



Bachelor of Science in Architecture with Honours

Academic Staff (Architecture)



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2.0 School Requirements (Academic)

The Bachelor of Science in Architecture with Honours degree is a 3-year programme upon which the graduated students will be awarded the LAM Part 1 qualification. In order to graduate, the minimum passing grade required is Grade C.

A. Core Courses (90 Units)

Code and Title		Unit	Semester	Year	TICK ✓
RAS 101	Design Studio 1	7	1	1	
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	Structural Mechanics	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	
RAK 244	History and Theory of Architecture 1	3	2	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 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	
RBG 351 REG 266 REG 233	Building Maintenance** / Structural Analysis** / Geomatic Technology**	3	1	2	

* Recommended courses

**For RBG 351, students have options either to take that subject or its alternatives: REG 266 or REG 233

3. Unit Requirements and Grade Point Average System

Unit Requirements

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

Course Duration

Bachelor of Science in Architecture with Honours (3 years)	
Minimum semesters	6 (3 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 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.

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	A	A-	B+	B	B-	C+	C	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

4. University Requirements

Students are required to take **15 units** of the following University/Option courses for University requirements. In order to graduate, the minimum passing grade required is Grade C.

UNIVERSITY COURSE REQUIREMENTS		CREDIT TOTAL	
		Local Students	International Students
General Studies (MPU)			
U1	<u>Local Students</u> <ul style="list-style-type: none"> HFF225 (Philosophy and Current Issues) (2 credits) HFE224 (Appreciation of Ethics and Civilisations) (2 credits) LKM400 (Bahasa Malaysia IV) (2 credits) <u>International Students of Science and Technology</u> <ul style="list-style-type: none"> HFF225 (Philosophy and Current Issues) (2 credits) LKM100 (Bahasa Malaysia I) (2 credits) 	6	4
U2 (Local Students) AND U3 (International Students)	<u>Local Students</u> <ul style="list-style-type: none"> WUS101 (Core Entrepreneurship) (2 credits) English Language Courses (4 credits) <u>International Students</u> <ul style="list-style-type: none"> SEA205E (Malaysian Studies) (4 credits) English Language Courses (4 credits) 	6	8
U4	<u>Local Students</u> WAR122 (Integrity and Anti-Corruption Course)/Co-Curricular Courses*	2	2
Options	Students can/have to choose any of the following: <ul style="list-style-type: none"> Co-curricular courses Skill courses/Foreign Language Courses/Other courses offered by other schools 	1	1
CREDIT TOTAL		15	15

5. 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 the diploma level must be equivalent to the degree course and have the same number of or more units.

- (i) 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.

B. Total Number of Exempted Semesters

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 units for graduation	2

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.

6. 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:

- Give an opportunity to students who are facing time constraints for graduation.
- Assist students who need to accumulate a few more credits for graduation.
- Assist "probationary" students to enhance their academic status.
- 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

- Students are allowed to register for a maximum of 3 courses and the total number of units registered must not exceed 10.
- 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:

$$\text{Final Grade} = \text{The best coursework marks or grade} + \text{Marks or grade for KSCP examination}$$

- 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.
- Graduating students (those who have fulfilled the graduation requirements) in the second semester are not allowed to register for KSCP.

7. 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 institution. 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 disciplinary 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.

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COURSE STRUCTURE

UNDERGRADUATE PROGRAMME ARCHITECTURE

YEAR 1				
SEMESTER 1				
RAS 101	Design Studio 1	T	7	
RAG 121	Environmental Science 1	T	3	
RAG 132	Introduction to Built Environment & Human Settlement	T	3	
RAG 161	Building Construction 1	T	3	
REG 132	Structural Mechanics	T	3	
HFF 225	Philosophy and Current Issues	U	2	
WAR 122	Integrity and Anti-Corruption	U	2	
LSP 101	Progressive English*	U	2*	
UNITS		23		

YEAR 2				
SEMESTER 3				
RAS 203	Architecture Studio 1	T	7	
RAK 232	Principles of Architectural Design	T	3	
RAG 234	Computer Aided Design for Architecture	T	3	
RBG 351, or REG 266, or REG 233	Building Maintenance*, or Structural Analysis*, or Geomatic Technology*	E	3	
LSP 301	General English II	U	2	
	University Course (Co-Curriculum)	U	1	
UNITS		19		

YEAR 2				
SEMESTER 4				
RAS 204	Architecture Studio 2	T	7	
RAG 265	Building Construction 2	T	3	
RAK 244	History and Theory of Architecture 1	T	3	
RAG 232	Architectural Working Drawing & Documentation	T	3	
REG 261	Building Services	E	3	
UNITS (19 + 6 units)		19		

SEMESTER 4 (Semester Break August-October)				
RUL 274	Compulsory Practical Training	T	6	
UNITS		6		

YEAR 3				
SEMESTER 5				
RAS 305	Architecture Studio 3	T	7	
RAK 346	History and Theory of Architecture 2	T	3	
RAG 333	Advanced Computer Aided Architecture Design	T	3	
RAL 371	Measured Drawing	T	3	
UNITS		16		

YEAR 3				
SEMESTER 6				
RAS 306	Architecture Studio 4	T	7	
RAG 322	Environmental Science 2	T	3	
RAK 345	Housing Studies	T	3	
REG 360	Industrialised Building System	E	3	
RMK 255	Law and Practice of Construction Project Management 1	E	3	
UNITS		19		

Core Courses		T	90
Elective Courses		E	18
University Courses		U	15
TOTAL UNITS			123