

FACULTY OF BUILT ENVIRONMENT

List of Courses Offered for University of Malaya Student Exchange (UMSEP) for 2018/2019 Academic Session

No.	Course Code	Topic	Pre-Requisite	Credit	Course Offered		Course Description
					Semester I	Semester II	
Bachelor of Real Estate/Estate Management							
1	BIE1002	Accounting and Financial Management	NIL	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.
2	BIE1005	Urban Planning	NIL	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.
3	BIE1006	Urban Land Economics	NIL	3		√	This course provides an insight into the urban land economics, land prices and property market structures. It constitutes a range of urban economics theories and concepts which include characteristics of land and its market, land use, theory of rent and location, urban structure and urban growth theory. The course will also provide an understanding on the urbanisation context, economic approach to a wide range of urban problems and related policies that can be used to address urban problems.
Bachelor of Science In Architecture							
1	BIA1002	Materials and Construction I	NIL	2	√		This course introduces students to the basic building materials and construction techniques, material and construction defects and methods to avoid the occurrence of such defects in the domestic two-story structure using the construction of timber, bricks and reinforced concrete.
2	BIA1003	Environmental Physics	NIL	2	√		This course introduces basic knowledge in the relationship between environmental physics and the built environment in the quest for human comfort, looking into the influence of natural elements and climate on design, the appropriateness of building on site and the problem of heat and wind in the context of micro climate. It will also review the effectiveness and efficiency of vernacular architectural design, bio-climatic design and passive solar architecture.
3	BIA1004	History of Ancient and Asian Architecture	NIL	2	√		This course covers: <ul style="list-style-type: none"> • Brief overviews on the legacy of the ancient civilizations such as Egypt, Mesopotamia, Mohenjo-Daro and Harappa, Maya, Aztec and Inca. • Discussion on vernacular architecture heritage covering: <ul style="list-style-type: none"> o Austronesian World o Malay Houses o Siamese traditional architecture o Indian traditional architecture o Chinese traditional architecture o Japanese traditional architecture • Introduction to the architecture of the Islamic World. • Discussion about foreign influences on the local architecture in Malaysia.
4	BIA2001	Architectural Design Studio III	BIA1005	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: <ul style="list-style-type: none"> • combining architectural elements • putting together a scheme • conceptualising This course also provides learning on the architectural theories and themes for this semester, which are: <ul style="list-style-type: none"> • architectural representation • architectural language • form • space • context

5	BIA2002	Digital Architecture	NIL	2	√		This course provides continuous training using skills and knowledge to effectively handle architectural digital data information. Students will be familiar with several techniques of 3D modelling using selected architectural software with the ability to transform architectural drawings into 3D digital representation. The final coursework includes techniques of rendering and key frame animation leading to short visual architectural documentation.
6	BIA2003	Building Structure	NIL	3	√		Topics covered include: <ul style="list-style-type: none"> • Distribution of loads on structural systems • Structural systems • Structural design • Structural analysis
7	BIA3001	Architectural Design Studio V	BIA2004	10	√		This course allows students to focus on the urban studies: <ul style="list-style-type: none"> • 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 authorities • 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
8	BIA1005	Architectural Design Studio II	BIA1001	10	√		This course strengthens basic design knowledge and vocabulary introduced previously, where a series of design projects would highlight the importance of the design process. Projects would concentrate on form-making, and would revisit ideas of basic design elements (linear, planar, volume, addition / subtraction, interlocking space etc.) and enclosure and include architectonic aspects such as entrances, fenestrations, overhead enclosure / roof, furniture etc.
9	BIA1006	Materials and Construction II	BIA1002	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.
10	BIA1007	Architectural Lighting and Acoustics	NIL	2	√		This course is a further discussion on the link between environmental physics and the built environment, focusing on: <ul style="list-style-type: none"> • Architectural lighting and design • Building acoustics and architectural acoustic design
11	BIA1008	History of Western Architecture	NIL	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.
12	BIA2004	Architectural Design Studio IV	BIA2001	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: <ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • 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.

13	BIA2005	Building Services	NIL	3		√	<p>This course introduces the:</p> <ul style="list-style-type: none"> • 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.
14	BIA3004	Architectural Design Studio VI	BIA3001	10		√	<p>This course allows students to:</p> <ul style="list-style-type: none"> • apply findings of the urban principles and knowledge in the previous study • focus on conceptual architectural design of an individual five-storey building with basement carpark • to incorporate sustainability, landscaping, interior design, structure, services and by-laws (building and planning)
Bachelor of Building Surveying							
1	BIB2007	Building Maintenance	NIL	3		√	<p>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.</p>
2	BIB2010	Facilities Management	NIL	3		√	<p>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.</p>
3	BIB1009	Material and Construction Technology II	NIL	3		√	<p>Introduction to construction industry, building construction principles, methods and processes for multi-storey building base on relevant regulation and standard; site preparation and machineries; building frames, roof system, elements, materials and finishes; piling and basement; fundamental of building alteration.</p>
Bachelor of Urban And Regional Planning							
1	BID2004	Urban Economics	NIL	3		√	<p>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.</p>
2	BUEU3102	Recreation & Tourism Planning	NIL	3		√	<p>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.</p>
3	BID1006	Land Use & Site Planning	NIL	3		√	<p>This course introduces elements of site planning that begin with the recognizing of site characteristics, conditions, problems and limitations. The identification of site potential development requires examinations of surrounding development including elements of infrastructures, existing economic activities and local development policies that regulate urban land uses. The introduction to land use planning will cover urban land use theory, urban land use component, land use planning models, land use zoning categories and codes (use class order). Discussions on site development issues will include topics of how land use planning was incorporating site development potentials and planning controls.</p>

4	BID1007	Community Development Planning	NIL	3		√	The course introduces social infrastructure concepts, characteristics, issues and challenges. It also relates the current practices of Malaysian social and infrastructure policy in developing social infrastructures in spatial planning.
5	BUEU3107	Environmental Planning & Management	NIL	3		√	This course discusses key concepts and topics in environmental policy, planning and management (definitions, concepts, scopes, elements and approaches) and also analyses local and global environmental problems and issues related to urbanisation. Integrating environmental concerns into decision-making in ensuring sustainable development will also be included.
Bachelor of Quantity Surveying							
1	BIX1005	Principles of Management	NIL	3		√	This course introduces the history, principles and current issues in management studies and organization. It includes concepts of management, organization and team work.