**LAMPIRAN 1**

**FACULTY OF BUILT ENVIRONMENT**

**List of Courses Offered for University of Malaya**

**Student Exchange (UMSEP) for the 2015/2016 Academic Session**

**BACHELOR OF ESTATE MANAGEMENT**

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| **No.** | **Course Code** | **Topic** | **Pre-Requisite** | **Credit Hours** | **Courses Offered** | | | **Course Description (Compulsory to be filled up by the Faculty)** | **Other Description** |
| **Please Tick ( √ ) Where Applicable** | | |
| **Sem I** | **Sem II** | **Special Sem** |
| 1. | BVEV1101 | Introduction to Property |  | 4 | √ |  |  | This course provides a theoretical foundation for understanding the valuation profession. It presents an overview of property markets and real estate characteristics. It introduces the general approach to valuation and emphasizes the computational skills. |  |
| 2. | BVEV1102 | Principles of Economics |  | 2 | √ |  |  | This course provides a theoretical foundation of understanding to the land economics course. The course introduces the knowledge in both micro and macroeconomics which covers a range of economic theories and concepts. |  |
| 3. | BVEV1103 | Legal Studies |  | 3 | √ |  |  | This course focuses on Malaysian Legal System, tort and contract. It includes the principles and sources of Malaysian law, processes, systems and procedures, common law, statute and equity. This course covers the law of contract (Contracts Act 1950) emphasizing on capacity, consideration, intention to create legal relation and methods of discharging of contracts. It will also include the types of remedies covering damages, specific performance and injunction by making a specific reference to the Specific Relief Act 1950. The law of torts includes negligence, duty of care, breach of duty, causation, remoteness, professional negligence, nuisance and trespass to land. |  |
| 4. | BVEV1104 | Accounting and Financial Management |  | 3 | √ |  |  | This course deals with the concept and basic principles of accounting which include balance sheet, ledger, trading account, and profit-and-loss account. The course also introduces the financial management which provides an understanding on accounting ratio and the application of financial statement. |  |
| 5. | BVEV1106 | Property Market Analysis |  | 2 |  | √ |  | This course delivers the methodological and technical knowledge of a wide range of analytical methods used in data analysis. It provides the analysis of data in various forms using a variety of qualitative and quantitative tools and techniques. The tools and techniques in this course include methods of grouping, structuring, sampling and presentation of data, tabling, frequency distribution, graphical representation, measures of location and deviation. Basic econometric concepts are introduced and students practise regression analysis and other statistical tools. |  |
| 6. | BVEV1108 | Introduction to Town Planning |  | 3 |  | √ |  | This course provides a theoretical understanding of town planning. It is divided into three major aspects: the planning theories and models, the development plan system and the land and property development control system in Malaysia. |  |
| 7. | BVEV3123 | GIS and Spatial Analysis |  | 3 |  | √ |  | The course is divided into two parts: site and building survey, and application of GIS in real estate. The first part provides a theoretical foundation of understanding of principles of land and building surveying and referencing to fulfil the requirement of Malaysian Valuation Standard. Students will have hands-on experience at the field work on the equipment used in land surveying. A studio based task is given for plotting the measurements. The second part introduces GIS application in real estate profession. The course establishes the methods and preparation of data input, range of GIS techniques for data validation and concludes with an exposure to current issues and GIS future in real estate. The course incorporates GIS computer based exercise. |  |

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**FACULTY OF BUILT ENVIRONMENT**

**List of Courses Offered for University of Malaya**

**Student Exchange (UMSEP) for the 2015/2016 Academic Session**

**BACHELOR OF URBAN AND REGIONAL PLANNING**

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| **Please Tick ( √ ) Where Applicable** | | |
| **Sem I** | **Sem II** | **Special Sem** |
| 1. | BUEU1102 | Introduction to Planning |  | 3 | √ |  |  | This is an introductory course to urban planning. The course comprises of three main components: definition and principles of planning; planning history and planning organizations; and planning process. It allows students to appreciate the process of early city planning and planning development up to the present time. |  |
| 2. | BUEU2103 | Planning Theory |  | 3 | √ |  |  | This course will discuss the origins and evolution of planning theories. Lectures will especially focus on the discussion about different types of planners and their thinking mode and style and relate them to specific planning concepts and theories. Thereafter, relating those aspects to the planning environment and setting, exposing students also to the planning process and important planning ideologies. This will set students to understand the different types of situations planners will experience in the course of their career as planners and be able to conduct themselves appropriately. |  |
| 3. | BUEU2104 | Urban Economics |  | 3 | √ |  |  | This course will introduce students to the basic understanding of the urban economic structure and its changes; emphasising relevant issues as they relate to urban planning. The topics that will be covered include the significance of economic thinking in planning, economic explanation for urban growth, economics of urban land use, urban location decision and the economics of urban public intervention. Students will also be exposed to the economic approach to selected urban problems such as congestion, crime, pollution etc. |  |
| 4. | BUEU3102 | Recreation and Tourism Planning |  | 3 | √ |  |  | This course discusses the physical and social aspects in recreation and tourism development. Students will do research on spatial planning in the provision and development of recreation and tourism: monitoring, implementation, planning in selected recreation and tourism area, and evaluating country’s recreation and tourism projects. Other topics discuss includes the legal systems, standards, policies, strategies, implementation of recreation and tourism activities. |  |
| 5. | BUEU3103 | Transportation and Traffic Planning |  | 3 | √ |  |  | This course will introduce students to transportation systems and its relationship to the urban land use system. Among aspects that will be discussed are transportation system requirements, travel demand, travel behaviour and sustainable transportation planning. Students are taught how to conduct traffic surveys as well how to use transportation modelling computer software. |  |
| 6. | BUEU3104 | Housing |  | 3 | √ |  |  | This course focuses on housing policy at federal, state and local levels affecting urban housing markets. Emphasis will be given on assessment of market conditions affecting community development decisions. |  |

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**FACULTY OF BUILT ENVIRONMENT**

**List of Courses Offered for University of Malaya**

**Student Exchange (UMSEP) for the 2015/2016 Academic Session**

**BACHELOR OF QUANTITY SURVEYING**

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| **Sem I** | **Sem II** | **Special Sem** |
| 1. | BQES2102 | Site Survey |  | 2 | √ |  |  | The usage of lecture mode and hands-on technique are used in this course. It includes the learning of definition and principle of survey. The concept and procedure of survey. Survey equipment. Survey levelling. Procedure to ascertain parameter observation, bearing, distance and recording technique. Measurement of area, topography, cutting and filling. Confirmation of location for a proposed building and existing building. |  |
| 2. | BQES2104 | Principles of Management |  | 2 | √ |  |  | This course examines the history of, principles and current issues in management and organization studies. It covers the principles and practices of modern organisation management include characteristics, structure, behaviour and effectiveness of organization, teamwork and leadership, values and culture of organization. The course will include the changing role of management, managerial skills and competencies, and strategic corporate management and framework for understanding the processes of management (e.g. planning, strategic decision making, SWOT analysis, corporate objectives, strategies and policies). This course will also cover the managerial identity and how it is constructed and consideration is given to what it means to be an effective human resources management system (e.g. staffing, organizing, coordinating, communication, and control). |  |
| 3. | BQES3105 | Financial Management and Accounting |  | 2 | √ |  |  | This course deals with the concept and basic principles of accounting which include balance sheet, ledger, trading account and profit-and-loss account. The course also introduces the financial management which provides an understanding on accounting ratio and the application of financial statement. |  |
| 4. | BQES1106 | Legal Studies |  | 3 | √ |  |  | This course focuses on Malaysian Legal System, tort and contract. It includes the principles and sources of Malaysian law, processes, systems and procedures, common law, statute and equity. This course covers the law of contract (Contracts Act 1950) emphasizing on capacity, consideration, intention to create legal relation and methods of discharging of contracts. It will also include the types of remedies covering damages, specific performance and injuction by making a specific reference, duty of care, breach of duty, causation, remoteness, professional negligence, nuisance and trespass to land. |  |

**LAMPIRAN 1**

**FACULTY OF BUILT ENVIRONMENT**

**List of Courses Offered for University of Malaya**

**Student Exchange (UMSEP) for the 2015/2016 Academic Session**

**BACHELOR OF BUILDING SURVEYING**

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| **Sem I** | **Sem II** | **Special Sem** |
| 1. | BSEB1101 | Environmental Science and Sustainability |  | 2 | √ |  |  | Introduction to the concept of environmental physics in a sustainable development and human lifestyle influenced by lighting, ventilation and acoustic systems. |  |
| 2. | BSEB1103 | Material and Construction Technology I |  | 3 | √ |  |  | Introduction to construction industry, building construction principles, methods and processes for low rise building; construction activities and parties involved; civil and building works; building structures and elements; sub structures, super structures, building materials and finishes. |  |
| 3. | BSEB1106 | Building Services |  | 2 |  | √ |  | Introduction to various type of building services system on low rise and high rise buildings; water supply and sanitation system, drainage and waste water system, reservoir system, plumbing system, garbage disposal system, installation of gas supply. |  |
| 4. | BSEB1107 | Structural Analysis |  | 3 |  | √ |  | Introduction to building structures layout. Building loading, forces and reaction in structures. Axial forces, shear force and bending moment. Framed structures. Properties of section, material strength and safety factors. |  |
| 5. | BSEB2101 | Structural Design |  | 3 | √ |  |  | Introduction to philosophy of structural design, rule of thumb in arrange reinforced concrete, timber and steel structures. Properties and characteristic of reinforced concrete, timber and steel materials. Load distribution and analysis. Design concrete beam, slab and column using the design chart. Design timber and steel structures using elastic theory. |  |
| 6. | BSEB2102 | Economics for Built Environment |  | 2 | √ |  |  | Introduction to construction industry, construction firms; supply and demand within built environment;principles of macro and micro economics; introduction to business industry, environmental economics and economic factors within construction industry. |  |
| 7. | BSEB2105 | Building Pathology I |  | 3 | √ |  |  | Introduction to various types of building defects occured on building fabrics and structures; understanding material behaviour due to mechanical, biological, chemical and environmental agents; deterioration on modern and traditional materials. Introduction to building inspection, measurement techniques using appropraite apparatus and various remediation techniques. Preparation of building condition reporting based on RICS and RISM code of practise, i.e. RICS Condition Reporting and RISM CP BS101. |  |
| 8. | BSEB2106 | Building Maintenance |  | 3 |  | √ |  | Introduction to the various types of building maintenance strategies; planned and preventive building maintenance methods; economical and efficient maintenance; organizational chart; maintenance activities; supervision and monitoring. |  |
| 9. | BSES2109 | Facilities Management |  | 3 |  | √ |  | Introduction to facilities management and its relation to building design and operation; strategic facilities operation management for organisations; the relationship between facilities management and building performance to ensure productive working environment. Exposure to sustainable asset management and facilities maintenance and diagnosis of Post Occupancy Evaluation (POE) to upgrade corrective operation; procurement of facilities project through service level agreement or contracts based on continuous performance; health and security awareness within workplace design. |  |
| 10. | BSEB3102 | Operation and Maintenance |  | 3 | √ |  |  | Principle and techniques of building maintenance; landscape maintenance operations; pest control; health and safety aspects in building maintenance work. Exposure to building operation and maintenance including remedial techniques, preparation of maintenance schedule and specification writing. |  |
| 11. | BSEB3104 | Risk Management and Construction Safety |  | 2 | √ |  |  | Introduction to risk, health and safety in construction industry : risk and danger, legislation and safety acts : OSHA 1994, building works guidelines; Role, importance and safety and health management: characteristics, policy, investigative methods, manuals and procedures; Accidents at site: report, monitoring and prevention. Explanation of current case studies which are related to safety and health issues in the construction industry. |  |
| 12. | BSEB3106 | Professional Practice |  | 3 |  | √ |  | Introduction to Building Surveying profession, Building Surveying scope of works in construction sector, professional qualification, qualities, skills, codes and ethics. Contractual Relationship, Duties and Fees. Organization Management and Office Establishment, personal appoinment and job interview, professionalism and recognition in local and global level, services in public and private sectors. |  |
| 13. | BSEB3107 | Fire Safety Audit |  | 3 |  | √ |  | Introduction to the evaluation of fire safety and risk in building; identify the fire hazards; identify people at risk; evaluate, remove or reduce the risks; prepare an emergencyavacuation plan and review and update the fire risk assesment based on legislation requirements and standards. |  |

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**FACULTY OF BUILT ENVIRONMENT**

**List of Courses Offered for University of Malaya**

**Student Exchange (UMSEP) for the 2015/2016 Academic Session**

**BACHELOR OF ARCHITECTURE**

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| **Sem I** | **Sem II** | **Special Sem** |
| 1. | BAED2276 | Architectural Design Studio IV |  | 10 |  | √ |  | This course allows students to further build and strengthen skills by using an experiential ‘master-apprentice’ studio-based learning approach. The student is given two assignments based on a brief and program, to complete a final set of drawings and models, graphically and verbally presented. The design process requires the students to practice an approach of:   * combining architectural elements, * putting together a scheme and, * conceptualising.   The architectural design program provides learning on the sustainable design theory and principles for this semester, which is:   * elements – site elements, topography, vegetation, natural materials, building materials; * scheme – climatic design ideas, passive energy design principles, building form and function, and; concepts – vernacular architecture, tropical architectural design, bio-climatic design, ecological design and sustainable design. |  |
| 2. | BAED3276 | Architectual Design Studio VI |  | 10 |  | √ |  | This course allows students to focus on the urban studies:   * Visit and conduct an urban study based on a developed brief in an identified town or city * Gather planning and building regulation from respective local authoroties. * Illustrate and present the urban site studies utilizing selected principles and concepts. * Design an individual building project based on the findings of the urban and site studies. |  |
| 3. | BAED2221 | Materials and Construction II |  | 3 |  | √ |  | This course provides the learning of simple construction methods and processes, including site clearance, piling, basement, waterproofing systems, demolition works of 3 to 5 storey buildings, metal and concrete composite structures, cladding systems, industrial building systems, fire-fighting elements and infrastructural work. |  |
| 4. | BAED2128 | Building Services |  | 3 |  | √ |  | This course introduces the:   * Need for building services in modern living, relevant regulations, cold and hot water distribution and drainage systems. * Design of rainwater collection and drainage systems, plumbing and integrated plumbing systems. * Underground drainage and disposal system, above ground drainage, sewerage systems and septic tanks. * Refuse disposal systems. * Principles of refrigeration and types of air-conditioning. * Choice of cooling system in relation to performance specification and impact of each system on the building. * Location, size and contents of plant rooms, details and design of various ducting systems and damper positioning. * Vertical and horizontal transportation in buildings. * Fire prevention, fire fighting systems and equipment.   Uniform Building By-Laws (UBBL) requirements. |  |
| 5. | BAED1125 | Architectural Lighting and Acoustics |  | 2 |  | √ |  | This course is a further discussion on the link between environmental physics and the built environment, focusing on:   * Architectural lighting and design * Building acoustics and architectural acoustic design |  |
| 6. | BAED1115 | History of Western Architecture |  | 2 |  | √ |  | This course concentrates on the Western Civilizations for eight weeks and subsequently focuses on Malaysian and Malaya Architectural History for the rest of the course with a final lecture to summarize Western Architecture’s influence globally. |  |