



School of Housing,Building,&Planning



BEST BS URP

SS A

WORLD UNIVERSITY RANKINGS
2022 by subject

ARCHITECTURE / BUILT ENVIRONMENT

TOP 100

hbp.usm.my

Bachelor of Science in

Architecture (Honours)



SCHOOLOF HOUSING. PLANNING BUILDINGS RankedTOP 5 **Public Universities**

& TOP 100 faculty in the world by subject



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Dr. Muhammad Hafeez Abdul Nasir

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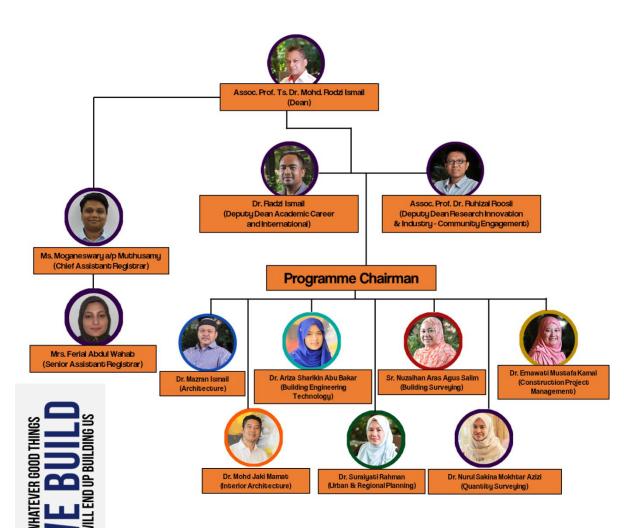
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Michael Ong Chin Keong (Ar.Tpr.)



Tang Wei Tee (Ar.)

School of Housing, Building & Planning

The School of Housing, Building and Planning (HBP), Universiti Sains Malaysia (USM) was established in 1972 with the aim of nurturing skilled graduates capable of becoming actors and future leaders in relevant planning, design, development and management necessary for a sustainable built environment in Malaysia and the world.

After almost five decades, the school has made tremendous progress in teaching and learning, research and publication, consultancy and innovation, and continuously making positive impact on the society and the industry.

undergraduate Currently, seven programmes are offered by school. The are programmes 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 Institute of Chartered Surveyors (RICS), Pacific Association of Quantity Surveyors (PAQS), Royal Institute of Chartered Surveyors Malaysia (RICSM), The Chartered Institute of Building (CIOB), and Chartered Association of Building Engineers (CABE).

Mission

- •To establish HBP as the best Built Environment School with emphasis on sustainability
- •To nurture outstanding graduates for the global market
- •To position HBP as a centre of expertise in identified niche areas
- •To be at the fore front of knowledge transfer and be relevant to the needs of the community (bottom billion)

'Championing a sustainable tomorrow through holistic education and upholding a global mindset'













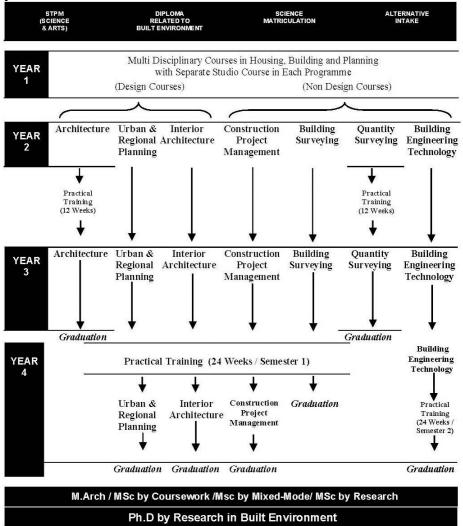






chartered association of building engineers

Study Path at The School of HBP



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 built environment. Whereas curricula in architecture, interior architecture, building surveying, urban & construction regional planning, project engineering management, building technology or quantity surveying 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 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.

These theoretical 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

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î	î	ì	i	10-	Workshop/Laboratories				
î	i	i i	i	20-	Physical Environment				
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i	i	i	i	30-	Theory and Methodology				
i	i	ì	i	40-	Cultural & Etiquette Studies				
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Architecture Programme

1. Introduction

The Bachelor of Science in Architecture (Honours) degree is a 3-year programme upon which the graduated students will be awarded the LAM Part 1 qualification.

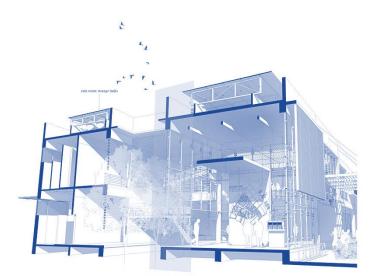
A. Core Courses (90 Units)

Code and T	itle	Unit	Semester	Year	TICK
RAS 101	Design Studio 1	7	1	1	V
RAS 102	Design Studio 2	7	2	1	
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	
REG 132	Structures of Mechanic	3	1	1	
RAS 203	Architecture Studio 1	7	1	2	
RAS 204	Architecture Studio 2	7	2	2	
RAG 232	Architectural Working Drawing & Documentation	3	2	2	
RAG 234	Computer Aided Design for Architecture	3	1	2	
RAK 232	Principles of Architectural Design	3	1	2	
RAG 265	Building Construction 2	3	2	2	
RUL 274	Compulsory Practical Training	6	2	2	
RAG 322	Environmental Science 2	3	2	3	
RAG 333	Advanced Computer Aided Architecture Design	3	1	3	
RAK 345	Housing Studies	3	2	3	
RAS 305	Architecture Studio 3	7	1	3	
RAS 306	Architecture Studio 4	7	2	3	
RAK 244	History and Theory of Architecture 1	3	2	2	
RAK 346	History and Theory of Architecture 2	3	1	3	
RAL 371	Measured Drawing	3	1	3	

B. Elective Courses (18 Units)

Code and Title		Unit	Semester	Year	TICK
REG 161	Construction Materials*	3	2	1	
RMK 252	Principles of Project Management*	3	2	1	
REG 261	Building Services*	3	2	2	
RMK 255	Law and Practice of Construction Project Management 1*	3	2	3	
REG 360	Industrialised Building System (IBS)*	3	2	3	
REG 266	Structure Analysis** /				
REG 233	Geomatic Technology** /	3	1	2	
RBG 351	Building Maintenance**				

^{*} Recommended courses



YOU ARE ALSO ENTITLED TO A

membership to USM's Archiclub

AND A FREE STUDENT MEMBERSHIP

in Pertubuhan Arkitek Malaysia (PAM)





^{**} For REG 266, students have options either to take that subject or its alternatives: REG 232 or RBG 351

2. Unit Requirements and Grade Point Average System

Unit Requirements

Bachelor of Science (Architecture) (Honours) (3 years)	
B.Sc.(HBP) Programme	Units
Core Courses	90
Elective Courses	18
University Courses	15
Total	123

Course Duration

Bachelor of Science (Architecture) (Honours) (3 years)	
Minimum	6 (3 years)
semesters	
Maximum	10 (5 years)
semesters	

For Core and Elective Courses:

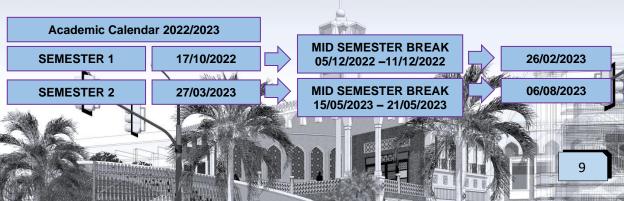
- Grade F (Fail) will be required to repeat the course.
- Grade D- and above is considered as a passing grade (Pass)

For Studio Courses (under the Core Courses):

 Grade of B- 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 non-studio 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 non-studio course will not be allowed to repeat the course whether during KSCP or normal semester.



Studio Courses

Studio courses are mandatory for all students to pass, i.e. with achievements of Grade B- and above. Students obtaining C+ and below need to repeat and pass the course before they can proceed with the upper studio.

ARCH	ARCHITECTURE (42 Units)						
Code		Title					
RAS	101/7	Design Studio 1					
RAS	102/7	Design Studio 2					
RAS	203/7	Architecture Studio 1					
RAS	204/7	Architecture Studio 2					
RAS	305/7	Architecture Studio 3					
RAS	306/7	Architecture Studio 4					

Grade Point Average System

Students' academic achievement for registered courses will be graded as follows:

Alphabetic Grade	А	A-	B+	В	B-	C+	С	C-	D+	D	D-	F
Grade Points	4.00	3.67	3.33	3.00	2.67	2.33	2.00	1.67	1.33	1.00	0.67	0



3. University Requirements

Students are required to take **15 units** of the following University/Option courses for University requirements:

		CRED	IT TOTAL				
	UNIVERSITY COURSE REQUIREMENTS	Local Students	International Students				
General Studies (M	General Studies (MPU)						
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 Or U3	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	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				

4. Unit Exemption

Unit exemption is defined as the total number of units given to students who are pursuing their studies in USM that are exempted from the graduation requirements. Students only need to accumulate the remaining units for graduation purposes. Only passes or course grades accumulated or acquired in USM will be included in the calculation of the Cumulative Grade Point Average (CGPA) for graduation purposes.

A. Regulations and Implementation of Unit Exemption

Diploma holders from recognised Public and Private Institutions of Higher Learning:

Unit exemption can only be given to courses taken at diploma level.

Courses for unit exemption may be combined (in two or more combinations) in order to obtain exemption of one course at degree level. However if the School would like to approve only one course at the diploma level for unit exemption of one course at degree level, the course at diploma level must be equivalent to the degree course and have the same number of or more units.

- Courses taken during employment (in service) for diploma holders cannot be considered for unit exemption.
- (ii) The minimum achievement at diploma level that can be considered for unit exemption is a minimum grade 'B' or 3.0 or equivalent.
- (iii) The total number of semesters exempted should not exceed two semesters.
- (iv) In order to obtain unit exemption for industrial training, a student must have continuous work experience for at least two years in the area. If a student has undergone industrial training during the period of diploma level study, the student must have work experience for at least one year. The students are also required to produce a report on the level and type of work performed. Industrial training unit exemption cannot be considered for semester exemption as the industrial training is carried out during the long vacation in USM.
- (v) Unit exemption for university and option courses can only be given for courses such as Bahasa Malaysia (LKM400), English Language, Islamic and Asian Civilisations and as well as co-curriculum.

IPTS (Private Institution of Higher Learning) USM Supervised/ External Diploma Graduates:

Students who are IPTS USM supervised/external diploma graduates are given unit exemption as stipulated by the specific programme of study. Normally, unit exemption in this category is given as a block according to the agreement between USM (through the School that offers the programme) with the IPTS.

Students from recognised local or foreign IPTA (Public Institutions of Higher Learning)/IPTS who are studying at the Bachelor's Degree level may apply to study in this university and if successful, may be considered for unit exemption, subject to the following conditions:

- (i) Courses taken in the previous IPT are equivalent (at least 80% of the course must be the same) to the courses offered in USM.
- (ii) Students taking courses at Advanced Diploma level in IPT that are recognised to be equivalent to the Bachelor's Degree course in USM may be considered for unit exemption.
- (iii) The total maximum unit exemption allowed should not exceed one third of the total unit requirement for graduation.



Semester exemption is based on the total units exempted as below:

Total Units Exempted	Total Semesters Exempted
8 and below	None
9 – 32	1
33 to 1/3 of the total	2
units for graduation	

Application Procedure for Unit Exemption

Any student who would like to apply for unit exemption is required to complete the Unit Exemption Application Form which can be obtained from the Examination and Graduation Section or the respective Schools.

The form must be approved by the Dean of the School prior to submission to the Examination and Graduation Section for consideration and approval.

5. Courses During the Long Vacation (Kursus Semasa Cuti Panjang) (KSCP)

KSCP is offered to students who have taken a course earlier and obtained a grade of 'C-', 'D+', 'D', 'D-', 'F' and 'DK' only. Students who have obtained a grade 'X' or 'F*' are not allowed to take the course during KSCP.

The purpose of KSCP is to:

- i. Give an opportunity to students who are facing time constraints for graduation.
- ii. Assist students who need to accumulate a few more credits for graduation.
- iii. Assist "probationary" students to enhance their academic status.
- iv. Assist students who need to repeat a prerequisite course, which is not offered in the following semester.

However, this opportunity is only given to students who are taking courses that they have attempted before and achieved a grade as stipulated above, provided that the course is being offered. Priority is given to final year students. Usually, formal lectures are not held, and teaching is via tutorials.

The duration of KSCP is 3 weeks, i.e. 2 weeks of tutorial and 1 week of examination, all held during the long vacation. The KSCP schedule is available in the University's Academic Calendar.

The Implementation of KSCP

- (i) Students are allowed to register for a maximum of 3 courses and the total number of units registered must not exceed 10.
- (ii) Marks/grades for coursework are taken from the highest marks/the best grades obtained in a particular course in the normal semester before KSCP. The final overall grade is determined as follows:

Final Grade = The best + Marks or grade for KSCP coursework marks examination or grade

- (iii) GPA calculation involves the LATEST grades (obtained in KSCP) and also involves courses taken in the second semester and those repeated in KSCP. If the GPA during KSCP as calculated above is 2.00 or better, the academic status will be active, even though the academic status for the second semester was probation status. However, if the GPA for KSCP (as calculated above) is 1.99 or below, the academic status will remain as probation status for the second semester.
- (iv) Graduating students (those who have fulfilled the graduation requirements) in the second semester are not allowed to register for KSCP.

6. Student Exchange Programme

Study Abroad Scheme

The student exchange programme is an opportunity for USM students to study for one or two semesters abroad at any USM partner institutions. Ideally, students are encouraged to participate in the exchange programme within their third to fifth semester (3 year degree programme) and within the third to seventh semester (4 year degree programme).

USM students who wish to follow the SBLN programme must discuss their academic plans with the Dean or Deputy Dean of their respective Schools and also with the International Mobility &

Collaboration Centre (IMCC) (to ensure that credits obtained from the external higher education institution can be transferred as part of the credit accumulation for graduation).

Any student that follows the SBLN programme and violates any disciplinary act in the external higher education institution, can be penalised in accordance with the University (Discipline of Students) Rules if the matter is referred to USM.

For further information, please visit www.imcc.usm.my or contact the International Mobility & Collaboration Centre (IMCC) at +604 – 653 2777/2774.

Student Exchange Programme in Local Higher Education Institutions (RPPIPT)

This is a programme that allows students of Higher Learning Institutions to do an exchange programme for a semester among the higher institutions themselves. Students can choose any relevant courses and apply for credit transfers. USM students who want to participate in RPPIPT have to discuss their academic plans with the Dean or Deputy Dean of their respective Schools as well with the Academic Collaboration Unit, Division of Academic and International (to ensure that credits obtained from the higher education institution in Malaysia can be transferred as part of the credit accumulation for graduation).

Any student who participates in RPPIPT and violates any of the institution's displinary rules can be penalised according to the University (Discipline of Students) Rules if the matter is referred to USM.

For further information, please visit http://bheaa.usm.my/index.php/programmes/inter-university-exchange or contact the Academic Collaboration Unit of the Academic and International Division at +604 – 653 2451.

Ownership of Students' Dissertation/Research Project/Theses and University's Intellectual Property

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COURSE STRUCTURE

	UNDERGRADUATE PROGRAMME ARCHITECTURE								
	YEAR 1								
	SEMESTER 1				SEMESTER 2				
RAS 101	Design Studio 1	7		RAS 102	Design Studio 2	7			
RAG 121	Environmental Science 1	3		REG 161	Construction Materials*	3			
RAG 132	Introduction to Built Environment & Human Settlement	3		RMK 252	Principles of Project Management*	3			
RAG 161	Building Construction 1	3							
REG 132	Structural Mechanics	3							
				HFE 224	Appreciation of Ethics and Civilizations** (University Course)	2			
				LKM 400	Bahasa Malaysia**	2			
HFF 255	Philosophy and Current Issues** (University Course)	2		LSP 300	Academic English** (University Course)	2			
LMT 100	Preparatory English*** (University Course)	2*		WUS 101	Core Entrepreneurship** (University Course)	2			
	UNITS	21			UNITS	21			

		YE	AR	2		
	SEMESTER 3				SEMESTER 4	
RAS 203	Architecture Studio 1	7		RAS 204	Architecture Studio 2	7
RAK 232	Principles of Architectural Design	3		RAG 265	Building Construction 2	3
RAG 234	Computer Aided Design for Architecture	3		RAK 344	History and Theory of Architecture 1	3
REG 233	Geomatic Technology**or	3		RAG 232	Architectural Working Drawing & Documentation	3
REG 266	Structural Analysis**or	3		REG 261	Building Services*	3
RBG 351	Building Maintenance**or	3				
LSP 404	Technical and Engineering English** (University Course)	2				
	Co-Curricular** (University Course)	1			Co-Curricular** (University Course)	1
	UNITS	19			UNITS (20 + 6 units)	20
					SEMESTER 4 (Semester Break July-Sept)	
				RUL 274	Compulsory Practical Training	6
					UNITS	6

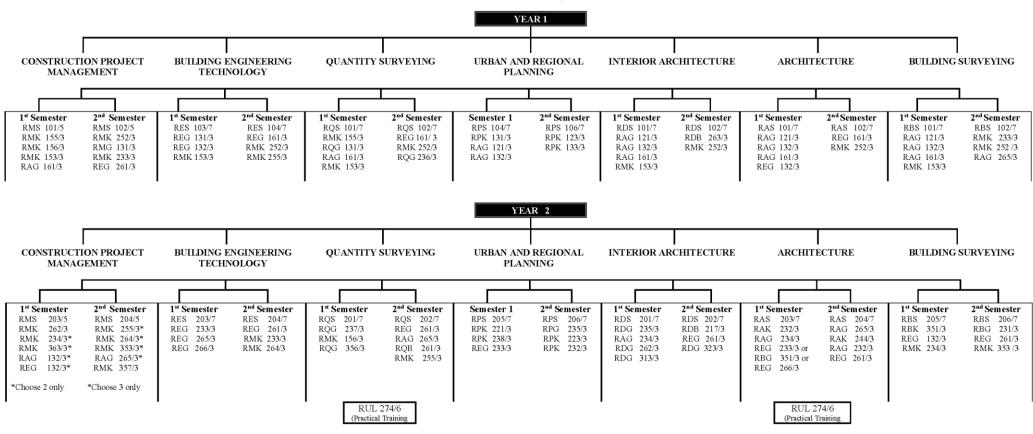
		YE	AR	3		
	SEMESTER 5				SEMESTER 6	
RAS 305	Architecture Studio 3	7		RAS 306	Architecture Studio 4	7
RAK 346	History and Theory of Architecture 2	3		RAG 322	Environmental Science 2	3
RAG 333	Advanced Computer Aided Architecture Design	3		RAK 345	Housing Studies	3
RAL 371	Measured Drawing	3		RMK 255	Law and Practice of Construction Project Management 1*	3
				REG 360	Industrialized Building System*	3
	Co-Curricular** (University Course)	1*			Co-Curricular** (University Course)	1*
	UNITS	17			UNITS	19
					Core Courses	90
					Elective Courses*	18
					University Courses**	15
					TOTAL UNITS	123

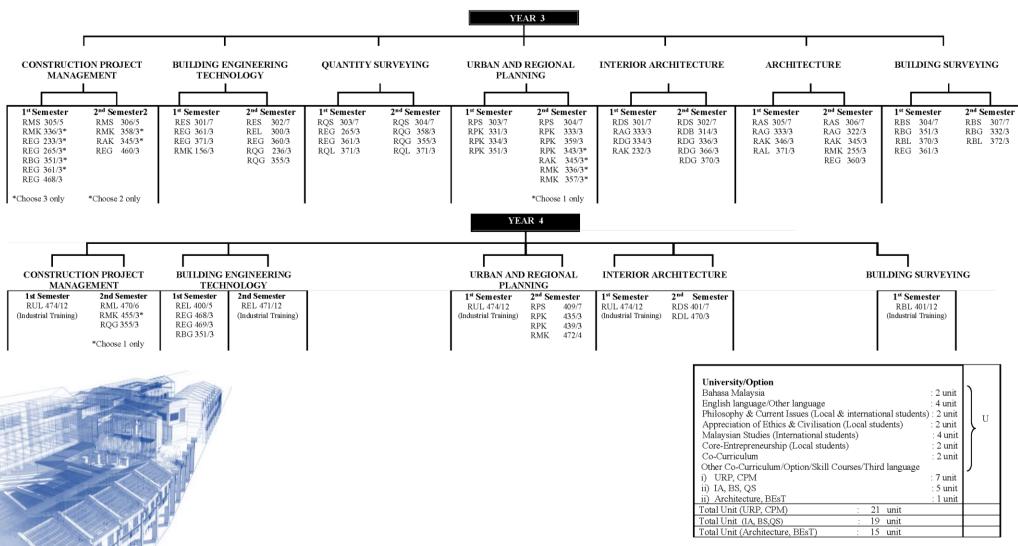
UNDERGRADUATE PROGRAMME ARCHITECTURE USM-EQUATOR (OFFSHORE PROGRAMME)									
YEAR 1									
	SEMESTER 1				SEMESTER 2				
RAS 101	Design Studio 1	7		RAS 102	Design Studio 2	7			
RAG 121	Environmental Science 1	3		REG 161	Construction Materials*	3			
RAG 132	Introduction to Built Environment & Human Settlement	3		RMK 252	Principles of Project Management*	3			
RAG 161	Building Construction 1	3							
REG 132	Structural Mechanics	3							
				HFE 224	Appreciation of Ethics and Civilizations** (University Course)	2			
				LKM 400	Bahasa Malaysia**	2			
HFF 255	Philosophy and Current Issues** (University Course)	2		LSP 300	Academic English** (University Course)	2			
LMT 100	Preparatory English*** (University Course)	2*		WUS 101	Core Entrepreneurship** (University Course)	2			
	UNITS	21			UNITS	21			

YEAR 2							
	SEMESTER 3				SEMESTER 4		
RAS 203	Architecture Studio 1	7		RAS 204	Architecture Studio 2	7	
RAK 232	Principles of Architectural Design	3		RAG 265	Building Construction 2	3	
RAG 234	Computer Aided Design for Architecture	3		RAK 344	History and Theory of Architecture 1	3	
REG 233	Geomatic Technology**or	3		RAG 232	Architectural Working Drawing & Documentation	3	
REG 266	Structural Analysis**or	3		REG 261	Building Services*	3	
RBG 351	Building Maintenance**or	3					
LSP 404	Technical and Engineering English** (University Course)	2					
WSC 127	Event Management 1** (University Course)	1*		WSC 227	Event Management 2** (University Course)	1*	
	UNITS	19			UNITS (20 + 6 units)	20	
					SEMESTER 4 (Semester Break July-Sept)		
				RUL 274	Compulsory Practical Training	6	
					UNITS	6	

		YE	AR	3		
	SEMESTER 5				SEMESTER 6	
RAS 305	Architecture Studio 3	7		RAS 306	Architecture Studio 4	7
RAK 346	History and Theory of Architecture 2	3		RAG 322	Environmental Science 2	3
RAG 333	Advanced Computer Aided Architecture Design	3		RAK 345	Housing Studies	3
RAL 371	Measured Drawing	3		RMK 255	Law and Practice of Construction Project Management 1*	3
				REG 360	Industrialized Building System*	3
	Co-Curricular** (University Course)	1			Co-Curricular** (University Course)	1
	UNITS	17			UNITS	19
					Core Courses	90
					Elective Courses*	18
					University Courses**	15
					TOTAL UNITS	123

CURRICULUM AT SCHOOL OF HOUSING, BUILDING AND PLANNING





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