| 2. Conduct setting up and used surveying equipments correctly according to manuals.  |        |   |   | ● |   | √                                    |                            |      |      |                       |
|  |        |   | ● |   |   |                                      | √                          |      |      |                       |
| 3. Demonstrate ability to work in team to complete assigned tasks during practical work session                                |        |   | ● |   |   |                                      | **√                        |      |      |                       |

**COURSE :** DUE3012 COMMUNICATIVE ENGLISH 2  
**CREDIT(S) :** 2  
**PRE REQUISITE(S) :** DUE1012 COMMUNICATIVE ENGLISH 1

### SYNOPSIS

**COMMUNICATIVE ENGLISH 2** emphasises the skills required at the workplace to describe products or services as well as processes or procedures. It also focuses on the skills to give and respond to instructions. This course will also enable students to make and reply to enquiries and complaints.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Describe products or services related to their field of studies using appropriate language. (C3, A3)
2. Transfer information of a process or procedure accurately from linear to non-linear form and vice versa. (C3)
3. Listen and respond to enquiries using appropriate language. (C3)
4. Make and respond to complaints using appropriate language. (C3)

### COURSE SUMMARY:

- TOPIC 1 : Products and Services
- TOPIC 2 : Processes, Procedures and Instructions
- TOPIC 3 : Enquires
- TOPIC 4 : Complaints

### COURSE ASSESSMENT:

Coursework (CA) - 100%

| TOPICS |   |   |   | ASSESSMENT TASKS FOR COURSEWORK ASSESSMENT (CA) |          |                |           |
|--------|---|---|---|---|----------|----------------|-----------|
| 1      | 2 | 3 | 4 | Presentation                                    | Test     | Listening Test | Role Play |
|        |   |   |   | *(1) 30%  | *(1) 30% | *(1) 20%       | *(1) 20%  |
| ●      |   |   |   | ✓   |          |                |           |
| ●      |   |   |   | **✓   |          |                |           |
|        | ● |   |   |   | ✓        |                |           |
|        |   | ● |   |   |          | ✓              |           |
|        |   |   | ● |   |          |                | ✓         |

**COURSE :** DCQ3043 CONSTRUCTION TECHNOLOGY 3  
**CREDIT(S) :** 2  
**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**CONSTRUCTION TECHNOLOGY 3** course exposes students to the technology involved in the construction. The course emphasizes is on long span roof, basement, external works and advance building structure. This course also gives students knowledge on demolition & renovation works and site & soil investigation.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Explain clearly the new concepts of advanced construction technology in building works and the method of construction for civil engineering works. (C3, PLO1)
2. Demonstrate good communication skill in oral presentation on assigned topic(s) within a stipulated time frame. (A3, PLO3)
3. Demonstrate ability to work in team to complete assignment task within a stipulated time frame. (A3, PLO9)

### COURSE SUMMARY:

TOPIC 1 : Long Span Roof  
 TOPIC 2 : Basement  
 TOPIC 3 : External Works  
 TOPIC 4 : Industrialised Building System and Green Technology  
 TOPIC 5 : Demolition and Renovation Works  
 TOPIC 6 : Site Soil Investigation

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| ASSESSMENT TASKS FOR COURSEWORK (CA) |   |   |   |   |   |                  |                  |                          |
|--------------------------------------|---|---|---|---|---|------------------|------------------|--------------------------|
| 1                                    | 2 | 3 | 4 | 5 | 6 | Test<br>*(2) 20% | Quiz<br>*(2) 10% | Presentation<br>*(1) 20% |
|                                      |   | ● |   |   | ● | √                |                  |                          |
| ●                                    |   | ● |   |   |   |                  | √                |                          |
|                                      |   |   | ● |   |   |                  |                  | √                        |
|                                      |   |   | ● |   |   |                  |                  | √**                      |
|                                      |   |   | ● |   |   |                  |                  |                          |



|                         |   |   |
|-------------------------|---|---|
| <b>COURSE</b>           | : | <b>DCQ3074 BUILDING WORKS MEASUREMENT 3</b> |
| <b>CREDIT(S)</b>        | : | <b>4</b>                                    |
| <b>PRE REQUISITE(S)</b> | : | <b>DCQ2064 BUILDING WORKS MEASUREMENT 2</b> |

**SYNOPSIS**

**BUILDING WORKS MEASUREMENT 3** course provides student knowledge on the quantity measurement for building and the civil engineering works. This content comprises of internal & external finishes works, furniture & fittings works, site clearance & earthworks, roadworks, retaining wall and basement.

**COURSE LEARNING OUTCOMES**

Upon completion of the course, students should be able to:-

1. Arrange the procedure to produce bill of quantities for finishes works, furniture & fittings and civil engineering works according to Standard Method of Measurement 2 (SMM2). (C4, PLO1)
2. Measure the quantities for finishes works, furniture & fittings and civil engineering works according to SMM2. (P4, PLO2)
3. Demonstrate an understanding of quantity surveying professional code of conduct in building works and civil engineering works measurement based on SMM2. (A3, PLO8)

**COURSE SUMMARY:**

TOPIC 1 : Internal and External Finishes Works Measurement

TOPIC 2 : Furniture and Fittings Works Measurement

TOPIC 3 : Site Clearance and Earthworks Measurement

TOPIC 4 : Roadworks Measurement

TOPIC 5 : Retaining Wall Measurement

TOPIC 6 : Basement Measurement

**COURSE ASSESSMENT:**

Coursework (CA) - 60%, Final Examination (FE) - 40%

| TOPICS |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |         |                         |         |
|--------|---|---|---|---|---|--------------------------------------|---------|-------------------------|---------|
| 1      | 2 | 3 | 4 | 5 | 6 | Test                                 | Quiz    | Practical (Studio Work) | Project |
|        | ● |   |   |   |   | ^(1) 10%                             | ^(1) 5% | ^(1) 35%                | (1) 10% |
|        |   |   |   | ● |   | ✓                                    | ✓       |                         |         |
|        |   | ● |   |   |   |                                      |         | ✓                       | ✓       |
|        |   | ● |   |   |   |                                      |         | **✓                     |         |

|                         |   |  |
|-------------------------|---|--|
| <b>COURSE</b>           | : | <b>DCQ3122 PROFESSIONAL PRACTICE 2</b> |
| <b>CREDIT(S)</b>        | : | <b>2</b>                               |
| <b>PRE REQUISITE(S)</b> | : | <b>NONE</b>                            |

**SYNOPSIS**

**PROFESSIONAL PRACTICE 2** course provides student an understanding the pre-contract stage. It covers the work procedures during the pre-contract stage and post contract stage which is the initial stage when tender is prepared up to selection of main contractor, sub-contractor and supplier. Hence the course focuses on the tender documents, tender reports, letter of acceptance, the contract, post contract procedures and nominated sub-contractor and supplier.

**COURSE LEARNING OUTCOMES**

Upon completion of the course, students should be able to:-

1. Relate correctly the involvement of quantity surveyor at pre-contract stage and post contract stage in public and private sectors. (C3, PLO 1)
2. Demonstrate good communication skill in oral presentation on assigned topic(s) within a stipulated time frame. (A3, PLO3)
3. Demonstrate ability to lead a team to complete assigned task within stipulated time frame. (A3, PLO9)

**COURSE SUMMARY:**

|           |  |
|-----------|--|
| TOPIC 1 : | Tender Document                                |
| TOPIC 2 : | Tender Report                                  |
| TOPIC 3 : | Letter of Acceptance                           |
| TOPIC 4 : | Contract                                       |
| TOPIC 5 : | Post Contract Procedures                       |
| TOPIC 6 : | Nominated Subcontractor and Nominated supplier |

**COURSE ASSESSMENT:**

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |                  |                          |
|--------|---|---|---|---|---|--------------------------------------|------------------|--------------------------|
| 1      | 2 | 3 | 4 | 5 | 6 | Test<br>*(2) 20%                     | Quiz<br>*(2) 10% | Presentation<br>*(1) 20% |
|        | ● |   |   |   | ● | √                                    |                  |                          |
|        |   | ● |   |   |   |                                      | √                |                          |
|        |   |   | ● |   |   |                                      |                  | √                        |
|        |   |   |   | ● |   |                                      |                  | √                        |
|        |   |   |   |   | ● |                                      |                  | √**                      |

**COURSE :** DCQ3152 BUILDING SERVICES 2  
**CREDIT(S) :** 2  
**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**BUILDING SERVICES 2** course gives students knowledge on the basic concepts and the principles of building services. The course emphasizes on the understanding and knowledge development of the sanitation system, sewerage system and treatment process, electrical supply system, mechanical conveyors and building security system.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Illustrate clearly the importance and uses of building services elements to produce a high functional building. (C3, PLO1)
2. Demonstrate good communication skill in oral presentation on assigned topic (s) within a stipulated time frame. (A3, PLO3)
3. Demonstrate ability to work in team to complete assigned task within a stipulated time frame. (A3, PLO9)

### COURSE SUMMARY:

TOPIC 1 : Sanitation System

TOPIC 2 : Sewerage System and Treatment Process

TOPIC 3 : Electrical Supply System

TOPIC 4 : Mechanical Conveyors

TOPIC 5 : Building Security System

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| ASSESSMENT TASK FOR COURSEWORK (CA) |   |   |   |   |          |          |              |
|-------------------------------------|---|---|---|---|----------|----------|--------------|
| 1                                   | 2 | 3 | 4 | 5 | Test     | Quiz     | Presentation |
|                                     |   |   |   |   | *(2) 20% | *(2) 10% | *(1) 20%     |
|                                     | ● |   |   |   | ✓        |          |              |
|                                     |   |   |   | ● |          | ✓        |              |
|                                     |   |   |   | ● |          |          | ✓            |
|                                     |   |   |   | ● |          |          | **✓          |
|                                     |   |   |   | ● |          |          |              |

**COURSE :** DCQ3182 ESTIMATING 1  
**CREDIT(S) :** 2  
**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**ESTIMATING 1** gives knowledge on the factors considered in built up rates, preparation of built up rates and tender pricing. All the topics discussed will help the students to carry out an effective built up rate and tender pricing.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Compute accurately the built up rates for construction works. (C3,PLO1)
2. Explain the process of tender pricing for construction works thoroughly. (C2, PLO1)
3. Demonstrate ability to participate in critical thinking to solve problems related to estimation works. (A3,PLO4)
4. Demonstrate continuous learning and information management skill while engaging in independent acquisition of new knowledge and skill to develop a project in estimating works. (A3, PLO6)

### COURSE SUMMARY:

TOPIC 1 : Introduction to Built Up rates

TOPIC 2 : Built Up Rates

TOPIC 3 : Tender Pricing

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   | ASSESSMENT TASK FOR COURSEWORK (CA) |          |                |
|--------|---|---|-------------------------------------|----------|----------------|
| 1      | 2 | 3 | Test                                | Quiz     | End of Chapter |
|        |   |   | *(2) 20%                            | *(2) 10% | *(1) 20%       |
| ●      |   |   |                                     | ✓        |                |
|        | ● |   | ✓                                   |          |                |
|        | ● |   |                                     |          | ✓              |
|        |   | ● | ✓                                   |          |                |
|        |   |   |                                     | ✓        |                |
| ●      |   |   |                                     |          | ✓/**           |
| ●      |   |   |                                     |          |                |

|                         |   |                                       |
|-------------------------|---|---------------------------------------|
| <b>COURSE</b>           | : | <b>DCQ3202 PRINCIPLE OF ECONOMICS</b> |
| <b>CREDIT(S)</b>        | : | <b>2</b>                              |
| <b>PRE REQUISITE(S)</b> | : | <b>NONE</b>                           |

**SYNOPSIS**

**PRINCIPLES OF ECONOMICS** course exposes students to the knowledge and basic principles of economy. The course emphasizes on the introduction to economy, supply & demand, elasticity of supply & demand, market competition, aggregate demand & its determination factors, aggregate supply & economic growth and construction economy. These economic foundation are related to the national economic growth in general and focused towards the national construction industry.

**COURSE LEARNING OUTCOMES**

Upon completion of the course, students should be able to:-

1. Apply the microeconomics study on the concept of supply and demand and the market competition to macroeconomics. (C3,PLO1)
2. Apply the macroeconomics study on the economic development in relation to the national construction industry. (C3,PLO1)
3. Demonstrate ability to lead a team to complete assigned tasks within stipulated time frame. (A3, PLO9)

**COURSE SUMMARY:**

|           |  |
|-----------|--|
| TOPIC 1 : | Introduction to Economy                        |
| TOPIC 2 : | Elasticity of the Supply, Demand and Market    |
| TOPIC 3 : | Market Competition and Government Rules        |
| TOPIC 4 : | Aggregate Demand and Its Determination Factors |
| TOPIC 5 : | Aggregate Supply and Economy Growth            |
| TOPIC 6 : | Construction Economy                           |

**COURSE ASSESSMENT:**

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |                |
|--------|---|---|---|---|---|--------------------------------------|----------|----------------|
| 1      | 2 | 3 | 4 | 5 | 6 | Test                                 | Quiz     | Essay Question |
|        | • |   |   |   |   | *(2) 20%                             | *(2) 10% | *(1) 20%       |
|        |   | • |   |   |   | ✓                                    |          |                |
|        |   |   |   | • |   | ✓                                    | ✓        |                |
|        |   |   | • | • |   |                                      | ✓        |                |
|        |   |   |   | • |   |                                      |          | ✓**            |

**COURSE :** DUE5012 COMMUNICATIVE ENGLISH 3

**CREDIT(S) :** 2

**PRE REQUISITE(S) :** DUE3012 COMMUNICATIVE ENGLISH 2

### SYNOPSIS

**COMMUNICATIVE ENGLISH 3** aims to develop the necessary skills in students to analyse and interpret graphs and charts from data collected as well as job hunting mechanics. Students will learn to present data through the use of graphs and charts. Students will learn the process of job hunting which includes job search strategies and making enquiries. They will also learn to write resumes and cover letters. The students will develop skills to introduce themselves, highlight their strengths and abilities, present ideas, express opinions and respond appropriately during job interviews.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, students should be able to:

1. Describe and analyze information contained in graphs and charts clearly and accurately based on a mini project. (C4, A3)
2. Write an effective resume and a supporting cover letter for a relevant job opening. (C3)
3. Handle a job interview effectively and confidently. (C3)

### COURSE SUMMARY:

TOPIC 1 : Description of Graphs and Charts

TOPIC 2 : Job Hunting Mechanics

### COURSE SUMMARY:

Coursework Assessment (CA) - 100%

| TOPICS |   | ASSESSMENT TASKS FOR COURSEWORK ASSESSMENT (CA) |              |                          |              |                |
|--------|---|---|--------------|--------------------------|--------------|----------------|
| 1      | 2 | Test  | Presentation | Written Task<br>*(2) 20% |              | Mock Interview |
|        |   |   |              | Resume                   | Cover Letter |                |
|        |   | *(1) 20%  | *(1) 30%     | 10%                      | 10%          | *(1) 30%       |
| ●      |   | ✓   | ✓            |                          |              |                |
|        |   |   | **✓          |                          |              |                |
|        | ● |   |              | ✓                        | ✓            |                |
|        | ● |   |              |                          |              | ✓              |

**COURSE : DCC3132 STATISTICS**

**CREDIT(S) : 3**

**PRE REQUISITE(S) : NONE**

### SYNOPSIS

**STATISTICS** covers the fundamental statistical concepts. The course shall expose students on the basic concept of statistics that covers data collection methods and presentation of data, numerical description measures, probability, correlation, regression and application of statistical software.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, students should be able to:

1. Apply the fundamental concept of statistics by using statistical techniques (C3, PLO1)
2. Solve the problems of statistical matters by using statistical techniques and software (C4, PLO2)
3. Demonstrate the skills related on knowledge of statistical concepts through teamwork tasks. (A3, PLO11)

### COURSE SUMMARY:

- TOPIC 1 : Introduction to Statistics
- TOPIC 2 : Sampling Data Collection Methods
- TOPIC 3 : Data Presentation
- TOPIC 4 : Numerical Descriptive Measures
- TOPIC 5 : Probability
- TOPIC 6 : Correlation and Regression
- TOPIC 7 : Statistical Software

### COURSE ASSESSMENT:

Coursework Assessment (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK |          |              |            |              |
|--------|---|---|---|---|---|---|---------------------------------|----------|--------------|------------|--------------|
| 1      | 2 | 3 | 4 | 5 | 6 | 7 | Test                            | Quiz     | Mini Project | Assignment | Presentation |
|        |   |   |   |   |   |   | *(1) 10%                        | *(2) 10% | *(1) 10%     | *(1) 10%   | *(1)10%      |
| •      |   |   |   | • |   |   |                                 | ✓        |              |            |              |
|        | • |   |   |   | • |   |                                 |          | ✓            |            |              |
|        |   |   |   | • |   |   | ✓                               |          |              |            |              |
|        |   | • |   |   |   |   |                                 |          |              | ✓          | ✓            |
|        | • |   |   |   | • |   |                                 |          |              |            | ••✓          |

**COURSE** : **DCQ5083 BUILDING WORKS MEASUREMENT 4**

**CREDIT(S)** : **3**

**PRE REQUISITE(S)** : **DCQ3074 BUILDING WORKS MEASUREMENT 3**

### SYNOPSIS

**BUILDING WORKS MEASUREMENT 4** course provides students knowledge on the quantity measurement for building services works and builder's work in connection with services (BWICS). This content comprises of cold water or hot water supply services, soil, waste & vent pipe system, sanitary fittings and domestic electrical supply services.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, students should be able to:

1. Arrange the procedure to produce bill of quantities for piling works, building services works and BWICS according to Standard Method of Measurement 2 (SMM2). (C4, PLO1)
2. Measure the quantities for piling works, building services and BWICS works according to SMM2. (P4, PLO2)
3. Demonstrate an understanding of quantity surveying professional code of conduct in building works and civil engineering works measurement based on SMM2. (A3, PLO8)

### COURSE SUMMARY:

TOPIC 1 : Piling

TOPIC 2 : Building Services Works Measurement

TOPIC 3 : Builder's Work in Connection With Services Works (BWICS) Measurement

### COURSE ASSESSMENT:

Coursework Assessment (CA) - 60%, Final Examination (FE) - 40%

| TOPICS |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |         |                         |         |
|--------|---|---|--------------------------------------|---------|-------------------------|---------|
| 1      | 2 | 3 | Test                                 | Quiz    | Practical (Studio Work) | Project |
|        |   |   | *(1) 10%                             | *(1) 5% | *(1) 35%                | (1) 10% |
| ●      |   |   | ✓                                    |         |                         |         |
|        | ● |   |                                      | ✓       |                         |         |
|        | ● |   |                                      |         | ✓                       |         |
|        | ● |   |                                      |         |                         | ✓       |
|        | ● |   |                                      |         |                         | **✓     |



**COURSE : DCQ5192 ESTIMATING 2**

**CREDIT(S) : 2**

**PRE REQUISITE(S) : DCQ3182 ESTIMATING 1**

### SYNOPSIS

**ESTIMATING 2** gives students knowledge on the definition, purposes, and methods of preliminary cost estimate. All the topics discussed will help the students to carry out an effective preliminary cost estimate. This course also covers knowledge on the cost data, cost index and cost analysis.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, students should be able to:

1. Compute accurately the built up rates and preliminary cost estimate for the construction projects. (C3,PLO1)
2. Explain the preparation of cost estimation for construction projects. (C2, PLO1)
3. Demonstrate ability to participate in critical thinking to solve problems related to estimation works. (A3,PLO4)
4. Demonstrate continuous learning and information management skill while engaging in independent acquisition of new knowledge and skill to develop a project in estimating works. (A3, PLO6)

### COURSE SUMMARY:

TOPIC 1 : Built Up Rates

TOPIC 2 : Preliminary cost Estimate

TOPIC 3 : Cost Data

TOPIC 3 : Cost Index

TOPIC 3 : Cost Analysis

### COURSE ASSESSMENT:

Coursework Assessment (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |                |
|--------|---|---|---|---|--------------------------------------|----------|----------------|
| 1      | 2 | 3 | 4 | 5 | Test                                 | Quiz     | End of Chapter |
|        |   |   |   |   | *(2) 20%                             | *(2) 10% | *(1) 20%       |
| ●      |   |   |   |   | ✓                                    |          |                |
|        |   |   |   |   |                                      | ✓        |                |
|        |   |   | ● |   | ✓                                    |          | ✓              |
|        |   |   | ● |   |                                      | ✓        |                |
|        |   | ● |   |   |                                      |          | **✓            |
|        |   | ● |   |   |                                      |          |                |

**COURSE : DCQ5212 CONSTRUCTION ECONOMICS**

**CREDIT(S) : 2**

**PRE REQUISITE(S) : NONE**

### SYNOPSIS

**CONSTRUCTION ECONOMICS** course provides student knowledge on the concepts and the principles of economy in construction industry. The course covers project development, cash flow, current price and fluctuation cost, cost planning and cost control. This course also exposes student to knowledge on the cost implication on design changes and construction method.

### COURSE LEARNING OUTCOMES (CLO):

Upon completion of this course, students should be able to:

1. Illustrate clearly the housing development process, costing, cost management and implication for building construction. (C3,PLO1)
2. Demonstrate good communication skill in oral presentation on assigned topic(s) within a stipulated time frame. (A3,PLO3)
3. Demonstrate ability to lead a team to complete assigned task within a stipulated time frame. (A3,PLO9)

### COURSE SUMMARY:

TOPIC 1 : Economics For Housing Development

TOPIC 2 : Cash Flow

TOPIC 3 : Current Price And Fluctuation Cost

TOPIC 4 : Cost Planning

TOPIC 5 : Cost Control

TOPIC 6 : Cost Implication From Design Changes

TOPIC 7: Functional Requirement And Cost Implication On Construction Method

### COURSE ASSESSMENT:

Coursework Assessment (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |              |
|--------|---|---|---|---|---|---|--------------------------------------|----------|--------------|
| 1      | 2 | 3 | 4 | 5 | 6 | 7 | Test                                 | Quiz     | Presentation |
|        | ● |   |   |   | ● |   | *(2) 20%                             | *(2) 10% | *(1) 20%     |
| ●      |   | ● |   |   | ● |   | ✓                                    | ✓        | ✓            |
| ●      |   |   |   |   |   | ● |                                      |          | **✓          |
| ●      |   |   |   |   |   | ● |                                      |          |              |

**COURSE :** DCQ5222 CIVIL ENGINEERING WORKS MEASUREMENT 1  
**CREDIT(S) :** 2  
**PRE-REQUISITE(S) :** NONE

### SYNOPSIS

**CIVIL ENGINEERING WORKS MEASUREMENT 1** course provides students knowledge and skills in measuring quantities of civil engineering works. The topics covered are the principles of civil engineering works measurement, measuring general items, demolition & site clearance, earthworks and roads & pavings.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, students should be able to:

1. Arrange the procedure to produce bill of quantities for civil engineering works based on Malaysian Civil Engineering Standard Method of Measurement (MyCESMM). (C4,PLO1)
2. Measure the quantities for civil engineering works according to MyCESMM. (P4, PLO2)
3. Demonstrate an understanding of quantity surveying professional code of conduct in civil engineering works measurement based on MyCESMM. (A3, PLO8)

### COURSE SUMMARY:

TOPIC 1 : Introduction To Civil Engineering Works Measurement

TOPIC 2 : Measurement For Civil Engineering Works

### COURSE ASSESSMENT:

Coursework (CA) - 60%, Final Examination (FE) - 40%

| TOPICS |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |         |                            |                         |
|--------|---|--------------------------------------|---------|----------------------------|-------------------------|
| 1      | 2 | Test                                 | Quiz    | Practical<br>(Studio Work) | End of Chapter<br>(EOC) |
|        |   | *(1) 10%                             | *(1) 5% | *(2) 35%                   | *(1) 10%                |
|        | ● |                                      | ✓       |                            |                         |
|        | ● | ✓                                    |         |                            |                         |
|        | ● |                                      |         | ✓                          |                         |
|        | ● |                                      |         |                            | ✓                       |
|        | ● |                                      |         | ✓                          |                         |
|        | ● |                                      |         | **✓                        |                         |

**COURSE : DCQ5232 CONTRACT ADMINISTRATION**

**CREDIT(S) : 2**

**PRE-REQUISITE(S) : NONE**

### SYNOPSIS

**CONTRACT ADMINISTRATION** course gives knowledge and understanding on contract administration based on the PWD 203, PWD 203A and PAM Standard Form of Contract. The topics covered in the course are contract documentation, jurisdiction, roles & responsibilities of parties involved, work execution, workmen's welfare, delay & extension of time, completion of works, dispute & arbitration. This course also provides students knowledge regarding the importance of performance bond and insurance in construction projects.

### COURSE LEARNING OUTCOMES (CLO)

Upon completion of this course, students should be able to:

1. Explain clearly the relation of issues under post contract administration with related clauses in PWD203/203A and PAM Standard Form of Contract. (C3,PLO1)
2. Demonstrate good communication skill in oral presentation on assigned topics within a stipulated time frame. (A3, PLO3)
3. Demonstrate ability to participate to solve problems related to post contract administration. (A3,PLO4)

### COURSE SUMMARY:

TOPIC 1 : Introduction To Contract Administration

TOPIC 2 : Performance Bond And Insurance

TOPIC 3 : Possession of Site

TOPIC 4 : Employment of Workmen

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |              |
|--------|---|---|---|---|---|---|--------------------------------------|----------|--------------|
| 1      | 2 | 3 | 4 | 5 | 6 | 7 | Test                                 | Quiz     | Presentation |
| •      |   | • |   | • |   |   | *(2) 20%                             | *(2) 10% | *(1) 20%     |
|        |   | • |   |   | • |   | ✓                                    |          |              |
|        |   |   |   |   | • |   |                                      | ✓        |              |
|        |   |   |   |   | • |   |                                      |          | ✓            |
|        |   |   |   |   | • |   |                                      |          | ✓**          |

**COURSE :** DCQ5242 PRINCIPLE OF MANAGEMENT

**CREDIT(S) :** 2

**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**PRINCIPLES OF MANAGEMENT** course provides students knowledge regarding the concept and fundamental principles of project management in the construction industry. The topics covered in the course are introduction to management, management theories, management process and motivation & incentives.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Explain clearly the implementation of the principles of management in an organization. (C3,PLO1)
2. Demonstrate awareness of social safety/ healthy/ needs in assigned topic(s) for assignments. (A3, PLO5)
3. Demonstrate ability to work in team to complete assigned tasks during assigned project. (A3,PLO9)

### COURSE SUMMARY:

TOPIC 1 : Introduction To Management

TOPIC 2 : Management Theories

TOPIC 3 : Management Process

TOPIC 4 : Motivations and Incentives

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |              |
|--------|---|---|---|--------------------------------------|----------|--------------|
| 1      | 2 | 3 | 4 | Test                                 | Quiz     | Presentation |
|        |   |   |   | *(2 )20%                             | *(2) 10% | *(1) 20%     |
| ●      |   |   | ● | √                                    |          |              |
|        | ● |   |   |                                      | √        |              |
|        | ● |   |   |                                      |          | √            |
|        | ● |   |   |                                      |          | **√          |
|        | ● |   |   |                                      |          |              |

**COURSE : DUA6022 KOMUNIKASI DAN PENYIARAN ISLAM**

**CREDIT(S) : 2**

**PRE-REQUISITE(S) : TIADA**

#### **SYNOPSIS**

**KOMUNIKASI DAN PENYIARAN ISLAM** memfokuskan kepada penguasaan konsep, kemahiran komunikasi dan penyiaran islam bagi meningkatkan kefahaman pelajar secara holistik terhadap kursus ini.

#### **HASIL PEMBELAJARAN**

Di akhir kursus ini, pelajar akan dapat :

1. Menjelaskan konsep, bentuk komunikasi dan hubungannya dalam Islam. (C2 : LD1)
2. Menunjukkan kemahiran pengurusan komunikasi dalam bidang penyiaran Islam. (C3, A4 : LD1, LD5)
3. Menghubung kait isu-isu semasa dalam komunikasi dan penyiaran Islam. (C3, A3 : LD1, LD6)

#### **RINGKASAN KURSUS:**

TOPIK 1 : Konsep Komunikasi

TOPIK 2 : Kensep Penyiaran

TOPIK 3 : Cabaran Komunikasi Dan Penyiaran Dalam Islam

#### **PENILAIAN KURSUS:**

Pentaksiran Kerja Kursus (KK) – 100%

| TOPIK |   |   | KAEDAH PENTAKSIRAN UNTUK KERJA KURSUS (KK) |          |          |              |
|-------|---|---|--|----------|----------|--------------|
| 1     | 2 | 3 | Kuiz                                       | Projek   | E-Folio  | Pembentangan |
|       |   |   | *(2) 20%                                   | *(1) 30% | *(1) 30% | *(1) 20%     |
| ●     |   |   | ✓  |          |          |              |
|       | ● |   |  | ✓        |          | **✓          |
|       |   | ● | ✓  |          | ✓        |              |

**COURSE :** DCQ6094 BUILDING WORKS MEASUREMENT 5  
**CREDIT(S) :** 4  
**PRE REQUISITE(S) :** DCQ5083 BUILDING WORKS MEASUREMENT 4

### SYNOPSIS

**BUILDING WORKS MEASUREMENT 5** course provides students knowledge on the quantity measurement for steelwork, external work, demolition and renovation works. This content comprises of steel work and external work such as fencing & gate, landscape, drainage & sewerage and water reticulation system. It also covers demolition and renovation works.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Arrange the procedure to produce bill of quantities for civil engineering works according to Standard Method of Measurement 2 (SMM2). (C4, PLO1)
2. Measure the quantities for civil engineering works according to SMM2 (P4, PLO2)
3. Demonstrate an understanding of quantity surveying professional code of conduct in building works and civil engineering works measurement based on SMM2. (A3, PLO8)

### COURSE SUMMARY:

- TOPIC 1 : Steel Works Measurement
- TOPIC 2 : Fencing And Gate Measurement
- TOPIC 3 : Landscape Measurement
- TOPIC 4 : Drainage Works Measurement
- TOPIC 5 : Sewerage Works Measurement
- TOPIC 6 : Water Reticulation System Measurement
- TOPIC 7 : Demolition And Renovation Works Measurement

### COURSE ASSESSMENT:

Coursework (CA) - 60%, Final Examination (FE) - 40%

| TOPICS |   |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |         |                         |         |
|--------|---|---|---|---|---|---|--------------------------------------|---------|-------------------------|---------|
| 1      | 2 | 3 | 4 | 5 | 6 | 7 | Test                                 | Quiz    | Practical (Studio Work) | Project |
|        |   |   |   |   |   |   | ^(1) 10%                             | ^(1) 5% | ^(1) 35%                | ^(1)10% |
|        | ● |   |   |   |   | ● |                                      | ✓       |                         |         |
|        |   |   |   | ● |   |   | ✓                                    |         |                         | ✓       |
|        |   |   | ● |   |   |   |                                      |         | ✓                       |         |
|        |   |   | ● |   |   |   |                                      |         | **✓                     |         |

**COURSE :** DCQ6132 PROFESSIONAL PRACTICE 3  
**CREDIT(S) :** 2  
**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**PROFESSIONAL PRACTICE 3** course gives student knowledge on the task of a quantity surveyor in a project. The course emphasize on the definition, purpose and task of quantity surveyor in the preparation of prime cost sum and provisional sum, preliminaries works, preparation of interim payment, variation order and final account.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Apply the procedure for preparation of prime cost sum, provisional sum and payment to a project according to PWD and PAM standard form of contract. (C3, PLO1)
2. Demonstrate good communication skill in oral presentation on assigned topic(s) within a stipulated time frame (A3, PLO3)
3. Demonstrate ability to work in team to complete assignment tasks within a stipulated time frame (A3, PLO9)

### COURSE SUMMARY:

TOPIC 1 : Prime Cost And Provisional Sum

TOPIC 2 : Preliminaries Works

TOPIC 3 : Interim Payment

TOPIC 4 : Variation Order

TOPIC 5 : Final Account

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |              |
|--------|---|---|---|---|--------------------------------------|----------|--------------|
| 1      | 2 | 3 | 4 | 5 | Test                                 | Quiz     | Presentation |
|        |   |   |   |   | *(2) 20%                             | *(2) 10% | *(1) 20%     |
| ●      |   |   | ● |   | ✓                                    |          |              |
| ●      |   |   | ● |   |                                      | ✓        |              |
|        |   | ● |   |   |                                      |          | ✓            |
|        |   | ● |   |   |                                      |          | **✓          |
|        |   | ● |   |   |                                      |          |              |



**COURSE : DCQ6253 QUANTITY SURVEYING PROJECT**

**CREDIT(S) : 3**

**PRE REQUISITE(S) : NONE**

### SYNOPSIS

**QUANTITY SURVEYING PROJECT** course enables students to apply knowledge and technical expertise gained throughout the semester. It requires the students to prepare Bills of Quantities by using computer. This course also offers experience in communication skills, group work, work planning, decision making and also critical and creative thinking.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Organize a work programme to prepare bills of quantities accurately. (C5, PLO1)
2. Measure the quantities for construction works according to Standard Method of Measurement. (P5, PLO2)
3. Demonstrate continuous learning and information management skill while engaging in independent acquisition of new knowledge and skill to develop a project. (A3, PLO6)
4. Demonstrate ability to lead a team to complete assigned project within a stipulated time frame. (A3, PLO9)

### COURSE SUMMARY:

TOPIC 1 : Introduction

TOPIC 2 : Planning of Works

TOPIC 3 : Preparing Bill of Quantities

TOPIC 4 : Project Presentation

### COURSE ASSESSMENT:

Coursework (CA) - 100%

| TOPICS |   |   |   | ASSESSMENT TASK FOR COURSEWORK (CA) |                      |
|--------|---|---|---|-------------------------------------|----------------------|
| 1      | 2 | 3 | 4 | Project Portfolio                   | Project Presentation |
|        |   |   |   | <b>*(1) 80%</b>                     | <b>*(2) 20%</b>      |
|        |   | ● |   | ✓                                   |                      |
|        |   | ● |   |                                     | ✓                    |
|        |   | ● |   | ✓                                   |                      |
|        |   |   | ● |                                     | **✓                  |
|        |   |   | ● |                                     |                      |

**COURSE** : **DCQ6262 CONSTRUCTION MANAGEMENT**  
**CREDIT(S)** : **2**  
**PRE REQUISITE(S)** : **NONE**

### SYNOPSIS

**CONSTRUCTION MANAGEMENT** course exposes students to the construction project management techniques practiced in this country. The course emphasis is on the planning of construction future control and construction site management. This course also gives students knowledge in the implementation of leadership and management tasks.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Explain clearly the planning techniques and site management which are practiced in the construction project. (C3, PLO1)
2. Demonstrate good communication skill in oral presentation on assigned topics within a stipulated time frame. (A3, PLO3)
3. Demonstrate ability to work in team to complete assigned tasks within a stipulated time frame (A3, PLO9)

### COURSE SUMMARY:

TOPIC 1 : Planning Techniques In The Construction Project

TOPIC 2 : Construction Site Management

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |          |              |
|--------|---|--------------------------------------|----------|--------------|
| 1      | 2 | Test                                 | Quiz     | Presentation |
|        |   | *(2) 20%                             | *(2) 10% | *(1) 20%     |
|        | ● | ✓                                    |          |              |
|        |   |                                      | ✓        |              |
|        |   |                                      |          | ✓            |
|        | ● |                                      |          | ✓**          |
| ●      |   |                                      |          |              |

**COURSE : DCQ6272 VALUE MANAGEMENT**

**CREDIT(S) : 2**

**PRE REQUISITE(S) : NONE**

### **SYNOPSIS**

**VALUE MANAGEMENT** course exposes students to value management concepts and its background. The course emphasizes on the method of implementing value management studies in the construction industry. The course also covers the concept, the elements and the implementation of the life cycle costing.

### **COURSE LEARNING OUTCOMES**

Upon completion of the course, students should be able to:-

1. Explain clearly the procedure of implementation value management and the life cycle costing in construction industry. (C3,PLO1)
2. Demonstrate good communication skill in oral presentation on assigned topic (s) within a stipulated time frame. (A3, PLO3)
3. Demonstrate continuous learning and information management skill while engaging in independent acquisition of new knowledge and skill to develop a project. (A3,PLO6)

### **COURSE SUMMARY:**

TOPIC 1 : Introduction To Value Management

TOPIC 2 : Activities Involved In Value Management

TOPIC 3 : Life Cycle Costing

### **COURSE ASSESSMENT:**

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |         |              |
|--------|---|---|--------------------------------------|---------|--------------|
| 1      | 2 | 3 | Test                                 | Quiz    | Presentation |
|        |   |   | *(2)20%                              | *(2)10% | *(1)20%      |
|        | ● |   | ✓                                    |         |              |
|        | ● |   |                                      | ✓       |              |
|        | ● |   |                                      |         |              |
|        | ● |   |                                      |         | ✓            |
|        | ● |   |                                      |         | **✓          |
|        | ● |   |                                      |         |              |

**COURSE :** DCQ6282 CIVIL ENGINEERING WORKS MEASUREMENT 2  
**CREDIT(S) :** 2  
**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**CIVIL ENGINEERING WORKS MEASUREMENT 2** course provides students knowledge and skills in measuring quantities for civil engineering works. The emphasis of the course is on the principles of measurement for concrete works, piling works, metal works and method related charges.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Arrange the procedure to produce bill of quantities for civil engineering works based on Malaysian Civil Engineering Standard Method of Measurement (MyCESMM). (C4, PLO1)
2. Measure the quantities for civil engineering works according to MyCESMM. (P4, PLO2)
3. Demonstrate an understanding of quantity surveying professional code of conduct in civil engineering works measurement based on MyCESMM. (A3, PLO8)

### COURSE SUMMARY:

TOPIC 1 : Introduction To The Concept of Method Related Charges (MRC)

TOPIC 2 : Measurement For Civil Engineering Works

### COURSE ASSESSMENT:

Coursework (CA) - 60%, Final Examination (FE) - 40%

| TOPICS | ASSESSMENT TASKS FOR COURSEWORK (CA) |         |                            |                         |
|--------|--------------------------------------|---------|----------------------------|-------------------------|
| 1      | Test                                 | Quiz    | Practical<br>(Studio Work) | End of Chapter<br>(EOC) |
|        | *(1) 10%                             | *(1) 5% | *(1) 35%                   | *(1) 10%                |
| ●      |                                      | ✓       |                            |                         |
| ●      | ✓                                    |         |                            |                         |
| ●      |                                      |         |                            | ✓                       |
| ●      |                                      |         | ✓                          |                         |
| ●      |                                      |         | **✓                        |                         |
| ●      |                                      |         |                            | **✓                     |

**COURSE :** DCC6252 INTRODUCTION TO GREEN CONSTRUCTION  
**CREDIT(S) :** 2  
**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**INTRODUCTION TO GREEN CONSTRUCTION** is designed for comprehension of green building technologies and sustainability. The main topics to be covered include concept of green technologies, energy conservation, green building practices and sustainable construction.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Relate good practices in green technology and energy conservation on the surrounding environment. (C3, PLO1)
2. Investigate an appropriate comprehension of green assessment to embrace sustainable development and construction. (C4, PLO3)
3. Integrate good ethics and professionalism in issues associated with energy conservation, green practices and sustainability. (A4, PLO10)

### COURSE SUMMARY:

TOPIC 1 : Introduction To Green Technology

TOPIC 2 : Energy System

TOPIC 3 : Green Building

TOPIC 4 : Sustainable Construction

### COURSE ASSESSMENT:

Coursework (CA) - 50%, Final Examination (FE) - 50%

| TOPICS |   |   |   | ASSESSMENT TASKS FOR COURSEWORK |          |            |            |
|--------|---|---|---|---------------------------------|----------|------------|------------|
| 1      | 2 | 3 | 4 | Test                            | Quiz     | Assignment | Case Study |
|        |   |   |   | *(2) 20%                        | *(2) 10% | *(1) 10%   | *(1) 10%   |
| ●      |   |   |   | ✓                               | ✓        | ✓          |            |
|        |   | ● |   | ✓                               | ✓        |            | ✓          |
|        | ● | ● |   |                                 |          | ***✓       | ***✓       |

**COURSE : DBC2012 COMPUTER APPLICATION**

**CREDIT(S) : 2**

**PRE REQUISITE(S) : NONE**

### SYNOPSIS

**COMPUTER APPLICATION** expose students to different packages of applications software such as word processor, spreadsheet, presentation, project management and diagramming. This course mainly emphasize on the practical aspects of using applications software. As the result, students will have opportunity to manipulate and create a variety of techniques and styles to produce documents.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Apply computer application knowledge and skills to perform related task. (C3, LD1)
2. Complete appropriate lab work task by using suitable application software to enhance computer knowledge and skills. (P4, LD2)
3. Organise a complete project report by using appropriate application software. (P4, LD2)

### COURSE SUMMARY:

TOPIC 1 : Word Processor

TOPIC 2 : Spreadsheet

TOPIC 3 : Database

TOPIC 4 : Presentation

TOPIC 5 : Project Management

TOPIC 6: Diagramming

### COURSE ASSESSMENT:

Coursework (CA) - 100%

| ASSESSMENT TASKS FOR COURSEWORK |   |   |   |   |   |                |          |          |
|---------------------------------|---|---|---|---|---|----------------|----------|----------|
| 1                               | 2 | 3 | 4 | 5 | 6 | Practical Test | Lab Work | Project  |
|                                 |   |   |   |   |   | *(1) 20%       | *(6) 60% | *(1) 20% |
| ●                               | ● |   |   |   | ● | √              |          |          |
| ●                               | ● | ● | ● | ● | ● |                | √        |          |
|                                 |   | ● |   |   |   |                |          | √        |

**COURSE** : **DUF1022 MANDARIN 1**  
**CREDIT(S)** : **2**  
**PRE REQUISITE(S)** : **NONE**

### **SYNOPSIS**

**MANDARIN 1** is intended for students who have no background in Mandarin. This is the first of a three-level Mandarin Language programme designed specifically for polytechnic students. The course will emphasize greatly on developing students' oral communication skills in situational contexts through class activities such as role plays, simulations and other relevant oral tasks. Students are expected to take part in all language skills conducted in class to ensure success in attaining the elementary level proficiency. In this course, students will be introduced to the basic *Hanyu Pinyin* system (Chinese Phonetic Alphabet) and *Hanzi* (Chinese characters). Finally, this course provides a basic insight into the Chinese culture.

### **COURSE LEARNING OUTCOMES**

Upon completion of the course, students should be able to:-

1. Identify and produce the basic sounds according to the system of *Hanyu Pinyin*. (C1, LD 1)
2. Listen and respond to oral discourse effectively. (C2, LD 3)
3. Deliver an oral presentation effectively. (C3, A2, LD 3)
4. Read and comprehend some simple sentences in *Hanyu Pinyin*. (C3, LD 3)
5. Write about 40 – 60 basic *Hanzi* correctly. (C3, A2, LD 3)

### **COURSE SUMMARY:**

TOPIC 1 : Introduction To *Hanyu Pinyin*

TOPIC 2 : Introduction To *Hanzi*

TOPIC 3 : Greetings

TOPIC 4 : Making Introductions

TOPIC 5 : Numbers

TOPIC 6 : Dates

TOPIC 7 : Time

**COURSE ASSESSMENT:**

Coursework (CA) - 100%

| TOPICS |   |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK (CA) |                        |                        |                          |
|--------|---|---|---|---|---|---|--------------------------------------|------------------------|------------------------|--------------------------|
| 1      | 2 | 3 | 4 | 5 | 6 | 7 | Quiz<br>*(2) 30%                     | Oral Test<br>**(1) 25% | Final Test<br>*(1) 30% | Written Task<br>*(1) 15% |
| ●      |   |   |   |   |   |   | √                                    |                        |                        |                          |
|        |   | ● | ● |   |   |   | √                                    |                        |                        |                          |
|        |   |   |   | ● |   |   |                                      | √                      |                        |                          |
|        |   |   |   |   | ● | ● |                                      |                        | √                      |                          |
|        | ● |   |   |   |   |   |                                      |                        |                        | √                        |



**COURSE** : **DCA6272 MULTIMEDIA PRODUCTION**  
**CREDIT(S)** : **2**  
**PRE REQUISITE(S)** : **NONE**

### SYNOPSIS

**MULTIMEDIA PRODUCTION** course provides basic knowledge on multimedia elements. This module focuses on the usage of multimedia application in video production.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Describe multimedia elements and the effective methods of using multimedia application. (C2, PLO1)
2. Demonstrate appropriate multimedia elements in producing video production. (P5, PLO2)
3. Work collaboratively to promote social responsibility through video production. (A4, PLO5)

### COURSE SUMMARY:

TOPIC 1 : Introduction To Multimedia

TOPIC 2 : Multimedia Elements

TOPIC 3 : Multimedia Application

TOPIC 4 : Video Production

### COURSE ASSESSMENT:

Coursework (CA) - 100%

| TOPICS |   |   |   | ASSESSMENT METHODS FOR<br>COURSEWORK (CA) |                                 |                     |
|--------|---|---|---|---|---------------------------------|---------------------|
| 1      | 2 | 3 | 4 | Test<br>*(1) 20%                          | Laboratory Exercise<br>*(2) 40% | Project<br>*(1) 40% |
| •      |   |   |   | √   |                                 |                     |
|        |   | • | • |   | √                               | √                   |
|        |   | • | • |   | **√                             |                     |

**COURSE :** DCG3092 LAND LAWS & REGULATION  
**CREDIT(S) :** 2  
**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**LAND LAWS AND REGULATIONS** Provides exposure and knowledge related to the legislative system which was used in land administration in Peninsular Malaysia before and after the introduction of the National Land Code and also the land administration system for Sabah and Sarawak. This course also explains about land disposals, land dealing and transactions, Malay Reserve, Sabah and Sarawak Land Reserve and land acquisition by the State Authority. This knowledge is important in order to solve problems related to land administration and management.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Explain the National Land code in Peninsular Malaysia and land administration in Sabah and Sarawak. (C2, PLO1)
2. Apply the concept of Malay reserve in Peninsular Malaysia, land reserve in Sabah and Sarawak and land acquisition under Land Acquisition Act 1960 (Act 486). (C3, PLO1)
3. Demonstrate good communication skill in presentation individually / in group, on assigned topic (s) within a stipulated time frame. (A3, PLO3)

### COURSE SUMMARY:

- TOPIC 1 : Land Administration in Peninsular Malaysia, Sabah & Sarawak
- TOPIC 2 : Land Disposal by Alienation
- TOPIC 3 : Land Disposal by Other than Alienation
- TOPIC 4 : Land Dealings and Transactions
- TOPIC 5 : Malay Reserve in Peninsular Malaysia, Native Customary Rights (NCR) in Sarawak & Native Land in Sabah
- TOPIC 6 : Land Acquisition Under Land Acquisition Act 1960 (Latest Amendment)

### COURSE ASSESSMENT:

Coursework (CA) - 100%

| TOPICS |   |   |   |   |   | ASSESSMENT TASKS FOR COURSEWORK |          |                 |              |
|--------|---|---|---|---|---|---------------------------------|----------|-----------------|--------------|
| 1      | 2 | 3 | 4 | 5 | 6 | Theory Test                     | Quiz     | Essay Questions | Presentation |
|        |   |   |   |   |   | *(2) 20%                        | *(2) 10% | *(1) 10%        | *(1) 10%     |
|        |   |   |   |   |   | ✓                               |          |                 |              |
|        |   |   |   |   |   |                                 | ✓        |                 |              |
|        |   |   |   |   |   |                                 |          | ✓               |              |
|        |   |   |   |   |   | ✓                               |          | ✓               | ✓            |
|        |   |   |   |   |   |                                 | ✓        |                 |              |
|        |   |   |   |   |   |                                 |          |                 | ✓            |

**COURSE :** DUT4010 INDUSTRIAL TRAINING  
**CREDIT(S) :** 10  
**PRE REQUISITE(S) :** NONE

### SYNOPSIS

**INDUSTRIAL TRAINING** exposes students to related workplace competencies demanded by industries. This course provides exposure to students in terms of technology literacy, effective communication, practice social skills and teamwork, policies, procedures and regulations, professional ethics and reporting. It also equips students with real work experience, thus helping students to perform as novice workers.

### COURSE LEARNING OUTCOMES

Upon completion of the course, students should be able to:-

1. Apply related knowledge and skills at the workplace. (C3, P2)
2. Communicate effectively with others. (A3)
3. Practice teamwork. (A5)
4. Professionally and ethically comply with policies, procedures and rules of the organization. (A5)
5. Explain the tasks assigned (during the industrial training) according to the prescribed format. (P2, A4)

### COURSE SUMMARY:

- TOPIC 1 : Technology Literacy
- TOPIC 2 : Effective Communication
- TOPIC 3 : Social Skills and Teamwork
- TOPIC 4 : Policies, Procedures and Regulations
- TOPIC 5 : Professional Ethics
- TOPIC 6: Reporting

### COURSE ASSESSMENT:

Coursework (CA) – 100%

| TOPICS |   |   |   |     |   |   | ASSESSMENT METHODS FOR COURSEWORK (CA)                 |  |   |   |
|--------|---|---|---|-----|---|---|--|--|---|---|
| 1      | 2 | 3 | 4 | 4.1 | 5 | 6 | INSTITUTION<br>Report on<br>Industrial Training<br>30% | EVALUATION<br>(40%)<br>Presentation<br>10% | INDUSTRY<br>EVALUATION (60%)<br>Reflective<br>Journal<br>20%<br>Practical Task<br>40% |   |
| •      |   |   |   |     |   |   | ✓  |  | ✓   | ✓ |
|        | • |   |   |     |   |   |  | ✓  |   | ✓ |
|        |   | • |   |     |   |   |  | ✓  |   | ✓ |