



Bachelor in Building Surveying with Honours

Academic Staff (Building Surveying)



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2.0 School Requirements (Academic)

To produce ethically and professionally competent surveyors who are able to function effectively as members of the construction and property industry and able to face technological and managerial challenges in the national and global context

2.1 Learning outcomes

At the end of the programme, graduates are able to:

- Understand technical knowledge and good management in building surveying works
- Carry out building surveying services using equipment and proper procedure considering sustainable aspects and laws
- Apply social skills and responsibilities in the public interest within the construction industry and real estate sector.
- Deliver building surveying work in a professional manner and with right ethics
- Effectively communicate, enable teamwork and show leadership qualities
- Solve problems through objective analytical and scientific skills
- Understand building life cycle and information management
- Use experience and entrepreneurship to deliver effective consultancy

2.3 School Requirements

The requirements for Building Surveying students at the School of HBP are summarized as follows:

(A) Core Courses

These courses are **mandatory** for all Building Surveying students, and they must obtain a pass. These core courses include both Common Core and Discipline Core. These courses contain the fundamental topics of the School's curriculum and are coded 'T'.

- i) **Common Core:** Common Core is a set of foundational knowledge, skills, and competencies that all building surveying students should acquire during their education to broaden their understanding of building surveying and built environment.
- ii) **Discipline Core:** Discipline Core courses provide specialized knowledge and skills in building surveying, preparing students for practical, real-world applications beyond foundational knowledge.

(B) Practical Training Course

Building Surveying students are required to undergo Practical Training for a period of 24 weeks during their long-term vacation in their third year and throughout the first semester of their final year. The code to be used is 'T'.

2.3.1 Unit Requirements

Unit requirement for graduation for a Bachelor in Building Surveying with Honours is as follows:-

Bachelor Building Surveying Programme	
	Units
Core Courses (Discipline and Common)	96
Industrial Training	12
University Courses	19
Total	127

2.4 Course Duration

Bachelor in Building Surveying with Honours (3 1/2 years)

Period	
Minimum semesters	7 (3 1/2 years)
Maximum semesters	10 (5 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 Discipline Core Courses:

- Grade of C and above is considered as a passing grade. Students obtaining grade C- 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.

2.5 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 studio course.

BUILDING SURVEYING (42 Units)

Code	Title
RBS101/7	Building Surveying Fundamental Studio
RBS102/7	Building Control Studio
RBS205/7	Building Audit and Safety Studio
RBS206/7	Building Conservation Technology Studio
RBS304/7	Building Maintenance Management Studio
RBS307/7	Total Asset and Facilities Management Studio

2.6 Courses and syllabus

During the 7 semesters of study, Building Surveying students can expect to develop personal skills such as problem solving, communication skills and team working. Students will be exposed to knowledge underpinning design, construction and performance of a facility, familiarity with design, construction, commissioning, operational and maintenance phases of construction work, awareness of other disciplines and expertise involved in design and construction process. Students must fulfil 96 units of core courses (common and discipline), Industrial Training of 12 units, and 19 units of university courses. List of courses which are offered to Building Surveying students are shown in Table 1.

Table 1: List of Core Courses and Industrial Training

A. Core Courses (96 units)

DISCIPLINE CORE COURSES (60 units)						
Code and Title			Unit	Sem	Year	TICK ✓
RBS 101	-	Building Surveying Fundamental Studio	7	1	1	
RBS 102	-	Building Control Studio	7	2	1	
RBS 205	-	Building Audit and Safety Studio	7	1	2	
RBK 351	-	Professional Practice in Building Surveying	3	1	2	
RBS 206	-	Building Conservation Technology Studio	7	2	2	
RBG 231	-	Building Pathology 1 (Pre-requisite)	3	2	2	
RBS 304	-	Building Maintenance Management Studio	7	1	3	
RBG 351	-	Building Maintenance	3	1	3	
RBL 370	-	Building Surveying Final Year Project 1 (Pre-Requisite)	3	1	3	
RBS 307	-	Total Asset and Facilities Management Studio	7	2	3	
RBG 332	-	Building Pathology 2	3	2	3	
RBL 372	-	Building Surveying Final Year Project 2	3	2	3	

COMMON CORE COURSES (36 units)						
Code and Title			Unit	Sem	Year	TICK ✓
RAG 121	-	Environmental Science 1	3	1	1	
RAG 132	-	Introduction to Built Environment & Human Settlement	3	1	1	
RAG 161	-	Building Construction 1	3	1	1	
RMK 233	-	Measurement of Building Works	3	2	1	
RMK 252	-	Principles of Project Management	3	2	1	
RAG 265	-	Building Construction 2	3	2	1	
REG 132	-	Structural Mechanics	3	1	1	
RMK 234	-	Building Cost Estimation and Pricing	3	1	2	
RBG 262	-	Building Services Maintenance 1 (Pre-Requisite)	3	1	2	
RMK 353	-	Property Management	3	2	2	
REG 361	-	Methods of Construction	3	1	3	
RBG 263	-	Building Services Maintenance 2	3	2	2	

B. Industrial Training (12 Units)

Code and Title			Unit	Sem	Year	TICK ✓
RBL 401	-	Building Surveying Industrial Training	12	1	4	

3.0 Course Synopsis

3.1 Core Courses – Discipline and Common (96 units)

No	Code & Unit	Course Title & Synopsis
DISCIPLINE CORE COURSES (60 units)		
1	RBS 101 (7 unit)	BUILDING SURVEYING FUNDAMENTAL STUDIO 1 (PRE-REQUISITE) Concentrating on basic understanding of the role and contribution of various disciplines in the built environment. Students will be trained in all basic aspects of drawing to form a measured drawing through site visit and analysis, site planning.
2	RBS 102 (7 unit)	BUILDING CONTROL STUDIO 2 (PRE-REQUISITE) Comprises the review and practice of Building Control through the Building Control Practices Act. It includes Planning Permission, Building Plan Approvals and revisions before acquiring Building Occupancy Permissions
3	RBS 205 (7 unit)	BUILDING AUDIT AND SAFETY STUDIO (PRE-REQUISITE) Discovers on the practice of building audit and safety in various types of audits such as building condition audits, building services audits, building safety audits and building fire safety audits.
4	RBK 351 (3 unit)	PROFESSIONAL PRACTICE IN BUILDING SURVEYING The course in line with general principles and responsibility of the professionalism in building surveying field. The main scope of work and responsibilities focusses on the building control, building condition assessment, building surveying contract etc.
5	RBS 206 (7 unit)	BUILDING CONSERVATION TECHNOLOGY STUDIO (PRE-REQUISITE) Exposed on the technology involved in building conservation works. It is including building improvement technology in conservation projects involving restoration and adaptation of old buildings in addition to comply the laws and regulations involved including the types of adaptation in conservation, technology, strengthening of materials and ethics in conservation
6	RBG 231 (3 unit)	BUILDING PATHOLOGY 1 (PRE-REQUISITE) This course explores the principle of building material and damage to the elements of the building. This course also reveals the Building Surveyor Practices in Malaysia regarding the identification of damage to building materials and analysis.
7	RBS 304 (7 unit)	BUILDING MAINTENANCE MANAGEMENT STUDIO (PRE-REQUISITE) It is designed to expose the building maintenance planning, maintenance strategy, policies, finance planning and operations. The students will also be exposed to maintenance, management and policy, of contract and liability.
8	RBG 351 (3 unit)	BUILDING MAINTENANCE Focuses on Maintenance Management and Technology via variety types of building maintenance; planned and unplanned maintenance methods, maintenance policy, impact of design on maintainability, prioritizing and costing the maintenance works, budgeting and funding the maintenance works and maintenance procurement.
9	RBL 370 (3 unit)	BUILDING SURVEYING FINAL YEAR PROJECT 1 (PRE-REQUISITE) The Final Year Project requires students to carry out a research project on a chosen topic in Building Surveying under supervision of specific lecturer. Research can be conducted in the form of literature review, experimental study, modelling, simulation, computational, case study, survey, etc.
10	RBS 307 (7 unit)	TOTAL ASSET AND FACILITIES MANAGEMENT STUDIO It is designed to expose the students on the terminology, principles and applications of the facility management as one of the management tools applied in practice in the management of support activities within companies.
11	RBG 332 (3 unit)	BUILDING PATHOLOGY 2 The course covers the estimating, value or quality of building technology concerning the use of building pathology. Building pathology is related to the diagnosis or identification of a building defect or failure after observing the signs, prognosis or anticipation of the causes of a building failure and repair issues related to the building and structure.
12	RBL 372 (3 unit)	BUILDING SURVEYING FINAL YEAR PROJECT 2 This course is a continuation of RBL370 offered in Semester I. In this second part of building surveying studies, students will carry out data collection activities using appropriate methodologies established in the previous stage in analysis and findings.

COMMON CORE COURSES (36 units)		
1	RAG 121 (3 unit)	ENVIRONMENTAL SCIENCE 1 This course discusses on physical environmental issues and its measurement methods. Sustainability issues on natural resources and its relationship with the physical development will be discussed.
2	RAG 132 (3 unit)	INTRODUCTION TO BUILT ENVIRONMENT & HUMAN SETTLEMENT This course introduces the origins of human settlement on a various scale. The theory of the built environment and the regulations associated with it will be discussed. Students will be exposed to the elements in built environment with the history of human settlement, regulations associated with built environment, issues associated with human settlement and sustainable build environment.
3	RAG 161 (3 unit)	BUILDING CONSTRUCTION 1 This course introduces basic comprehension pertaining to building and materials used in the building components, beginning with systems, basic structure and its building relationship. It covers the main component of substructure, superstructure and roof systems.
4	RMK 233 (3 unit)	MEASUREMENT OF BUILDING WORKS This course establishes quantity measurement techniques for building and civil engineering works based on the Standards Method of Measurement 2 (SMM2).
5	RMK 252 (3 unit)	PRINCIPLES OF PROJECT MANAGEMENT This course discusses on managing the construction industry encompassing the methods of basic planning, monitoring and controlling use in project management.
6	RAG 265 (3 unit)	BUILDING CONSTRUCTION 2 This course is a continuation of Building Construction 1 with emphasis on more complex building systems and advanced material. The scope covers construction systems from sub-structure such as piling, retaining walls and basement constructions. It also elaborates on super structure of in-situ reinforced concrete, precast concrete as well as steel frames and their various component from columns, beams and floorings such as two-way, one-way, ribbed, waffle and precast slabs as well as composite floors.
7	REG 132 (3 unit)	STRUCTURE 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.
8	RMK 234 (3 unit)	BUILDING COST ESTIMATION AND PRICING This course introduces the cost estimates in the construction sector which covers all aspects relating to the production of accurate cost and price estimates for building work.
9	RBG 262 (3 unit)	BUILDING SERVICES MAINTENANCE 1 (PRE-REQUISITE) This course covers aspects of damage detection, application and maintenance ethics of low-rise building services by identifying problems, maintenance issues, defects in building services, maintenance and their solutions through maintenance planning and project strategies on site.
10	RMK 353 (3 unit)	PROPERTY MANAGEMENT This course introduces a diverse range of topics in the property management profession. These include the functions of property management, property market and legislations that influence the profession. Operational aspects like the elements of leasing; acquisition and disposal of property; record keeping and office organisation including the occupant's liabilities and real estate marketing techniques are also introduced.
11	REG 361 (3 unit)	METHODS OF CONSTRUCTION The course explores on site management, safety in construction site, earth work including cleaning, cut and fill, dewatering process from the construction site in basic design and preparation of concrete construction, removal of formwork for the prefabricated construction system, pre-stressed concrete construction and high-rise construction.
12	RBG 263 (3 unit)	BUILDING SERVICES MAINTENANCE 2 This course covers aspects of damage detection, application and maintenance ethics of high-rise building services by identifying problems, maintenance issues, defects in building services, maintenance and their solutions through maintenance planning and project strategies on site.

**In order to graduate, the minimum passing grade required is Grade C.*

3.2 Industrial Training (12 units)

No	Code & Unit	Course Title & Synopsis
1	RBL 401 (12 unit)	BUILDING SURVEYING INDUSTRIAL TRAINING This course is compulsory industrial training for Building Surveying students at the School of Housing, Building & Planning. It emphasizes on practicing professional practice in their respective fields to prepare students for the real-world challenges of the construction industry. It runs first Semester of Year 4. It takes 24 weeks (6 months) to meet the requirements of the MQA Building Surveying Standard and the Professional Body of the Royal Institution of Surveyors Malaysia (RISM).

3.3 University Courses / Compulsory Modules (19 units)

No	Code & Unit	Course Title & Synopsis
1	LKM (2 unit)	BAHASA MALAYSIA All Malaysian students must take LKM400 and pass with the minimum of Grade C to graduate.
2	LSP (4 unit)	ENGLISH LANGUAGE All bachelor's degree students must take 4 units of English Language courses to fulfil the University requirement for graduation
3	HFE 224 (2 unit)	APPRECIATION OF ETHICS AND CIVILISATIONS This course aims to increase students' knowledge on history, principles, values, main aspects of Malaysian civilization, current issue and its culture.
4	HFF 225 (2 units)	PHILOSOPHY AND CURRENT ISSUES This course is an introduction to ethnic relations in Malaysia. This course is designed with 3 main objectives: (1) to introduce students to the basic concepts and the practices of social accord in Malaysia, (2) to reinforce basic understanding of challenges and problems in a multi-ethnic society, and (3) to provide an understanding and awareness in managing the complexity of ethnic relations in Malaysia.
5	WUS101 (2 units)	CORE ENTREPRENEURSHIP This course aims to provide basic exposure to students in the field of entrepreneurship and business, with emphasis on the implementation of the learning aspects while experiencing the process of executing business projects in campus.
6	7 units	CO-CURRICULUM/SKILLS COURSE/FOREIGN LANGUAGE Students must choose one of the following (A/B): (A) Uniformed/Seni Silat Cekak/Jazz Band Co-Curricular Package (6 – 10 Units) (B) Co-curricular/Skills Courses/Options (1 – 6 Units)

**In order to graduate, the minimum passing grade required is Grade C.*

COURSE STRUCTURE

UNDERGRADUATE PROGRAM BUILDING SURVEYING

YEAR 1

SEMESTER 1				SEMESTER 2			
RBS 101/7	Building Surveying Fundamental Studio	T	7	RBS 102/7	Building Control Studio	T	7
RAG 121/3	Environmental Science I	T	3	RMK 233/3	Measurement of Building Works	T	3
RAG 132/3	Introduction to Built Environment & Human Settlement	T	3	RMK 252/3	Principles of Project Management	T	3
RAG 161/3	Building Construction I	T	3	RAG 265/3	Building Construction 2	T	3
REG 132/3	Structural Mechanics	T	3		University Courses	U	4
	University Course	U	2				
UNITS				UNITS			
21				20			

YEAR 2

SEMESTER 3				SEMESTER 4			
RBS 205/7	Building Audit and Safety Studio	T	7	RBS 206/7	Building Conservation Technology Studio	T	7
RBK 351/3	Professional Practice for Building Surveyor	T	3	RBG 231/3	Building Pathology 1	T	3
RBG 262/3	Building Services Maintenance 1	T	3	RBG 263/3	Building Services Maintenance 2	T	3
RMK 234/3	Building Cost Estimation and Pricing	T	3	RMK 353/3	Property Management	T	3
	University Courses	U	4		University Courses	U	2
UNITS				UNITS			
20				18			

YEAR 3

SEMESTER 5				SEMESTER 6			
RBS 304/7	Building Maintenance Management Studio	T	7	RBS 307/7	Total Asset and Facilities Management Studio	T	7
RBG 351/3	Building Maintenance	T	3	RBG 332/3	Building Pathology 2	T	3
RBL 370/3	Building Surveying Final Year Project 1	T	3	RBL 372/3	Building Surveying Final Year Project 2	T	3
REG 361/3	Methods of Construction	T	3		University Courses	U	4
	University Courses	U	3				
UNITS				UNITS			
19				17			

YEAR 4

SEMESTER 7							
RBL 401/12	Building Surveying Industrial Training	T	12		Core Courses (Discipline and Common)	T	96
					Industrial Training	T	12
					University Courses	U	19
UNITS				TOTAL UNITS			
12				127			