



UMS
UNIVERSITI MALAYSIA SABAH



**Faculty of
Computing
& Informatics**

Master of Computer Science (Software Development) by Coursework

The Master of Computer Science by coursework is designed to prepare graduates with state-of-the-art knowledge and skills required to compete in the rapidly growing field of computer technology related to the adoption of Industrial Revolution (IR 4.0). Research also highlights that data scientist, data analyst and software engineers in the area of AI and IoT to be among the fastest growing occupations now through 2022. The main objective of the programme is to produce more skilled human resources in Computer Science with specialization in Computational Intelligence such as Artificial Intelligence and Robotics, Information Retrieval and Machine Learning, in order to support the adoption of IR 4.0 at national and international level.

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Master of Computer Science (Software Development) by Coursework

MQA/FA8110

ADMISSION REQUIREMENTS

1. A bachelor's degree or equivalent in computing with a minimum CGPA of 2.75; OR
2. A bachelor's degree or equivalent in computing with a minimum CGPA of 2.50 may be accepted subject to rigorous internal assessment by the faculty; OR
3. A bachelor's degree or equivalent in computing with a CGPA of 2.00 - 2.49 may be accepted subject to a minimum of five (5) years working experience in the relevant fields; OR
4. A Bachelor of Science degree or its equivalent in any field other than computing with a minimum CGPA of 3.00 may be accepted provided that the applicant has taken at least one prerequisite module in computing; AND
5. Fulfill other requirements as set by the Senate. Degrees awarded by local/private institutions of higher learning, including those awarded under any collaborative/franchising schemes with local or foreign partners must be accredited by the Malaysian Qualifications Agency (MQA).

English Language Proficiency

Fulfill the general language requirement outlined by the university.

DURATION OF STUDY

Full time 1.5 Years

PROGRAMME STRUCTURE

The Masters of Computer Science Programme (Software Development) by coursework shall have a total of forty-two (42) credits.

Candidate Requirements

No	Requirements
1	Fulfill the minimum duration of 1.5 years 3 Semesters (Fulltime)
2	Fulfill the University Language Requirement
3	Presented a Computer Science Project

FEE STRUCTURE

FULL TIME

SEMESTER	FEE	SEMESTER FEE	INSURANCE	FEE CREDIT HOURS		TOTAL
				CREDIT HOUR	FEE	
1	780.00	1,275.00	25.00	15CH	5,250.00	7,330.00
2	-	1,275.00	-	15CH	3,150.00	6,525.00
3	-	1,275.00	25.00	12CH	4,200.00	5,500.00
				42CH		19,355.00

COURSE PLAN FOR MASTERS OF COMPUTER SCIENCE (COURSE WORK)

Software Development - MQA/PA8110

Courses		Credits	S1	S2	S3	
Compulsory modules						
KI51103	Algorithm And Analysis	3	✓			
KI51303	Advanced Database Management	3	✓			
KI51503	Advanced Computer And Communication Networks	3	✓			
KI51703	Software Engineering For Large Scale Systems	3	✓			
KI51203	Research Methods In Computer Science	3		✓		
KI51403	Software Testing	3		✓		
KI51603	Web Engineering	3		✓		
Specialization/Elective Module*						
KI71103	Mobile Application Development	3				
KI71203	Mobile Cloud Computing	3				
KI71303	Software Requirement Analysis Engineering	3				
KI71403	Software Security	3	1 Elective will be chosen for S1			
KI71503	User Interface Design	3				
KI71603	Advanced Topics In Software Development	3				
Computer Science Project Module						
KI61112	Computer Science Project	12	2 Electives will be chosen for S2			✓

* Students are required to register 3 courses only for the Elective Module.