







# Building Engineering Technology

School of Housing, Building, & Planning



EST BS URP



hbp.usm.my

| Student Information    |  |  |
|------------------------|--|--|
| Student Name:          |  |  |
| Matrix No.:            |  |  |
| Contact No.:           |  |  |
| Email Address:         |  |  |
| Academic Advisor Name: |  |  |

# Bachelor of Building Engineering Technology with Honours



SCHOOLOF HOUSING, BUILDING& PLANNING Ranked TOP 5
among
Public Universities

& TOP 100 faculty in the world by subject

#### **Editors**

Assoc. Prof. Dr. Radzi Ismail Dr. Ariza Sharikin Abu Bakar Dr. Muhammad Hafeez Abdul Nasir

#### **Advisors**

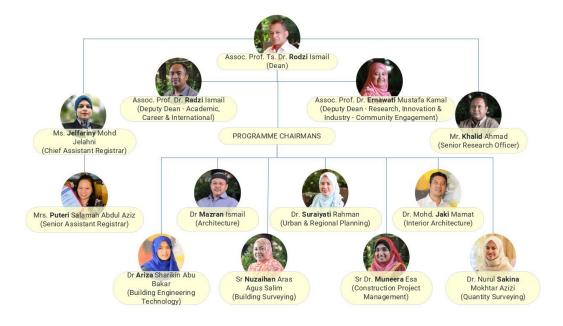
Assoc. Prof. Ts. Dr. Mohd. Rodzi Ismail Prof. Dato' Gs. Dr. Narimah Samat (TNCAA)

#### **Sponsor**

Bahagian Akademik dan Antarabangsa USM (BAA)



# School of Housing, Building and Planning (HBP) Organisation Chart, 2022 - 2024



#### **Academic Staff**



Mohd Rodzi Ismail (Assoc. Prof. Ts. Dr.) E49 Room 211 +604 - 653 2841



Ariza Sharikin Abu Bakar (Dr.) E49 Room 105 +604 - 653 2805



Hanizam Awang (Assoc. Prof. Dr.) E08 Room 006 +604 - 653 3279



Cheah Chee Ban (Assoc. Prof. Ir. Dr.) E49 Room 102 +604 - 653 2827



Mariati Taib @ Mohd Taib (Dr.) E49 Room 210 604 - 653 5953



Noor Faisal Abas (Assoc. Prof. Ts. Dr.) E08B Room 007 +604 - 653 3170



Faizal Baharum (Dr.) E40 Room 115 +604 - 653 2501



Norhidayah Md Ulang (Dr.) E49 Room 209 +604 - 653 2839



Noor Halizah Abdullah (Ts. Dr.) Cabin C, Room 1 +604-6535942

# School of Housing, Building & Planning Signed and crafted in 1972 as a Vision

Envisioned and crafted in 1972 as a holistic school entrusted with nation building and national development, the School of Housing, Building (HBP), Planning Universiti Sains Malaysia (USM) opened its doors to the first batch of enrolled students in 1973. 50 years on, HBP has matured into a multi-disciplinary built environment institution that seamlessly entwines 7 fields of study into one comprehensive learning and teaching experience that is strong in fundamentals but mercurial in adapting to change, innovation and dynamism. The school has made progress in teaching, tremendous research, consultancy and publication.

Currently, there are seven undergraduate programmes offered by the school. They are recognized by the respective professional bodies such as the Board of Town Planners Malaysia (LPBM), Board of Architects Malaysia (LAM), Board of Quantity Surveyors Malaysia (BQSM), Royal Institution of Chartered Surveyors (RICS), Royal Institution of Surveyors Malaysia (RISM), and Chartered Institute of Building (CIOB).

'Championing a sustainable future through comprehensive education and embracing a global perspective'

#### Mission

HBP as a prominent institution in the field of built environment education, cultivating transdisciplinary interconnectivity and committed to championing sustainability.





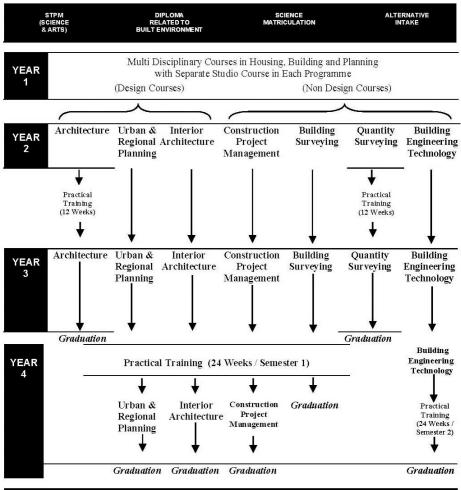








#### Study Path at The School of HBP



M.Arch / MSc by Coursework /Msc by Mixed-Mode/ MSc by Research

Ph.D by Research in Built Environment

#### Programme Structure/Curriculum at HBP

The School of Housing, Building and Planning (HBP) offers a curriculum that is unique amongst programmes of advanced education dealing with the environment. Whereas curricula architecture, interior architecture, building surveying, urban & regional planning, construction project management, building enaineerina technology or quantity surveying are generally based upon a professional training in one of these disciplines, the School eschews professional specialism in favour of a broadly based education cutting across both professional and disciplinary boundaries. As such, it is more correct to describe the broad focus of education at the School as a field of knowledge and skills, rather than the more narrowly focused concept of a single discipline. The students of HBP at the main campus USM Penang and Offshore Programme campus therefore draw upon many different disciplines during the course of their studies, in so far as they are all relevant to the activities of Housing. Building and Planning.

theoretical These and practical components are grouped in the curriculum according to the following categories:

- 1. Courses in theory and methodology
- 2. Studio projects
- 3.Laboratory projects
- 4.Practical training
- 5.Research

|     |         | _      |        |          | -                              |
|-----|---------|--------|--------|----------|--------------------------------|
|     | U       | S      | 1      | 0        | 0                              |
|     | ļ       | 1      | ļ      | L        | Logo                           |
|     | Ţ       | I      | ļ      |          | ses in Series                  |
|     | ļ       | I      | !      | 00-      | Studio                         |
|     | Į.      | Į.     | !      | 10-      | Workshop/Laboratories          |
|     | Į.      | Į.     | !      | 20-      | Physical Environment           |
|     | ļ.      | ļ      | !      | 00       | Studies                        |
|     | ļ       | Į.     | !      | 30-      | Theory and Methodology         |
|     | ļ       | ļ      | !      | 40-      | Cultural & Etiquette Studies   |
|     | ļ       | ļ      | !      | 50-      | Management,                    |
|     | ļ       | ļ      | !      | 00       | administration & regulation    |
|     | ļ       | ļ      | !      | 60-      | Science and Technology         |
|     | ļ       | ļ.     | !      | 70-      | Research and Practical         |
|     | i       | İ      | Cour   | se Leve  | el                             |
|     | Ţ       | I      |        | _        |                                |
|     | ļ       |        |        | lement   | tation                         |
|     | ļ       | S =    | Studio | -        |                                |
|     | Į       | B =    |        |          | aboratories                    |
|     | ļ       | K =    |        | re only  |                                |
|     | ļ       | G =    |        |          | of lectures and practicals     |
|     | ļ       | T =    |        |          | of lectures & tutorial/seminar |
|     | !       | L =    | Rese   | arch     |                                |
|     | Cour    | seClas | oifico | lion     |                                |
|     | U =     | Gene   |        | uon.     |                                |
|     | A =     |        | ecture |          |                                |
|     | P=      |        |        | nional F | Planning                       |
|     | M =     |        |        |          | et Management                  |
|     | D =     |        |        | itecture |                                |
|     | Ē=      |        |        |          | Technology                     |
|     | Q =     |        |        | rveying  | reamology                      |
|     | B=      |        |        | veying   |                                |
|     | _       | 2001   | J Cui  | , g      |                                |
| - C | ode for | the So | chool  | of Hous  | sing, Building and Planning    |

Course Classification Building Engineering Technology

#### 1.0 BUILDING ENGINEERING TECHNOLOGY (BEST)

#### 1.1 Programme Educational Objectives

- i. To nurture knowledgeable and technically competent graduates who are able to solve problems in Building Engineering Technology discipline for sustainable development.
- ii. To nurture graduates with good leadership qualities and communicate effectively, work collaboratively in teams, to achieve engineering solutions that align with societal needs and values.
- iii. To nurture graduates with ability in research, project management and lifelong learning.

#### 1.2 Programme Outcomes

#### **Programme Outcome (PO)**

| PO 1 | Student able to apply knowledge of mathematics, science, engineering fundamentals and an engineering specialisation to defined and applied engineering procedures, processes, systems or methodologies  |
|------|---|
| PO 2 | Student able to identify, formulate, research literature and analyse broadly-defined engineering problems using principles of mathematics, natural sciences and engineering sciences  |
| PO 3 | Student able to design solutions for broadly-defined engineering technology problems and contribute to the design of systems, components or processes to meet desired engineering society needs, public health and safety; and environmental considerations |
| PO 4 | Student able to conduct investigations of broadly-defined problems, research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions           |
| PO 5 | Student able to select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to broadly-defined engineering problems, with an understanding of the limitations                              |
| PO 6 | Student able to demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the engineering technologies practice; and solutions to broadly-defined engineering problems           |

| PO 7  | Student able to understand the impact of engineering technology solutions of broadly-<br>defined engineering problems in societal and environmental context and demonstrate<br>knowledge and needs for sustainable development  |
|-------|---|
| PO 8  | Student able to understand and commit to professional ethics, responsibilities and norms of engineering technology practice   |
| PO 9  | Student have the ability to function effectively as an individual, and as a member or leader in diverse technical teams and in multi-disciplinary settings  |
| PO 10 | Student able to communicate effectively on broadly-defined engineering activities with the engineering community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions |
| PO 11 | Student able to communicate effectively on broadly-defined engineering activities with the engineering community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions |
| PO 12 | Student able to recognize the need for and could engage in independent and life-long learning in the broadest context of engineering technology   |

#### 1.3 Career prospects

Building Engineer
Site Engineer
Building/Construction Technology Specialist
Maintenance Engineer
BIM Modeller
Research and Development Engineer
Housing Developer
Environmental Engineer
Geotechnical Engineer
Entrepreneur

#### 2.0 Program Requirements

#### 2.1 Courses

The requirements for students in Building Engineering Technology programme are summarised as follows:

#### (A) Core Courses

These courses are mandatory for all students and they have to obtain a pass. These courses contain the fundamental topics for the programme curriculum and are coded 'T'.

#### (B) Elective Courses

Elective courses are alternative courses offered by the School. Students who have chosen to major in one of the programmes at HBP are required to take certain related electives that are classified as a priority. Building Engineering Technology students are required to register the elective courses as outlined in the programme structure. The code to be used is 'E'.

#### (C) Practical Training Course

All Building Engineering Technology students are required to undergo Industrial Training for a period of 24 weeks (6 months) in Year Four Semester 2. Practical training carries 12 units.

#### 2.2 Unit Requirements

Unit requirement for graduation is as follows:-

| Bachelor of BUILDING ENGINEERING TECHNOLOGY with Honours |       |  |
|--|-------|--|
| Course Components  | Units |  |
| Core Courses   | 98    |  |
| Elective Courses   | 27    |  |
| University Courses                                       | 15    |  |
| Total  | 140   |  |

#### 2.3 Course Duration

| Bachelor of BUILDING ENGINEERING TECHNOLOGY with Honours |                        |  |  |
|--|------------------------|--|--|
| Duration   |                        |  |  |
| Minimum semesters  | 8 semesters (4 years)  |  |  |
| Maximum semesters  | 14 semesters (7 years) |  |  |

#### For Core and Elective Courses:

- Grade F (Fail) will be required to repeat the course.
- Grade D- and above is considered as a passing grade (Pass)

#### For Studio Courses under the Core Courses:

Grade of C and above is considered as a passing grade (except for Architecture Studio Courses
which the passing grade is B-). Students obtaining grade C- (C+ for Architecture Studio Courses)
and below will be required to repeat the course.

#### **Repeat Courses:**

Students awarded with a grade 'C-' and below for a particular course may be given a chance to
improve their grades by repeating the course during the KSCP or normal semester. Students
awarded with a grade 'C' and above for a particular course will not be allowed to repeat the
course whether during KSCP or normal semester. However, the KSCP is only permitted for the
final year student for graduating purpose

#### 2.4 Studio Courses

Studio courses are **mandatory** for all students to pass, i.e. with achievements of Grade C and above. Students obtaining Grade C- and below will be required to repeat the course.

#### STUDIO FOR BUILDING ENGINEERING TECHNOLOGY (42 Units)

| Code        | Title  |
|-------------|--|
| RES 103/7 - | Building Engineering Technology Studio 1                 |
| RES 104/7 - | Building Engineering Technology Studio 2                 |
| RES 203/7 - | Material and Structural System Studio                    |
| RES 204/7 - | Engineering Services and Environmental Technology Studio |
| RES 301/7 - | Infrastructure, Energy and Transportation Studio         |
| RES 302/7 - | Computer Aided Design and Information Modelling Studio   |

#### 3.0 List of Courses

#### 3.1 Building Engineering Technology Programme

A. Core Courses (98 Units)

| Code and Title | ) |  | Unit | Semester | Year | TICK ✓ |
|----------------|---|--|------|----------|------|--------|
| RES 103        | - | Building Engineering Technology Studio 1       | 7    | 1        | 1    |        |
| REG 131        | - | Mathematic for Engineering Technology          | 3    | 1        | 1    |        |
| REG 132 *      | - | Structural Mechanics *                         | 3    | 1        | 1    |        |
| RES 104        | - | Building Engineering Technology Studio 2       | 7    | 2        | 1    |        |
| REG 161        | - | Construction Materials                         | 3    | 2        | 1    |        |
| RES 203        | - | Material and Structural System Studio          | 7    | 1        | 2    |        |
| REG 233        | - | Geomatic Technology                            | 3    | 1        | 2    |        |
| REG 265        | - | Infrastructure Technology                      | 3    | 1        | 2    |        |
| REG 266        | - | Structural Analysis                            | 3    | 1        | 2    |        |
| RES 204        | - | Engineering Services and Environmental         | 7    | 2        | 2    |        |
|                |   | Technology Studio                              |      |          |      |        |
| REG 261        | ı | Building Services                              | 3    | 2        | 2    |        |
| RES 301        | - | Infrastrucre, Energy and Transportation Studio | 7    | 1        | 3    |        |
| REG 361        | ٠ | Methods of Construction                        | 3    | 1        | 3    |        |
| REG 371        | ı | Design of Concrete Structures                  | 3    | 1        | 3    |        |
| RES 302        | - | Computer Aided Design and Information          | 7    | 2        | 3    |        |
|                |   | Modelling Studio                               |      |          |      |        |
| REL 300        | • | Building Engineering Technology Studies 1      | 3    | 2        | 3    |        |
| REG 360        | ٠ | Industrialised Building System (IBS)           | 3    | 2        | 3    |        |
| REG 468        | • | Road and Transportation                        | 3    | 1        | 4    |        |
| REG 469        | - | Professional Practice for Engineering          | 3    | 1        | 4    |        |
|                |   | Technologist                                   |      |          |      |        |
| REL 400        | · | Building Engineering Technology Studies 2      | 5    | 1        | 4    |        |
| REL 471        | - | Industrial Training                            | 12   | 2        | 4    |        |

Note: \* Prerequisite course for REG 266, passing grade of C or above.

#### B. Elective Courses (27 Units)

| Code and | Title |   | Unit | Semester | Year | TICK ✓ |
|----------|-------|---|------|----------|------|--------|
| RMK153   | -     | Principles of Construction Economics                | 3    | 1        | 1    |        |
| RMK252   | -     | Principles of Project Management                    | 3    | 2        | 1    |        |
| RMK155   | -     | Fundamental of Construction Law                     | 3    | 1        | 2    |        |
| RMK264   | -     | Construction and Financial Management               | 3    | 2        | 2    |        |
| RQG236   | -     | Measurement 1                                       | 3    | 2        | 2    |        |
| RMK156   | -     | Health, Safety and Environmental Management         | 3    | 1        | 3    |        |
| RQG237   | -     | Measurement 2                                       | 3    | 1        | 3    |        |
| RQG355   | -     | Management, Sustainability and Internationalisation | 3    | 2        | 3    |        |
| RBG351   | -     | Building Maintenance                                | 3    | 1        | 4    |        |



#### 4.0 University Course Requirements

|  |  | CRED              | IT TOTAL               |
|--|--|-------------------|------------------------|
|  | General Studies (MPU)  | Local<br>Students | International Students |
| U1   | Local Students  HFF225 (Philosophy and Current Issues) (2 credits)  HFE224 (Appreciation of Ethics and Civilisations) (2 credits)  LKM400 (Bahasa Malaysia IV) (2 credits)  International Students of Science and Technology  HFF225 (Philosophy and Current Issues) (2 credits)  LKM100 (Bahasa Malaysia I) (2 credits) | 6                 | 4                      |
| U2 (Local<br>Students)<br>AND<br>U3<br>(International<br>Students) | Local Students  WUS101 (Core Entrepreneurship) (2 credits)  English Language Courses (4 credits)  International Students  SEA205E (Malaysian Studies) (4 credits)  English Language Courses (4 credits)  | 6                 | 8                      |
| U4   | Local Students WAR122 (Integrity and Anti-Corruption Course) / Co-Curricular Courses*  | 2                 | 2                      |
| Options  | Skill courses/Foreign Language Courses/ Other courses offered by other schools. Students have to choose any of the following:  Co-curricular courses  Skill courses/Foreign Language Courses/ Other courses offered by other schools   | 1                 | 1                      |
|  | CREDIT TOTAL   | 15                | 15                     |

#### 5.0 Course Synopsis

#### 5.1 Core Courses

## RES 103 – Building Engineering Technology Studio 1

This course exposes students to roles and contribution of various disciplines in built environment. Students will be trained in aspects of drawing, sketches, material, building element and structures. This course enhances creativity, communication skill and perception though development process that involves site analysis and planning, measured drawing, specifications and detailing.

## RES 104 - Building Engineering Technology Studio 2

This course aims to introduce students with fundamental concepts, techniques, and frameworks to assess development projects. It covers real estate development processes including site assessment, market research, project analysis, and approval of building and engineering plans

#### REG 131 – Mathematics For Engineering Technology

This course is about the mathematics that is most widely used in engineering core subjects such as algebra, calculus, statistic and statistical application. Topics covered include matrices, polynomials, application of the derivation, first order differential equations, statistic and applied statistic.

#### **REG 132 - Structural Mechanics**

This course introduces students to the principles of engineering mechanics. Course content includes forces and equilibrium of particles, equilibrium of rigid bodies, equivalent systems of forces, centroids and center of gravity, analysis of structural components such as trusses, beam and cables; friction and moment of inertia. The course not only focuses on

solving conceptual components related to engineering applications but also emphasis on practical real worlds industry oriented building engineering and technology problems

#### **REG 161 – Construction Materials**

This course equipped students with knowledge on building materials in construction industry. It emphasizes on the basic physical properties of the material and classification, and current developments to enhance or vary its physical properties. The course also introduces fundamental of testing and standard requirements topics for building materials.

#### RES 203 - Material and Structural System Studio

This course emphasizes on laboratory and site tests. Students are being exposed to the knowledge of soil mechanics, building materials, structural testing and analysis of structures. Students also are being exposed with preparing technical report

## RES 204 - Engineering Services and Environmental Technology Studio

This course emphasizes on the internal building aspects associated with building services systems considering the environmental and sustainability aspect.

#### **REG 233 - Geomatic Technology**

This course covers the basic principles of land surveying and geomatic including exploratory survey, levelling survey, traverse survey, theodolite survey, compass survey and tacheometric survey. Contour survey, contour development, determination of volumes in cut and fills works and also construction site survey are also deliberated in details. Besides, students will be exposed to fundamental of geographic information system, control and monitoring survey and latest GIS technology related to the field of geomatic

#### **REG 261 - Building Services**

This course introduces the principles and design of various building service systems including water supply and sanitation systems, mechanical ventilation and air conditioning systems, fire prevention systems, vertical transportation systems, lighting systems, power supply systems and communication systems. Students will also be exposed to auxilliary systems and sustainable service systems

#### **REG 265 - Infrastructure Technology**

This course focuses on the components of physical infrastructures that support the development of a nation, which includes roads, water supply system, drainage system, sewerage system, power system, communication system and other relevant public facilities. Students will be exposed to the principles, components and the knowledge to design the infrastructure system. This course also discusses the technology being applied to develop such infrastructure by providing actual examples from the existing infrastructure and mega infrastructure projects in this country and overseas.

#### **REG 266 - Structural Analysis**

This course study view at various types of indeterminate structures in building and civil engineering work with emphasis on structures such as continuous beams and low / medium frames. It also study using various methods to solve the indeterminate structures such as Moment Distribution method, Conjugate beam and Integration method.

# RES 301 - Infrastructure, Energy and Transportation Studio

This comprehensive course covers the planning and implementation of both internal and external infrastructure systems, involving vital elements such as energy, power, and water supply. Additionally, it explores into the particulars of land development, offering a holistic understanding of infrastructure

development from various perspectives.

#### RES 302 - Computer Aided Design and Information Modelling Studio

This course focuses on the design of components of building structures that include substructure and superstructure in construction. The design involves standard guided manual methods and using computer software simulation for structural analysis.

#### REG 360 - Industrialised Building System (IBS)

This course introduces the concept of IBS as sustainable construction in Malaysia. A comparison of conventional and IBS construction process and method studies is also introduced. Various materials, technologies and economic aspects of IBS will also be discussed in this course. Modular aspects of coordination, modular design rules and structural design concepts using components and assemblies are also covered

#### **REG 361 - Methods of Construction**

This course exposes students to the construction process and methods. It emphasised the knowledge of the soil and tests involved; site work and construction of structure

### REL 300 – Building Engineering Technology Studies 1

The Final Year Project requires students to undertake a research project supervised by a lecturer in topics related to building engineering and technology. Studies can be conducted in the form of literature reviews, experiments, modeling, arrangement simulations, case studies, questionnaires and others. The first part of this study involves the preparation of a project methodology based on the need to get answers to the problems that have been identified. Students will identify specific problems carefully through reading surveys, site visits and discussions with the industry involved to formulate reasonable research questions.

After that, a research methodology will be developed to find answers to these problems that will be conducted in the second part of the study in the REL 400 course

#### **REG 371 – Design of Concrete Structures**

This course equipped students with knowledge on reinforced concrete design as a structural material. Knowledge on the behaviour and properties of concrete is explained. The ultimate limit state concept design in reinforced concrete will also be explained. Students are exposed to the knowledge of design of the structural elements: slab, beam, column and footing.

#### **REG 468 - Road and Transportation**

This course covers the planning of road and road transportation systems (layout, category and administration of roads and transportation systems in Malaysia); road design and road systems; technology and construction (including earthworks, hydraulic structures, traffic control systems and tools); including materials (such as soil, aggregates, concrete and asphalt)

# REG 469 - Professional Practice for Engineering Technologist

This course provides students with exposure to basic knowledge and skills to adapt in industrial and professional practice. Emphasis is placed on standardized procedures and data, office procedures and official affairs, management structures and related networks in the construction industry

#### REL 400 - Building Engineering Technology Studies 2

This course is a continuation of REL370 offered in Semester I. In this second part of building engineering and technology studies, students will carry out data collection activities using appropriate methodologies established in the previous stage. Students will then be

expected to present the analyzed data in form of tables, charts and graphics and be able to produce meaningful discussion and debate in a written report. Research findings should be reported in the form of introduction, objectives of research, scope of study, literature review, research methodology, data collection/experimental work, data analysis, results and discussions, conclusions and recommendations and references. A scientific report in the form of a final year project report should be submitted at the end of the research and the student is required to communicate the findings of the research through an oral presentation. In addition, students will also be trained to produce their findings as an article in standard publications format

#### **REL 471 - Industrial training**

This course is a compulsory industrial training for Housing, Building and Planning Students. It focuses on training in professional practises in respective fields to prepare students for real-life in the respective industries. The course runs during long holiday and semester 1 for 24 weeks continuously.

#### 4.7.2 Elective Courses

#### RMK 153 – Principles of Construction Economics

This course introduces the economic concepts of demand, supply and market equilibrium; market structures; costs and production and in identifying the main economic problems. Emphasis is also given to supply and demand as well as market structures in the construction and building industries.

#### RMK 252 - Principles of Project Management

The course content covers three knowledge areas comprising organization, management and planning techniques in construction projects.

#### RMK 155 - Fundamentals of Construction Law

This course will expose students to the Malaysian legal system, and legislation related to construction projects. Among the related laws are criminal law, contract law, tort law, company law and partnership as well as land law.

#### RMK 264 – Construction and Financial Management

The main objective of this subject is to introduce to the students the importance of construction management and method of financial analysis in the construction industry.

#### RQG 236 - Measurement 1

This course explains the basic principles of building measurement according to the Standard Methods of Measurement for Building 2 (SMM2) and covers the method of measuring quantities for all major building elements which includes substructure, superstructure, finishing, external works and Bills of Quantities (BQ) preparation

## RMK 156 – Health, Safety and Environmental Management

The structure of this course covers the identification and control of hazards and the supervision of health, safety and environment management in the workplace within the context of the construction industry.

#### RQG 237 - Measurement 2

This course explains the basic principles of building and infrastructure measurement according to Standard Method of Measurement for Building 2

(SMM2) and Malaysian Civil Engineering Standard Methods of Measurement (MyCESMM) which also covers the method of measuring quantities for building and infrastructure elements which includes basements, piling, electrical installation, roadworks, drainage, sewer reticulation, water reticulation, structural steel and external works

#### RQG 355 - Measurement 1

This course focuses on three area namely, management, sustainability and internationalization in construction industry and within the context of quantity surveyors. The management aspect covers entrepreneurship, leadership and organizational management. Sustainability includes the application of green concept in construction and building including building heritage conservation. Internationalisation covers economic policies, work expectation and services of working overseas.

#### **RBG 351 - Building Maintenance**

This course focuses on planned maintenance program for building, encompassing conservation, preservation and dilapidated buildings as well as building space usage.



#### **COURSE STRUCTURE**

#### UNDERGRADUATE PROGRAMME **BUILDING ENGINEERING TECHNOLOGY**

|         |  |   | Υ | E |
|---------|--|---|---|---|
|         | SEMESTER 1                               |   |   | Г |
| RES 103 | Building Engineering Technology Studio 1 | Т | 7 |   |
|         | Mathematics for Engineering Technology   | Т | 3 |   |
| REG 132 | Structural Mechanics                     | Т | 3 |   |
| RMK 153 | Principles of Construction Economics     | Е | 3 |   |
|         | University Course                        | U | 2 |   |
|         |  |   |   |   |

| \R 1    |  |   |    |
|---------|--|---|----|
|         | SEMESTER 2                               |   |    |
|         | Building Engineering Technology Studio 2 | Т | 7  |
| REG 161 | Construction Materials                   | Т | 3  |
| RMK 252 | Principles of Project Management         | Е | 3  |
|         | University Course                        | Е | 2  |
|         | University Course                        | U | 2  |
|         |  |   |    |
|         | UNITS                                    |   |    |
|         |  |   | 17 |

|                        |                          |   | Y  |
|------------------------|--------------------------|---|----|
| SEMES1                 | TER 3                    |   |    |
| RES 203 Material and   | Structural System Studio | Т | 7  |
| REG 233 Geomatic Te    | echnology                | Т | 3  |
| REG 265 Infrastructure | e Technology             | Т | 3  |
| REG 266 Structural Ar  | nalysis                  | Т | 3  |
| RMK 155 Fundamenta     | ls of Construction Law   | E | 3  |
|                        |                          |   |    |
| UNITS                  |                          |   | 19 |

University Course University Course UNITS

| AR 2    |  |   |    |
|---------|--|---|----|
|         | SEMESTER 4   |   |    |
| RES 204 | Engineering Services and Environmental Technology Studio | Т | 7  |
|         | Building Services  | Т | 3  |
| RMK 264 | Construction and Financial Management                    | Е | 3  |
| RQG 236 | Measurement 1  | Е | 3  |
|         | University Course  | J | 2  |
|         |  |   |    |
|         | UNITS  |   | 18 |
|         |  |   |    |

|         |  |   | YE |
|---------|--|---|----|
|         | SEMESTER 5                                       |   |    |
| RES 301 | Infrastructure, Energy and Transportation Studio | Т | 7  |
| REG 361 | Methods of Construction                          | Т | 3  |
|         | Design of Concrete Structure                     | Т | 3  |
| RMK 156 | Health, Safety and Environmental Management      | Е | 3  |
| RQG 237 | Measurement 2                                    | Е | 3  |
|         | University Course                                | U | 1  |
|         | UNITS  |   | 20 |

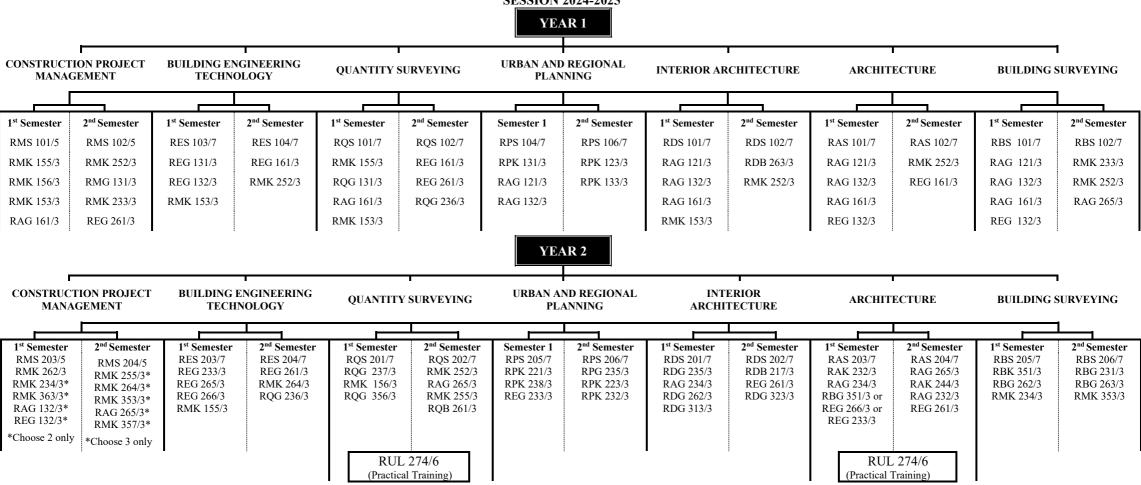
| AR | 3          |   |   |    |  |  |  |  |  |
|----|------------|---|---|----|--|--|--|--|--|
|    | SEMESTER 6 |   |   |    |  |  |  |  |  |
|    | RES 302    | Computer Aided Design and Information<br>Modelling Studio | Т | 7  |  |  |  |  |  |
| Г  | REL 300    | Building Engineering Technology Studies 1                 | Т | 3  |  |  |  |  |  |
| Γ  | REG 360    | Industrialised Building System                            | Т | 3  |  |  |  |  |  |
|    | RQG 355    | Management, Sustainability and Internationalisation       | Е | 3  |  |  |  |  |  |
|    |            | University Course   | U | 2  |  |  |  |  |  |
| L  |            |   |   |    |  |  |  |  |  |
|    | U          | INITS   |   | 18 |  |  |  |  |  |

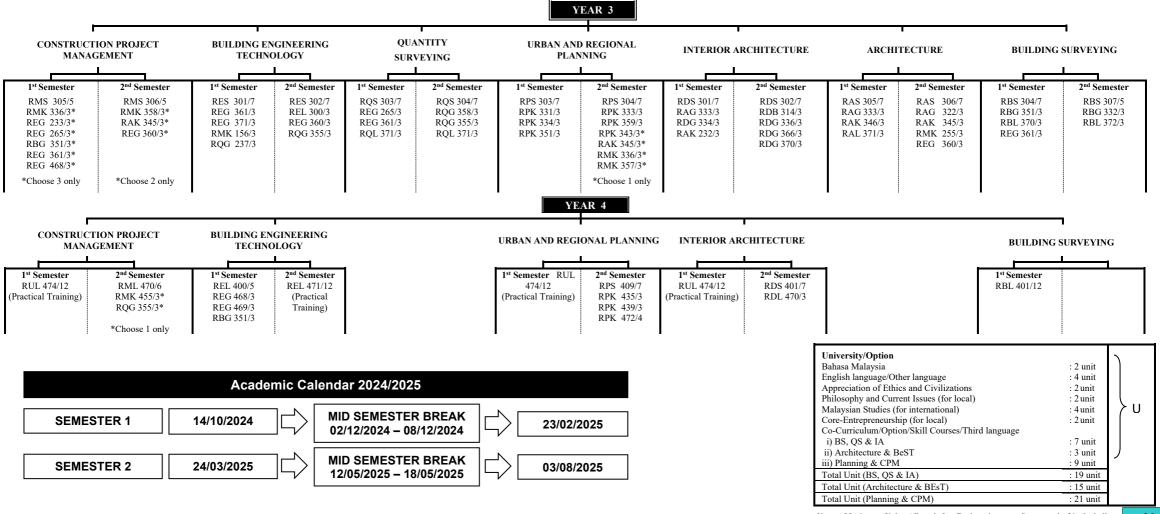
|         |   |   | YE | AR 4 |
|---------|---|---|----|------|
|         | SEMESTER 7                                |   |    |      |
| REL 400 | Building Engineering Technology Studies 2 | Т | 5  | RE   |
| REG 468 | Road and Transportation                   | Т | 3  |      |
| REG 469 | Professional Practice for Engineering     | Т | 3  |      |
| RBG 351 | Building Maintenance                      | Е | 3  |      |
|         | University Course                         | U | 2  |      |
|         | UNITS                                     |   | 16 |      |

| SEMESTER 8 |                     |   |                              |  |  |  |  |
|------------|---------------------|---|------------------------------|--|--|--|--|
| REL471     | Industrial Training | Т | 12                           |  |  |  |  |
|            |                     |   |                              |  |  |  |  |
|            |                     |   |                              |  |  |  |  |
|            |                     |   |                              |  |  |  |  |
|            |                     |   |                              |  |  |  |  |
| UNITS      |                     |   |                              |  |  |  |  |
|            | REL471              |   | REL471 Industrial Training T |  |  |  |  |

| Core Courses       | Т | 98  |
|--------------------|---|-----|
| Elective Courses   | Е | 27  |
| University Courses | U | 15  |
| TOTAL UNITS        |   | 140 |

# PROGRAMME STRUCTURE/CURRICULUM, SCHOOL OF HOUSING, BUILDING AND PLANNING SESSION 2024-2025





Notes: Maximum Units Allowed for Registration per Semester is 21 (including Universiti/Option courses)

# ACADEMIC ADVISORY SECTION

| Semester |   | Session  |       |
|----------|---|----------|-------|
|          | OUGGESTER COURSE REGISTRATION                 |          |       |
| Course   | SUGGESTED COURSE REGISTRATION  Course Name    | Type of  | Unit  |
| Code     | Course Harrie                                 | Course   | Oilit |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          |   | +        |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          | Otradayah Olayahaya                           | D-4-     |       |
|          | Student Signature                             | Date     |       |
|          |   |          |       |
|          | COMMENT/SUGGESTION FROM ACADEMIC ADVISOR      | <u> </u> |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          |   |          |       |
|          | Signature and Official Stamp Academic Advisor | Date     |       |

|                     |                       | CURREN'         | T STUDY IN                | FORMATION     | -                     |                 |
|---------------------|-----------------------|-----------------|---------------------------|---------------|-----------------------|-----------------|
| No                  | Detail                |                 | Total Unit for Graduation |               | Total Unit Cumulative |                 |
| 1                   | Core Courses          |                 | 98                        |               |                       |                 |
| 2                   | <b>Elective Cours</b> | es              |                           | 27            |                       |                 |
| 3                   | University Courses    |                 | Local                     | International |                       |                 |
|                     | U1                    |                 | 6                         | 4             |                       |                 |
|                     | U2                    | 2               | 6                         | 8             |                       |                 |
|                     | U3                    |                 | _                         | 0             |                       |                 |
|                     | U4                    | -               | 2                         | 2             |                       |                 |
|                     | Opti                  | on              | 1                         | 1             |                       |                 |
| 4                   | Courses Exem          | pted (Approve   | ed)                       |               | Total Unit (Co        | urses Exempted) |
|                     | Example: Cour         | rse Code / Unit | t / Type (RN              | IK262/3/T)    | Core                  | Elective        |
|                     |                       |                 |                           |               |                       |                 |
| -                   |                       |                 |                           |               |                       |                 |
| -                   |                       |                 |                           |               | 1                     |                 |
| -                   |                       |                 |                           |               |                       |                 |
| -                   |                       |                 |                           |               |                       |                 |
|                     | i                     | SUGGESTE        | COURSE                    | REGISTRATION  |                       | 1               |
| No                  | List of C             |                 |                           | of Course     |                       | Unit            |
|                     | 2.00 0.0              |                 | .,,,,,                    | 0. 000.00     | ,                     | J               |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |
| Student             |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           | Date          |                       |                 |
| Signature           |                       |                 |                           |               |                       |                 |
|                     | COM                   | MENT/SUGGES     | STION FROI                | M ACADEMIC AD | VISOR                 |                 |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               | <u> </u>              |                 |
| Signature and       |                       |                 |                           |               |                       |                 |
| Official Stamp      |                       |                 |                           |               | Date                  |                 |
| Academic<br>Advisor |                       |                 |                           |               |                       |                 |
|                     |                       |                 |                           |               |                       |                 |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

|                |                    | CURREN'        | T STUDY I                 | NFORMATION    |                       |                  |
|----------------|--------------------|----------------|---------------------------|---------------|-----------------------|------------------|
| No             | Detail             |                | Total Unit for Graduation |               | Total Unit Cumulative |                  |
| 1              | Core Courses       |                | 98                        |               |                       |                  |
| 2              | Elective Cours     | es             |                           | 27            |                       |                  |
| 3              | University Courses |                | Local                     | International |                       |                  |
|                | U                  |                | 6                         | 4             |                       |                  |
|                | U                  | 2              | 6                         | 8             |                       |                  |
|                | U                  |                | _                         | 0             |                       |                  |
|                | U                  | •              | 2                         | 2             |                       |                  |
|                | Opti               | on             | 1                         | 1             |                       |                  |
| 4              | Courses Exem       | pted (Approve  | ed)                       |               | Total Unit (Co        | ourses Exempted) |
|                | Example: Cou       | rse Code / Uni | t / Type (R               | MK262/3/T)    | Core                  | Elective         |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                | L                  | SUGGESTE       | D COURSE                  | REGISTRATION  | II.                   |                  |
| No             | List of C          |                | Type of Course Unit       |               |                       | Unit             |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
| Student        |                    |                |                           |               |                       |                  |
| Signature      |                    |                |                           | Date          |                       |                  |
| Signature      | 2011               | AENT/OUGOE     | TION FRO                  |               | 2)///200              |                  |
|                | COMI               | VIEN I/SUGGES  | STION FRO                 | M ACADEMIC AI | NISOK                 |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
|                |                    |                |                           |               |                       |                  |
| <u> </u>       |                    |                |                           |               |                       |                  |
| Signature and  |                    |                |                           |               |                       |                  |
| Official Stamp |                    |                |                           |               | Date                  |                  |
| Academic       |                    |                |                           |               |                       |                  |
| Advisor        |                    |                |                           |               |                       |                  |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

| r                               |                    |             | 1                         |      |                       |                |                 |
|---------------------------------|--------------------|-------------|---------------------------|------|-----------------------|----------------|-----------------|
|                                 |                    |             |                           |      | ORMATION              |                |                 |
| No                              | Deta               | ail         | Total Unit for Graduation |      | Total Unit Cumulative |                |                 |
| 1                               | Core Courses       |             |                           | 98   |                       |                |                 |
| 2                               | Elective Cours     |             |                           |      | 27                    |                |                 |
| 3                               | University Cou     | irses       | Local International       |      |                       |                |                 |
|                                 | U1                 |             | 6 4                       |      |                       |                |                 |
|                                 | U2                 |             | 6                         | _    | 8                     |                |                 |
| <u> </u>                        | U3                 |             | _                         |      | ~                     |                |                 |
|                                 | U4                 | l           | 2                         |      | 2                     |                |                 |
|                                 | Opti               |             | 1                         |      | 1                     |                |                 |
| 4                               | Courses Exem       |             |                           |      |                       | Total Unit (Co | urses Exempted) |
|                                 | Example: Coul      |             |                           | RMI  | K262/3/T)             | Core           | Elective        |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    | SUGGESTFI   | COURS                     | E F  | REGISTRATION          |                | J               |
| No                              | List of C          |             | Type of Course            |      | Unit                  |                |                 |
|                                 |                    |             | .,                        | ,,,, |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
| Student                         |                    |             |                           |      |                       |                |                 |
| Signature                       |                    |             |                           | I    | Date                  |                |                 |
| 3.9                             | COMB               | MENT/SUGGES | TION FR                   | OM   | ACADEMIC AD           | VISOR          |                 |
|                                 | COMIN              | ILN 1/30GGE | JI ION FR                 | UIV  | ACADEIVIIC AD         | VIOUR          |                 |
| i                               |                    |             |                           |      |                       |                |                 |
| Ì                               |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
|                                 |                    |             |                           |      |                       |                |                 |
| Cianatura and                   |                    |             |                           |      |                       |                |                 |
| Signature and<br>Official Stamp |                    |             |                           |      |                       |                |                 |
| Academic                        |                    |             |                           |      |                       | Date           |                 |
| Advisor                         |                    |             |                           |      |                       |                |                 |
|                                 | u the study inform |             |                           |      |                       |                |                 |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

|                |                | CURREN         | T STUDY IN   | FORMATION      |                |                 |
|----------------|----------------|----------------|--------------|----------------|----------------|-----------------|
| No             | Det            | ail            | Total Unit   | for Graduation | Total Uni      | t Cumulative    |
| 1              | Core Courses   |                |              | 98             |                |                 |
| 2              | Elective Cours | ses            |              | 27             |                |                 |
| 3              | University Cou | ırses          | Local        | International  |                |                 |
|                | U              | 1              | 6            | 4              |                |                 |
|                | Už             | 2              |              | 8              |                |                 |
|                | U:             | 3              | 6            | 0              |                |                 |
|                | U              | 4              | 2            | 2              |                |                 |
|                | Opti           | ion            | 1            | 1              |                |                 |
| 4              | Courses Exem   |                |              |                | Total Unit (Co | urses Exempted) |
|                | Example: Cou   | rse Code / Uni | t / Type (RN | K262/3/T)      | Core           | Elective        |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                | SUGGESTE       | D COURSE     | REGISTRATION   | l .            |                 |
| No             | List of C      | Course         | Type         | of Course      | Unit           |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
| Student        |                |                |              | D-4-           |                |                 |
| Signature      |                |                |              | Date           |                |                 |
| <del>-</del>   | COM            | MENT/SUGGES    | STION FROI   | M ACADEMIC AD  | VISOR          |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |
| Signature and  |                |                |              |                |                |                 |
| Official Stamp |                |                |              |                | D-4-           |                 |
| Academic       |                |                |              |                | Date           |                 |
| Advisor        |                |                |              |                |                |                 |
|                |                |                |              |                |                |                 |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

|  |                    | CURREN'        | T STUE                    | Y INF | ORMATION              |                |                 |
|--|--------------------|----------------|---------------------------|-------|-----------------------|----------------|-----------------|
| No                                       | Detail             |                | Total Unit for Graduation |       | Total Unit Cumulative |                |                 |
| 1  | Core Courses       |                |                           | 98    |                       |                |                 |
| 2  | Elective Courses   |                | 27                        |       |                       |                |                 |
| 3  | University Courses |                | Loc                       | cal   | International         |                |                 |
|  | U1                 |                | 6                         | i     | 4                     |                |                 |
|  | U2                 |                | 6                         |       | 8                     |                |                 |
|  | U                  |                |                           |       | ~                     |                |                 |
|  | U4                 | •              | 2                         |       | 2                     |                |                 |
|  | Opti               |                | 1                         |       | 1                     |                |                 |
| 4  | Courses Exem       |                |                           |       |                       | Total Unit (Co | urses Exempted) |
|  | Example: Cou       | rse Code / Uni | t / Type                  | (RMI  | K262/3/T)             | Core           | Elective        |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    | SUGGESTE       | D COU                     | RSE F | REGISTRATION          | •              |                 |
| No                                       | List of C          | ourse          |                           | Туре  | of Course             | Unit           |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
| Student                                  |                    |                |                           |       | - ·                   |                |                 |
| Signature                                |                    |                |                           |       | Date                  |                |                 |
|  | COM                | MENT/SUGGES    | STION                     | FROM  | ACADEMIC AD           | VISOR          |                 |
| COMMENT/SUGGESTION FROM ACADEMIC ADVISOR |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
|  |                    |                |                           |       |                       |                |                 |
| Signature and                            |                    |                |                           |       |                       |                |                 |
| Official Stamp                           |                    |                |                           |       |                       |                |                 |
| Academic                                 |                    |                |                           |       |                       | Date           |                 |
| Advisor                                  |                    |                |                           |       |                       |                |                 |
| thister Disease show                     | L                  |                |                           |       |                       | -ii4h-4h- A    |                 |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

|                |                    | CURREN'        | T STUDY IN   | FORMATION                 |                |                       |  |
|----------------|--------------------|----------------|--------------|---------------------------|----------------|-----------------------|--|
| No             | Det                | Detail         |              | Total Unit for Graduation |                | Total Unit Cumulative |  |
| 1              | Core Courses       |                | 98           |                           |                |                       |  |
| 2              | Elective Cours     | es             |              | 27                        |                |                       |  |
| 3              | University Courses |                | Local        | International             |                |                       |  |
|                | U                  |                | 6            | 4                         |                |                       |  |
|                | Už                 | 2              |              | 8                         |                |                       |  |
|                | U:                 | 3              | 6            | 0                         |                |                       |  |
|                | U                  | 4              | 2            | 2                         |                |                       |  |
|                | Opti               | on             | 1            | 1                         |                |                       |  |
| 4              | Courses Exem       |                |              |                           | Total Unit (Co | urses Exempted)       |  |
|                | Example: Cou       | rse Code / Uni | t / Type (RM | IK262/3/T)                | Core           | Elective              |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    | SUGGESTE       | D COURSE     | REGISTRATION              | ı              |                       |  |
| No             | List of C          | Course         | Type         | of Course                 |                | Unit                  |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
| Student        |                    |                |              | D-4-                      |                |                       |  |
| Signature      |                    |                |              | Date                      |                |                       |  |
| <u> </u>       | COM                | MENT/SUGGES    | STION FROM   | M ACADEMIC AD             | VISOR          |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |
| Signature and  |                    |                |              |                           |                |                       |  |
| Official Stamp |                    |                |              |                           |                |                       |  |
| Academic       |                    |                |              |                           | Date           |                       |  |
| Advisor        |                    |                |              |                           |                |                       |  |
|                |                    |                |              |                           |                |                       |  |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

|                |                    | CURREN         | T STU   | IDY INF                   | ORMATION      |                       |                 |
|----------------|--------------------|----------------|---------|---------------------------|---------------|-----------------------|-----------------|
| No             | Detail             |                | Tota    | Total Unit for Graduation |               | Total Unit Cumulative |                 |
| 1              | Core Courses       |                |         | 98                        |               |                       |                 |
| 2              | Elective Courses   |                | 27      |                           |               |                       |                 |
| 3              | University Courses |                | Local   |                           | International |                       |                 |
|                | U1                 |                |         | 6                         | 4             |                       |                 |
|                | U2                 |                |         | 6                         | 8             |                       |                 |
|                | U3                 |                |         | -                         | -             |                       |                 |
|                | U4                 |                |         | 2                         | 2             |                       |                 |
|                | Opti               |                |         | 1                         | 1             |                       |                 |
| 4              | Courses Exem       |                |         |                           |               | Total Unit (Co        | urses Exempted) |
|                | Example: Coul      | rse Code / Uni | t / Typ | e (RMI                    | K262/3/T)     | Core                  | Elective        |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    | SUGGESTE       | o col   | JRSE F                    | REGISTRATION  |                       |                 |
| No             | List of C          | ourse          |         | Type                      | of Course     |                       | Unit            |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
| Student        |                    |                |         |                           | Data.         |                       |                 |
| Signature      |                    |                |         |                           | Date          |                       |                 |
| -              | COM                | MENT/SUGGES    | STION   | FROM                      | ACADEMIC AD   | VISOR                 |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
|                |                    |                |         |                           |               |                       |                 |
| Signature and  |                    |                |         |                           |               |                       |                 |
| Official Stamp |                    |                |         |                           |               | D-4-                  |                 |
| Academic       |                    |                |         |                           |               | Date                  |                 |
| Advisor        |                    |                |         |                           |               |                       |                 |
| *N -4 DIl      | 4141 !6            |                |         | 01:                       |               | -:                    |                 |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

|                | -                  | CURREN         | T STUDY I           | NFORMATION        |                       |                 |
|----------------|--------------------|----------------|---------------------|-------------------|-----------------------|-----------------|
| No             | Det                |                |                     | it for Graduation | Total Unit Cumulative |                 |
| 1              | Core Courses       |                | 98                  |                   |                       |                 |
| 2              | Elective Cours     | es             |                     | 27                |                       |                 |
| 3              | University Courses |                | Local International |                   |                       |                 |
|                | U1                 |                | 6                   | 4                 |                       |                 |
|                | Už                 | 2              | _                   | 8                 |                       |                 |
|                | U:                 | 3              | 6                   | •                 |                       |                 |
|                | U                  | 4              | 2                   | 2                 |                       |                 |
|                | Opti               |                | 1                   | 1                 |                       |                 |
| 4              | Courses Exem       | pted (Approve  | ed)                 |                   | Total Unit (Co        | urses Exempted) |
|                | Example: Cou       | rse Code / Uni | t / Type (R         | MK262/3/T)        | Core                  | Elective        |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                | 1                  | SUGGESTE       | D COURSE            | REGISTRATION      |                       | I.              |
| No             | List of C          | ourse          | Тур                 | e of Course       |                       | Unit            |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
| Student        |                    |                |                     | _                 |                       |                 |
| Signature      |                    |                |                     | Date              |                       |                 |
| <b>J</b>       | COM                | MENT/SUGGES    | STION FRO           | M ACADEMIC AD     | VISOR                 |                 |
|                | JOINI              |                | 5.10H 1 KC          | MI AUADLINIO AL   | 71001                 |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
|                |                    |                |                     |                   |                       |                 |
| Signature and  |                    |                |                     |                   |                       |                 |
| Official Stamp |                    |                |                     |                   |                       |                 |
| Academic       |                    |                |                     |                   | Date                  |                 |
| Advisor        |                    |                |                     |                   |                       |                 |
| , 14 11001     |                    |                |                     |                   |                       |                 |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

|  |                    | CLIDDEN        | T STUDY             | INE                       | ORMATION    |                       |                 |
|--|--------------------|----------------|---------------------|---------------------------|-------------|-----------------------|-----------------|
| No                                       | Deta               |                |                     | Total Unit for Graduation |             | Total Unit Cumulative |                 |
| 1  | Core Courses       | 411            | 98                  |                           | Total Olli  | Countaidative         |                 |
| 2  | Elective Cours     | es             |                     | 27                        |             |                       |                 |
| 3  | University Courses |                | Local International |                           |             |                       |                 |
|  | U1                 |                | 6                   |                           | 4           |                       |                 |
|  | U2                 | 2              |                     |                           | •           |                       |                 |
|  | U3                 | 3              | 6                   |                           | 8           |                       |                 |
|  | U4                 | l              | 2                   |                           | 2           |                       |                 |
|  | Opti               |                | 1                   |                           | 1           |                       |                 |
| 4  | Courses Exem       | pted (Approve  | ed)                 |                           |             | Total Unit (Co        | urses Exempted) |
|  | Example: Coul      | rse Code / Uni | t / Type (F         | RMK                       | (262/3/T)   | Core                  | Elective        |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    | SUGGESTE       | O COURS             | ΕR                        | EGISTRATION |                       |                 |
| No                                       | List of C          | ourse          | Ту                  | рес                       | of Course   | Unit                  |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
| Student                                  |                    |                |                     | г                         | Date        |                       |                 |
| Signature                                |                    |                |                     |                           |             |                       |                 |
| COMMENT/SUGGESTION FROM ACADEMIC ADVISOR |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
|  |                    |                |                     |                           |             |                       |                 |
| Signature and                            |                    |                |                     |                           |             |                       |                 |
| Official Stamp                           |                    |                |                     |                           |             |                       |                 |
| Academic                                 |                    |                |                     |                           |             | Date                  |                 |
| Advisor                                  |                    |                |                     |                           |             |                       |                 |
|  | 1                  |                |                     |                           |             |                       |                 |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.

|                | -                  | CURREN         | T STUDY IN                | FORMATION     |                       |                 |
|----------------|--------------------|----------------|---------------------------|---------------|-----------------------|-----------------|
| No             | Det                |                | Total Unit for Graduation |               | Total Unit Cumulative |                 |
| 1              | Core Courses       | -              | 98                        |               |                       |                 |
| 2              | Elective Cours     | es             |                           | 27            |                       |                 |
| 3              | University Courses |                | Local International       |               |                       |                 |
|                | U                  | 1              | 6                         | 4             |                       |                 |
|                | Už                 | 2              |                           | 8             |                       |                 |
|                | U:                 | 3              | 6                         | 0             |                       |                 |
|                | U                  | 4              | 2                         | 2             |                       |                 |
|                | Opti               |                | 1                         | 1             |                       |                 |
| 4              | Courses Exem       | pted (Approve  | ed)                       |               | Total Unit (Co        | urses Exempted) |
|                | Example: Cou       | rse Code / Uni | t / Type (RI              | /IK262/3/T)   | Core                  | Elective        |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                | 1                  | SUGGESTE       | D COURSE                  | REGISTRATION  |                       |                 |
| No             | List of C          | Course         | Туре                      | of Course     |                       | Unit            |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
| Student        |                    |                |                           |               |                       |                 |
| Signature      |                    |                |                           | Date          |                       |                 |
|                | COMI               | MENT/SUGGES    | STION FRO                 | M ACADEMIC AD | VISOR                 |                 |
|                | 301111             |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               |                       |                 |
| Signature and  |                    |                |                           |               |                       |                 |
| Official Stamp |                    |                |                           |               |                       |                 |
| Academic       |                    |                |                           |               | Date                  |                 |
| Advisor        |                    |                |                           |               |                       |                 |
|                |                    |                |                           |               | l                     |                 |

<sup>\*</sup>Note: Please show the study information from Campus Online during the discussion with the Academic Advisor.