

# UNDERGRADUATE KIT

**FACULTY OF COMPUTER SCIENCE  
AND INFORMATION TECHNOLOGY  
UNIVERSITI MALAYA**



**Bachelor of Computer Science  
(Artificial Intelligence)**

**Bachelor of Computer Science  
(Computer System and Network)**

**Bachelor of Computer Science  
(Data Science)**

**Bachelor of Computer Science  
(Information Systems)**

**Bachelor of Computer Science  
(Multimedia Computing)**

**Bachelor of Computer Science  
(Software Engineering)**



**2024/2025  
ACADEMIC  
SESSION**

**ACADEMIC CALENDAR  
2024/2025 ACADEMIC SESSION  
(BACHELOR DEGREE LEVEL)**

<b>SEMESTER I</b>				
Orientation Week			29.09.2024	- 06.10.2024
Lectures	7	weeks*	07.10.2024	- 24.11.2024
Mid Semester I Break	1	week	25.11.2024	- 01.12.2024
Lectures	7	weeks*	02.12.2024	- 19.01.2025
Revision Week	1	week*	20.01.2025	- 26.01.2025
Semester I Final Examination	3	weeks*	27.01.2025	- 16.02.2025
Semester I Break	4	weeks	17.02.2025	- 16.03.2025
	23	weeks		
<b>SEMESTER II</b>				
Lectures	7	weeks*	17.03.2025	- 04.05.2025
Mid Semester II Break	1	week	05.05.2025	- 11.05.2025
Lectures	7	weeks*	12.05.2025	- 29.06.2025
Revision Week	1	week*	30.06.2025	- 06.07.2025
Semester II Final Examination	3	weeks*	07.07.2025	- 27.07.2025
Semester II Break	4	weeks	28.07.2025	- 24.08.2025
	23	weeks		
<b>SPECIAL SEMESTER</b>				
Lectures	7	weeks*	28.07.2025	- 14.09.2025
Special Semester Final Examination	1	week*	15.09.2025	- 21.09.2025
Break	1	week	22.09.2025	28.09.2025
	9	weeks		

**Nota:**

(\* ) *The Academic Calendar has taken into account public and festive holidays and is subject to change:*

Deepavali	31 October 2024 (Thursday)
Christmas Day	25 December 2024 (Wednesday)
New Year	01 January 2025 (Wednesday)
Chinese New Year	29 & 30 January 2025 (Wednesday & Thursday)
Federal Territory Day	01 February 2025 ((Saturday)
Thaipusam	11 February 2025 (Tuesday)
Nuzul Al-Quran	17 March 2025 (Monday)
Eidul Fitri	31 March & 01 April 2025 (Monday & Tuesday)
Wesak Day	12 May 2025 (Monday)
His Majesty the King's Birthday	02 June 2025 (Monday)
Eidul Adha	06 June 2025 (Friday)
Awal Muharam	27 June 2025 (Friday)

**CURRICULUM STRUCTURE  
BACHELOR OF COMPUTER SCIENCE (ARTIFICIAL INTELLIGENCE)  
ACADEMIC SESSION 2024/2025**

COURSE CODE	COURSE COMPONENT	CREDITS	SEMESTER
	UNIVERSITY COURSES		
GIG1012	Philosophy and Current Issues <i>(for local student only)</i>	2	1
GLT1049	Basic Malay Language <i>(for international student)</i>		
GIG1013	Appreciation of Ethics and Civilizations	2	2
GIG1003	Basic Entrepreneurship Culture	2	3
GLTXXXX	English for Communication (1)	2	1
GLTXXXX	English for Communication (2)	2	2
	Co-Curriculum (1)	2	4
	Co-Curriculum (2)	2	7
	<b>Total</b>	<b>14</b>	
COURSE CODE	FACULTY CORE COURSES	CREDITS	SEMESTER
WIX1001	Computing Mathematics I	3	1
WIX1002	Fundamentals of Programming	5	1
WIX1003	Computer Systems and Organization	3	1
WIX2001	Thinking and Communication Skills	3	3
WIX2002	Project Management	3	3
	<b>Total</b>	<b>17</b>	
COURSE CODE	EXTERNAL UNIVERSITY ELECTIVE COURSES STUDENT HOLISTIC EMPOWERMENT (SHE)	CREDITS	SEMESTER
	University Elective (Cluster 1) - <i>Thinking Matters: Mind &amp; Intellect</i>	2	4
	University Elective (Cluster 2) - <i>Technology/Artificial Intelligence and Data Analytics: i-Techie</i>	2	6
	University Elective (Cluster 3) - <i>Global Issues and Community Sustainability: Making the World a Better Place</i>	2	6
	<i>KIAR: Integrity and Anti-Corruption course</i>	2	2
	<b>Total</b>	<b>8</b>	
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER
WIA1002	Data Structure (#WIX1002)	5	2
WIA1003	Computer System Architecture (#WIX1003)	3	2
WIA1005	Network Technology Foundation	4	2
WIA1006	Machine Learning	3	2
WIA1007	Introduction to Data Science	3	1
WIA2001	Database	3	3
WIA2003	Probability and Statistics	3	3
WIA2004	Operating Systems	4	4
WIA2005	Algorithm Design and Analysis (#WIA1002)	4	4
WIA2006	System Analysis and Design	3	3
WIA2007	Mobile Application Development	4	3
WIA3001	Industrial Training *	12	5
WIA3002	Academic Project I **	3	6
WIA3003	Academic Project II (#WIA3002)	5	7
	<b>Total</b>	<b>59</b>	
COURSE CODE	SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)	CREDITS	SEMESTER
WIC2008	Internet of Things (#WIA1005)	3	4
WID2001	Knowledge Representation and Reasoning	3	4
WID2002	Computing Mathematics II	3	4
WID2003	Cognitive Science	3	4
WID3001	Functional and Logic Programming	3	7
WID3002	Natural Language Processing	3	6
WID3007	Fuzzy Logic (#WIX1001)	3	7
WID3010	Autonomous Robots	3	6
WID3011	Deep Learning	3	6
WID3012	Evolutionary Computation	3	7
WID3013	Computer Vision and Pattern Recognition	3	6
WID3014	Practical Artificial Intelligence	3	7
WID3015	Numerical Analysis	3	7
WIG3004	Virtual Reality	3	6
	<b>Total</b>	<b>30</b>	
<b>TOTAL CREDITS FOR GRADUATION</b>		<b>128</b>	

# Pre-requisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

**COURSE PLANNING FOR BACHELOR OF COMPUTER SCIENCE (ARTIFICIAL INTELLIGENCE)  
ACADEMIC SESSION 2024/2025**

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
1	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 / GLT1049	Philosophy and Current Issues ( <i>for local student only</i> ) / Basic Malay Language ( <i>for international student</i> )	2
	GLTXXXX	English for Communication (1)	2	GLTXXXX	English for Communication (2)	2
	WIX1001	Computing Mathematics I	3	WIA1002	Data Structure (#WIX1002)	5
	WIX1002	Fundamentals of Programming	5	WIA1003	Computer System Architecture (#WIX1003)	3
	WIX1003	Computer Systems and Organization	3	WIA1005	Network Technology Foundation	4
	WIA1007	Introduction to Data Science	3	WIA1006	Machine Learning	3
		<b>Total</b>	<b>18</b>		<b>Total</b>	<b>19</b>
Course Code	Semester 1	Credits	Course Code	Semester 2	Credits	
2	GIG1013	Appreciation of Ethics and Civilizations	2		Co-Curriculum (1)	2
	WIX2001	Thinking and Communication Skills	3	WIA2004	Operating Systems	4
	WIX2002	Project Management	3	WIA2005	Algorithm Design and Analysis (#WIA1002)	4
	WIA2001	Database	3		Specialization Elective (1)	3
	WIA2003	Probability and Statistics	3		Specialization Elective (2)	3
	WIA2006	System Analysis and Design	3		Specialization Elective (3)	3
	WIA2007	Mobile Application Development	4		University Elective (Cluster 1)	2
					<i>Choose 3 electives of the following</i>	
				WIC2008	Internet of Things (#WIA1005)	3
				WID2001	Knowledge Representation and Reasoning	3
			WID2002	Computing Mathematics II	3	
			WID2003	Cognitive Science	3	
	<b>Total</b>	<b>21</b>		<b>Total</b>	<b>21</b>	
Course Code	Semester 1	Credits	Course Code	Semester 2	Credits	
3	WIA3001	Industrial Training *	12	WIA3002	Academic Project I **	3
					Specialization Elective (4)	3
					Specialization Elective (5)	3
					Specialization Elective (6)	3
					Specialization Elective (7)	3
					University Elective (Cluster 2)	2
					University Elective (Cluster 3)	2
					<i>Choose 4 electives of the following</i>	
				WID3002	Natural Language Processing	3
				WID3010	Autonomous Robots	3
			WID3011	Deep Learning	3	
			WID3013	Computer Vision and Pattern Recognition	3	
			WIG3004	Virtual Reality	3	
	<b>Total</b>	<b>12</b>		<b>Total</b>	<b>19</b>	

	Course Code	Semester 1	Credits	Credit Distribution		
				Course Component	Credits	
4		Co-Curriculum (2)	2			
	WIA3003	Academic Project II (#WIA3002)	5	University Courses	14	
		Specialization Elective (8)	3	Faculty Core Courses	17	
		Specialization Elective (9)	3	University Elective Courses	8	
		Specialization Elective (10)	3	Programme Core Courses	59	
		<i>University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place</i>	2	University Courses	14	
		<i>Choose 3 electives of the following</i>				
		WID3001	Functional and Logic Programming	3		
		WID3007	Fuzzy Logic (#WIX1001)	3		
		WID3014	Practical Artificial Intelligence	3		
		WID3015	Numerical Analysis	3		
			<b>Total</b>	<b>18</b>	<b>TOTAL CREDITS FOR GRADUATION</b>	<b>128</b>

# Pre-requisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

**CURRICULUM STRUCTURE  
BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING)  
ACADEMIC SESSION 2024/2025**

COURSE CODE	COURSE COMPONENT	CREDITS	SEMESTER
	UNIVERSITY COURSES		
GIG1012	Philosophy and Current Issues (for local student only)	2	2
GLT1049	Basic Malay Language (for international student)		
GIG1013	Appreciation of Ethics and Civilizations	2	1
GIG1003	Basic Entrepreneurship Culture	2	1
GLTXXXX	English for Communication (1)	2	1
GLTXXXX	English for Communication (2)	2	2
	Co-Curriculum (1)	2	2
	Co-Curriculum (2)	2	1
	<b>Total</b>	<b>14</b>	
COURSE CODE	FACULTY CORE COURSES	CREDITS	SEMESTER
WIX1001	Computing Mathematics I	3	1
WIX1002	Fundamentals of Programming	5	1
WIX1003	Computer Systems and Organization	3	1
WIX2001	Thinking and Communication Skills	3	1
WIX2002	Project Management	3	1
	<b>Total</b>	<b>17</b>	
COURSE CODE	EXTERNAL UNIVERSITY ELECTIVE COURSES STUDENT HOLISTIC EMPOWERMENT (SHE)	CREDITS	SEMESTER
	University Elective (Cluster 1) - Thinking Matters: Mind & Intellect	2	2
	University Elective (Cluster 2) - Technology/Artificial Intelligence and Data Analytics: i-Techie	2	2
	University Elective (Cluster 3) - Global Issues and Community Sustainability: Making the World a Better Place	2	1
	KIAR: Integrity and Anti-Corruption course	2	2
	<b>Total</b>	<b>8</b>	
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER
WIA1002	Data Structure (#WIX1002)	5	2
WIA1003	Computer System Architecture (#WIX1003)	3	2
WIA1005	Network Technology Foundation	4	2
WIA1006	Machine Learning	3	2
WIA2001	Database	3	1
WIA2002	Software Modeling	3	1
WIA2003	Probability and Statistics	3	1
WIA2004	Operating Systems	4	2
WIA2005	Algorithm Design and Analysis (#WIA1002)	4	2
WIA2007	Mobile Application Development	4	1
WIA2010	Human Computer Interaction	3	1
WIA3001	Industrial Training *	12	1
WIA3002	Academic Project I **	3	2
WIA3003	Academic Project II (#WIA3002)	5	1
	<b>Total</b>	<b>59</b>	
COURSE CODE	SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)	CREDITS	SEMESTER
WIF2002	Software Requirements Engineering	3	1 or 2 <sup>⊗</sup>
WIF2003	Web Programming	3	1 or 2 <sup>⊗</sup>
WIF3001	Software Testing	3	1 or 2 <sup>⊗</sup>
WIF3002	Software Process and Quality	3	1 or 2 <sup>⊗</sup>
WIF3004	Software Architecture and Design Paradigms (#WIA2002)	3	1 or 2 <sup>⊗</sup>
WIF3005	Software Maintenance and Evolution	3	1 or 2 <sup>⊗</sup>
WIF3006	Component Based Software Engineering (#WIA2002)	3	1 or 2 <sup>⊗</sup>
WIF3008	Real Time Systems	3	1 or 2 <sup>⊗</sup>
WIF3009	Python for Scientific Computing	3	1 or 2 <sup>⊗</sup>
WIF3010	Programming Language Paradigm	3	1 or 2 <sup>⊗</sup>
WIF3011	Concurrent and Parallel Programming (#WIX1002) (#WIA2004)	3	1 or 2 <sup>⊗</sup>
WIG3005	Game Development	3	1 or 2 <sup>⊗</sup>
WIC2008	Internet of Things (#WIA1005)	3	1 or 2 <sup>⊗</sup>
	<b>Total</b>	<b>30</b>	
<b>TOTAL CREDITS FOR GRADUATION</b>		<b>128</b>	

# Prerequisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

⊗ Each Specialization Elective Course is only offered ONCE every academic session, either on Semester 1 OR Semester 2.

**COURSE PLANNING FOR BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING)  
ACADEMIC SESSION 2024/2025**

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
1	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 / GLT1049	Philosophy and Current Issues (for local student only) / Basic Malay Language (for international student)	2
	GLTXXXX	English for Communication (1)	2	GLTXXXX	English for Communication (2)	2
	WIX1001	Computing Mathematics I	3	WIA1002	Data Structure (#WIX1002)	5
	WIX1002	Fundamentals of Programming	5	WIA1003	Computer System Architecture (#WIX1003)	3
	WIX1003	Computer Systems and Organization	3	WIA1005	Network Technology Foundation	4
	WIA2010	Human Computer Interaction	3	WIA1006	Machine Learning	3
		<b>Total</b>		<b>18</b>		<b>Total</b>
Course Code	Semester 1	Credits	Course Code	Semester 2	Credits	
2	GIG1013	Appreciation of Ethics and Civilizations	2		Co-Curriculum (1)	2
	WIX2001	Thinking and Communication Skills	3	WIA2004	Operating Systems	4
	WIX2002	Project Management	3	WIA2005	Algorithm Design and Analysis (#WIA1002)	4
	WIA2001	Database	3		Specialization Elective (1) <sup>⊗</sup>	3
	WIA2002	Software Modeling	3		Specialization Elective (2) <sup>⊗</sup>	3
	WIA2003	Probability and Statistics	3		Specialization Elective (3) <sup>⊗</sup>	3
	WIA2007	Mobile Application Development	4		<i>KIAR: Integrity and Anti-Corruption course</i>	2
	<b>Total</b>		<b>21</b>		<b>Total</b>	<b>21</b>
Course Code	Semester 1	Credits	Course Code	Semester 2	Credits	
3	WIA3001	Industrial Training *	12	WIA3002	Academic Project I **	3
					Specialization Elective (4) <sup>⊗</sup>	3
					Specialization Elective (5) <sup>⊗</sup>	3
					Specialization Elective (6) <sup>⊗</sup>	3
					Specialization Elective (7) <sup>⊗</sup>	3
					<i>University Elective (Cluster 1): Thinking Matters: Mind &amp; Intellect</i>	2
					<i>University Elective (Cluster 2): Technology/Artificial Intelligence and Data Analytics: i-Techie</i>	2
	<b>Total</b>		<b>12</b>		<b>Total</b>	<b>19</b>
Course Code	Semester 1	Credits	Credit Distribution			
4		Co-Curriculum (2)	2	Course Component	Credits	
	WIA3003	Academic Project II (#WIA3002)	5	University Courses	14	
		Specialization Elective (8) <sup>⊗</sup>	3	Faculty Core Courses	17	
		Specialization Elective (9) <sup>⊗</sup>	3	University Elective Courses	8	
		Specialization Elective (10) <sup>⊗</sup>	3	Programme Core Courses	59	
		<i>University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place</i>	2	Specialization Elective Courses <sup>⊗</sup>	30	
		<b>Total</b>	<b>18</b>	<b>TOTAL CREDITS FOR GRADUATION</b>	<b>128</b>	

# Prerequisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

⊗ Each Specialization Elective Course is only offered ONCE every academic session, either on Semester 1 OR Semester 2.

**CURRICULUM STRUCTURE  
BACHELOR OF COMPUTER SCIENCE (INFORMATION SYSTEMS)  
ACADEMIC SESSION 2024/2025**

COURSE CODE	COURSE COMPONENT	CREDITS	SEMESTER
	UNIVERSITY COURSES		
GIG1012	Philosophy and Current Issues ( <i>for local student only</i> )	2	2
GLT1049	Basic Malay Language ( <i>for international student</i> )		
GIG1013	Appreciation of Ethics and Civilizations	2	1
GIG1003	Basic Entrepreneurship Culture	2	1
GLTXXXX	English for Communication (1)	2	1
GLTXXXX	English for Communication (2)	2	2
	Co-Curriculum (1)	2	2
	Co-Curriculum (1)	2	1
	<b>Total</b>	<b>14</b>	
COURSE CODE	FACULTY CORE COURSES	CREDITS	SEMESTER
WIX1001	Computing Mathematics I	3	1
WIX1002	Fundamentals of Programming	5	1
WIX1003	Computer Systems and Organization	3	1
WIX2001	Thinking and Communication Skills	3	1
WIX2002	Project Management	3	1
	<b>Total</b>	<b>17</b>	
COURSE CODE	EXTERNAL UNIVERSITY ELECTIVE COURSES STUDENT HOLISTIC EMPOWERMENT (SHE)	CREDITS	SEMESTER
	University Elective ( <i>Cluster 1 - Thinking Matters: Mind &amp; Intellect</i> )	2	2
	University Elective ( <i>Cluster 2 - Technology/Artificial Intelligence and Data Analytics: i-Techie</i> )	2	2
	University Elective ( <i>Cluster 3 - Global Issues and Community Sustainability: Making the World a Better Place</i> )	2	1
	KIAR: Integrity and Anti-Corruption course	2	2
	<b>Total</b>	<b>8</b>	
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER
WIA1001	Information Systems	3	1
WIA1002	Data Structure (#WIX1002)	5	2
WIA1003	Computer System Architecture (#WIX1003)	3	2
WIA1005	Network Technology Foundation	4	2
WIA1006	Machine Learning	3	2
WIA2001	Database	3	1
WIA2003	Probability and Statistics	3	1
WIA2004	Operating Systems	4	2
WIA2005	Algorithm Design and Analysis (#WIA1002)	4	2
WIA2006	System Analysis and Design	3	1
WIA2007	Mobile Application Development	4	1
WIA3001	Industrial Training *	12	1
WIA3002	Academic Project I **	3	2
WIA3003	Academic Project II (#WIA3002)	5	1
	<b>Total</b>	<b>59</b>	
COURSE CODE	SPECIALIZATION ELECTIVE COURSES ( <i>Choose only 10 courses</i> )	CREDITS	SEMESTER
WIC2008	<i>Internet of Things</i>	3	1 or 2
WIE2001	Trends in Information Systems	3	1 or 2
WIE2002	Open-Source Programming: Application and Technology	3	1 or 2
WIE2003	Introduction to Data Science	3	1 or 2
WIE2005	Information Retrieval and Web Search	3	1 or 2
WIE3001	Advanced Database	3	1 or 2
WIE3002	Electronic Commerce	3	1 or 2
WIE3003	Information System Control and Security	3	1 or 2
WIE3005	Knowledge Management and Engineering	3	1 or 2
WIE3006	Information System Auditing	3	1 or 2
WIE3007	Data Mining and Warehousing	3	1 or 2
WIE3010	Data Visualization	3	1 or 2
WIE3012	Business Analytics and Intelligence	3	1 or 2
WIF2003	Web Programming	3	1 or 2
	<b>Total</b>	<b>30</b>	
<b>TOTAL CREDITS FOR GRADUATION</b>		<b>128</b>	

# Pre-requisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

⊗ Each Specialization Elective Course is only offered ONCE every academic session, either on Semester 1 OR Semester 2.



**COURSE PLANNING FOR BACHELOR OF COMPUTER SCIENCE (INFORMATION SYSTEMS)  
ACADEMIC SESSION 2024/2025**

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
1	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 / GLT1049	Philosophy and Current Issues <i>(for local student only)</i> / Basic Malay Language <i>(for international student)</i>	2
	GLTXXXX	English for Communication (1)	2	GLTXXXX	English for Communication (2)	2
	WIX1001	Computing Mathematics I	3	WIA1002	Data Structure (#WIX1002)	5
	WIX1002	Fundamentals of Programming	5	WIA1003	Computer System Architecture (#WIX1003)	3
	WIX1003	Computer Systems and Organization	3	WIA1005	Network Technology Foundation	4
	WIA1001	Information Systems	3	WIA1006	Machine Learning	3
		<b>Total</b>		<b>18</b>		<b>Total</b>
	<b>Course Code</b>	<b>Semester 1</b>	<b>Credits</b>	<b>Course Code</b>	<b>Semester 2</b>	<b>Credits</b>
2	GIG1013	Appreciation of Ethics and Civilizations	2		Co-Curriculum (1)	2
	WIX2001	Thinking and Communication Skills	3	WIA2004	Operating Systems	4
	WIX2002	Project Management	3	WIA2005	Algorithm Design and Analysis (#WIA1002)	4
	WIA2001	Database	3		Specialization Elective (1) <sup>⊗</sup>	3
	WIA2003	Probability and Statistics	3		Specialization Elective (2) <sup>⊗</sup>	3
	WIA2006	System Analysis and Design	3		Specialization Elective (3) <sup>⊗</sup>	3
	WIA2007	Mobile Application Development	4		<i>KIAR: Integrity and Anti-Corruption course</i>	2
	<b>Total</b>		<b>21</b>		<b>Total</b>	<b>21</b>
	<b>Course Code</b>	<b>Semester 1</b>	<b>Credits</b>	<b>Course Code</b>	<b>Semester 2</b>	<b>Credits</b>
3	WIA3001	Industrial Training *	12	WIA3002	Academic Project I **	3
					Specialization Elective (4) <sup>⊗</sup>	3
					Specialization Elective (5) <sup>⊗</sup>	3
					Specialization Elective (6) <sup>⊗</sup>	3
					Specialization Elective (7) <sup>⊗</sup>	3
					<i>University Elective (Cluster 1): Thinking Matters: Mind &amp; Intellect</i>	2
					<i>University Elective (Cluster 2): Technology/Artificial Intelligence and Data Analytics: i-Techie</i>	2
	<b>Total</b>		<b>12</b>		<b>Total</b>	<b>19</b>
	<b>Course Code</b>	<b>Semester 1</b>	<b>Credits</b>	<b>Credit Distribution</b>		
4		Co-Curriculum (2)	2	<b>Course Component</b>		<b>Credits</b>
	WIA3003	Academic Project II (#WIA3002)	5	University Courses	14	
		Specialization Elective (8) <sup>⊗</sup>	3	Faculty Core Courses	17	
		Specialization Elective (9) <sup>⊗</sup>	3	University Elective Courses	8	
		Specialization Elective (10) <sup>⊗</sup>	3	Programme Core Courses	59	
		<i>University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place</i>	2	Specialization Elective Courses	30	
	<b>Total</b>		<b>18</b>	<b>TOTAL CREDITS FOR GRADUATION</b>		<b>128</b>

# Pre-requisite.  
\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.  
\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.  
<sup>⊗</sup> Each Specialization Elective Course is only offered ONCE every academic session, either on Semester 1 OR Semester 2.

**CURRICULUM STRUCTURE  
BACHELOR OF COMPUTER SCIENCE (COMPUTER SYSTEM AND NETWORK)  
ACADEMIC SESSION 2024/2025**

COURSE CODE	COURSE COMPONENT	CREDITS	SEMESTER
	UNIVERSITY COURSES		
GIG1012	Philosophy and Current Issues <i>(for local student only)</i>	2	2
GLT1049	Basic Malay Language <i>(for international student)</i>		
GIG1013	Appreciation of Ethics and Civilizations	2	1
GIG1003	Basic Entrepreneurship Culture	2	1
GLTXXXX	English for Communication (1)	2	1
GLTXXXX	English for Communication (2)	2	2
	Co-Curriculum (1)	2	2
	Co-Curriculum (2)	2	1
	<b>Total</b>	<b>14</b>	
COURSE CODE	FACULTY CORE COURSES	CREDITS	SEMESTER
WIX1001	Computing Mathematics I	3	1
WIX1002	Fundamentals of Programming	5	1
WIX1003	Computer Systems and Organization	3	1
WIX2001	Thinking and Communication Skills	3	1
WIX2002	Project Management	3	1
	<b>Total</b>	<b>17</b>	
COURSE CODE	EXTERNAL UNIVERSITY ELECTIVE COURSES STUDENT HOLISTIC EMPOWERMENT (SHE)	KREDIT	SEMESTER
	University Elective <i>(Cluster 1) - Thinking Matters: Mind &amp; Intellect</i>	2	2
	University Elective <i>(Cluster 2) - Technology/Artificial Intelligence and Data Analytics: i-Techie</i>	2	2
	University Elective <i>(Cluster 3 - Global Issues and Community Sustainability: Making the World a Better Place</i>	2	1
	KIAR: Integrity and Anti-Corruption course	2	2
	<b>Total</b>	<b>8</b>	
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER
WIA1002	Data Structure (#WIX1002)	5	2
WIA1003	Computer System Architecture (#WIX1003)	3	2
WIA1005	Network Technology Foundation	4	2
WIA1006	Machine Learning	3	2
WIA2001	Database	3	1
WIA2003	Probability and Statistics	3	1
WIA2004	Operating Systems	4	2
WIA2005	Algorithm Design and Analysis (#WIA1002)	4	2
WIA2006	System Analysis and Design	3	1
WIA2008	Advanced Network Technology (#WIA1005)	4	1
WIA2009	Digital Design and Hardware Description Language (#WIA1003 & #WIX1003)	3	1
WIA3001	Industrial Training *	12	1
WIA3002	Academic Project I **	3	2
WIA3003	Academic Project II (#WIA3002)	5	1
	<b>Total</b>	<b>59</b>	
COURSE CODE	SPECIALIZATION ELECTIVE COURSES <i>(Choose only 10 courses)</i>	CREDITS	SEMESTER
WIC2002	Network Security	3	1 or 2
WIC2004	Internet Technology	3	1 or 2
WIC2005	Programmable Network (#WIA2008)	3	1 or 2
WIC2006	Digital Forensic	3	1 or 2
WIC2007	Cyber Security	3	1 or 2
WIC2008	Internet of Things (#WIA1005)	3	1 or 2
WIC3001	Mathematics in Networking	3	1 or 2
WIC3002	Cryptography	3	1 or 2
WIC3003	Embedded System Programming	3	1 or 2
WIC3004	Computer Penetration	3	1 or 2
WIC3005	Enterprise Network Design and Management (#WIA1005)	3	1 or 2
WIC3006	Mobile Computing	3	1 or 2
WIC3007	Principles of Distributed System (#WIA1005)	3	1 or 2
WIC3008	Microprocessor	3	1 or 2
WIC3009	Parallel Programming	3	1 or 2
	<b>Total</b>	<b>30</b>	
<b>TOTAL CREDITS FOR GRADUATION</b>		<b>128</b>	

# Pre-requisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

**COURSE PLANNING FOR BACHELOR OF COMPUTER SCIENCE (COMPUTER SYSTEM AND NETWORK)  
ACADEMIC SESSION 2024/2025**

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
1	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 / GLT1049	Philosophy and Current Issues <i>(for local student only)</i> / Basic Malay Language <i>(for international student)</i>	2
	GLTXXXX	English for Communication (1)	2	GLTXXXX	English for Communication (2)	2
	WIX1001	Computing Mathematics I	3	WIA1002	Data Structure (#WIX1002)	5
	WIX1002	Fundamentals of Programming	5	WIA1003	Computer System Architecture (#WIX1003)	3
	WIX1003	Computer Systems and Organization	3	WIA1005	Network Technology Foundation	4
	WIX2001	Thinking and Communication Skills	3	WIA1006	Machine Learning	3
		<b>Total</b>		<b>18</b>		<b>Total</b>
Course Code	Semester 1	Credits	Course Code	Semester 2	Credits	
2	GIG1013	Appreciation of Ethics and Civilizations	2		Co-Curriculum (1)	2
	WIX2002	Project Management	3	WIA2004	Operating Systems	4
	WIA2001	Database	3	WIA2005	Algorithm Design and Analysis (#WIA1002)	4
	WIA2003	Probability and Statistics	3		Specialization Elective (1) <sup>⊗</sup>	3
	WIA2006	System Analysis and Design	3		Specialization Elective (2) <sup>⊗</sup>	3
	WIA2008	Advanced Network Technology (#WIA1005)	4		Specialization Elective (3) <sup>⊗</sup>	3
	WIA2009	Digital Design and Hardware Description Language (#WIX1003 & #WIA1003)	3		<i>KIAR: Integrity and Anti-Corruption course</i>	2
	<b>Total</b>	<b>21</b>		<b>Total</b>	<b>21</b>	
Course Code	Semester 1	Credits	Course Code	Semester 2	Credits	
3	WIA3001	Industrial Training *	12	WIA3002	Academic Project I **	3
					Specialization Elective (4) <sup>⊗</sup>	3
					Specialization Elective (5) <sup>⊗</sup>	3
					Specialization Elective (6) <sup>⊗</sup>	3
					Specialization Elective (7) <sup>⊗</sup>	3
					<i>University Elective (Cluster 1): Thinking Matters: Mind &amp; Intellect</i>	2
					<i>University Elective (Cluster 2): Technology/Artificial Intelligence and Data Analytics: i-Techie</i>	2
	<b>Total</b>	<b>12</b>		<b>Total</b>	<b>19</b>	
Course Code	Semester 1	Credits	Credit Distribution			
4		Co-Curriculum (2)	2	Course Component	Credits	
	WIA3003	Academic Project II (#WIA3002)	5	University Courses	14	
		Specialization Elective (8) <sup>⊗</sup>	3	Faculty Core Courses	17	
		Specialization Elective (9) <sup>⊗</sup>	3	University Elective Courses	8	
		Specialization Elective (10) <sup>⊗</sup>	3	Programme Core Courses	59	
		<i>University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place</i>	2	Specialization Elective Courses	30	
		<b>Total</b>	<b>18</b>	<b>TOTAL CREDITS FOR GRADUATION</b>		<b>128</b>

# Pre-requisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

⊗ Each Specialization Elective Course is only offered ONCE every academic session, either on Semester 1 OR Semester 2.

**CURRICULUM STRUCTURE  
BACHELOR OF COMPUTER SCIENCE (MULTIMEDIA COMPUTING)  
ACADEMIC SESSION 2024/2025**

COURSE CODE	COURSE COMPONENT	CREDITS	SEMESTER
	UNIVERSITY COURSES		
GIG1012	Philosophy and Current Issues ( <i>for local student only</i> )	2	2
GLT1049	Basic Malay Language ( <i>for international student</i> )		
GIG1013	Appreciation of Ethics and Civilizations	2	1
GIG1003	Basic Entrepreneurship Culture	2	1
GLTXXXX	English for Communication (1)	2	1
GLTXXXX	English for Communication (2)	2	2
	Co-Curriculum (1)	2	2
	Co-Curriculum (2)	2	1
	<b>Total</b>	<b>14</b>	
COURSE CODE	FACULTY CORE COURSES	CREDITS	SEMESTER
WIX1001	Computing Mathematics I	3	1
WIX1002	Fundamentals of Programming	5	1
WIX1003	Computer Systems and Organization	3	1
WIX2001	Thinking and Communication Skills	3	1
WIX2002	Project Management	3	1
	<b>Total</b>	<b>17</b>	
COURSE CODE	EXTERNAL UNIVERSITY ELECTIVE COURSES STUDENT HOLISTIC EMPOWERMENT (SHE)	CREDITS	SEMESTER
	University Elective ( <i>Cluster 1 - Thinking Matters: Mind &amp; Intellect</i> )	2	2
	University Elective ( <i>Cluster 2 - Technology/Artificial Intelligence and Data Analytics: i-Techie</i> )	2	2
	University Elective ( <i>Cluster 3 - Global Issues and Community Sustainability: Making the World a Better Place</i> )	2	1
	KIAR: <i>Integrity and Anti-Corruption course</i>	2	2
	<b>Total</b>	<b>8</b>	
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER
WIA1002	Data Structure (#WIX1002)	5	2
WIA1003	Computer System Architecture (#WIX1003)	3	2
WIA1005	Network Technology Foundation	4	2
WIA1006	Machine Learning	3	2
WIA1008	Fundamental of Multimedia	3	1
WIA2001	Database	3	1
WIA2003	Probability and Statistics	3	1
WIA2004	Operating Systems	4	2
WIA2005	Algorithm Design and Analysis (#WIA1002)	4	2
WIA2006	System Analysis and Design	3	1
WIA2007	Mobile Application Development	4	1
WIA3001	Industrial Training *	12	1
WIA3002	Academic Project I **	3	2
WIA3003	Academic Project II (#WIA3002)	5	1
	<b>Total</b>	<b>59</b>	
COURSE CODE	SPECIALIZATION ELECTIVE COURSES ( <i>Choose only 10 courses</i> )	CREDITS	SEMESTER
WIG2001	Digital Image Processing	3	1 atau 2
WIG2002	Computer Graphics	3	1 atau 2
WIG2004	Audio Synthesis	3	1 atau 2
WIG2005	Interactive Design	3	1 atau 2
WIG3001	Mathematics for Multimedia	3	1 atau 2
WIG3002	Rendering and Animation	3	1 atau 2
WIG3003	Multimedia Programming	3	1 atau 2
WIG3004	Virtual Reality	3	1 atau 2
WIG3005	Game Development	3	1 atau 2
WIG3006	Digital Video Processing	3	1 atau 2
WIG3007	Special Topics in Multimedia	3	1 atau 2
WIG3008	Multimedia Forensic and Security	3	1 atau 2
WIE3010	Data Visualization	3	1 atau 2
WIF2003	Web Programming	3	1 atau 2
	<b>Total</b>	<b>30</b>	
<b>TOTAL CREDITS FOR GRADUATION</b>		<b>128</b>	

# Pre-requisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

**COURSE PLANNING FOR BACHELOR OF COMPUTER SCIENCE (MULTIMEDIA COMPUTING)  
ACADEMIC SESSION 2024/2025**

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
1	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 / GLT1049	Philosophy and Current Issues <i>(for local student only)</i> / Basic Malay Language <i>(for international student)</i>	2
	GLTXXXX	English for Communication (1)	2	GLTXXXX	English for Communication (2)	2
	WIX1001	Computing Mathematics I	3	WIA1002	Data Structure (#WIX1002)	5
	WIX1002	Fundamentals of Programming	5	WIA1003	Computer System Architecture (#WIX1003)	3
	WIX1003	Computer Systems and Organization	3	WIA1005	Network Technology Foundation	4
	WIA1008	Fundamental of Multimedia	3	WIA1006	Machine Learning	3
		<b>Total</b>		<b>18</b>		<b>Total</b>
	<b>Course Code</b>	<b>Semester 1</b>	<b>Credits</b>	<b>Course Code</b>	<b>Semester 2</b>	<b>Credits</b>
2	GIG1013	Appreciation of Ethics and Civilizations	2		Co-Curriculum (1)	2
	WIX2001	Thinking and Communication Skills	3	WIA2004	Operating Systems	4
	WIX2002	Project Management	3	WIA2005	Algorithm Design and Analysis (#WIA1002)	4
	WIA2001	Database	3		Specialization Elective (1) <sup>⊗</sup>	3
	WIA2003	Probability and Statistics	3		Specialization Elective (2) <sup>⊗</sup>	3
	WIA2006	System Analysis and Design	3		Specialization Elective (3) <sup>⊗</sup>	3
	WIA2007	Mobile Application Development	4		<i>KIAR: Integrity and Anti-Corruption course</i>	2
	<b>Total</b>		<b>21</b>		<b>Total</b>	<b>21</b>
	<b>Course Code</b>	<b>Semester 1</b>	<b>Credits</b>	<b>Course Code</b>	<b>Semester 2</b>	<b>Credits</b>
3	WIB3001	Industrial Training *	12	WIA3002	Academic Project I **	3
					Specialization Elective (4) <sup>⊗</sup>	3
					Specialization Elective (5) <sup>⊗</sup>	3
					Specialization Elective (6) <sup>⊗</sup>	3
					Specialization Elective (7) <sup>⊗</sup>	3
					<i>University Elective (Cluster 1): Thinking Matters: Mind &amp; Intellect</i>	2
					<i>University Elective (Cluster 2): Technology/Artificial Intelligence and Data Analytics: i-Techie</i>	2
	<b>Total</b>		<b>12</b>		<b>Total</b>	<b>19</b>
	<b>Course Code</b>	<b>Semester 1</b>	<b>Credits</b>	<b>Credit Distribution</b>		
4		Co-Curriculum (2)	2	<b>Course Component</b>		
	WIA3003	Academic Project II (#WIA3002)	5	University Courses	14	
		Specialization Elective (8) <sup>⊗</sup>	3	Faculty Core Courses	17	
		Specialization Elective (9) <sup>⊗</sup>	3	University Elective Courses	8	
		Specialization Elective (10) <sup>⊗</sup>	3	Programme Core Courses	59	
		<i>University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place</i>	2	Specialization Elective Courses	30	
	<b>Total</b>		<b>18</b>	<b>TOTAL CREDITS FOR GRADUATION</b>		
				<b>128</b>		

# Pre-requisite.

\* Taken all Faculty and Programme Core Courses except Academic Project I and Academic Project II.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training and Academic Project II.

⊗ Each Specialization Elective Course is only offered ONCE every academic session, either on Semester 1 OR Semester 2.

**CURRICULUM STRUCTURE  
BACHELOR OF COMPUTER SCIENCE (DATA SCIENCE)  
ACADEMIC SESSION 2024/2025**

COURSE CODE	COURSE COMPONENT	CREDITS	SEMESTER
	UNIVERSITY COURSES		
GIG1012 / GLT1049	Philosophy and Current Issues <i>(for local student only)</i> / Basic Malay Language <i>(for international student)</i>	2	2
GIG1013	Appreciation of Ethics and Civilizations	2	1
GIG1003	Basic Entrepreneurship	2	1
GIG1004	Information Literacy	2	2
GIG1005	Social Engagement	2	2
GLTXXXX	English for Communication (1)	3	1
GLTXXXX	English for Communication (2)	3	2
	Co-Curriculum	2	1
	External Faculty Elective	2	1
	<b>Total</b>	<b>20</b>	
COURSE CODE	FACULTY CORE COURSES	CREDITS	SEMESTER
WIX1001	Computing Mathematics I	3	1
WIX1002	Fundamentals of Programming	5	1
WIX1003	Computer System and Organization	3	1
WIX2001	Thinking and Communication Skills	3	1
WIX2002	Project Management	3	1
	<b>Total</b>	<b>17</b>	
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER
WIE2003	Introduction to Data Science	3	2
WIA1001	Information Systems	3	1
WIA1002	Data Structure	5	2
WIA1003	Computer System Architecture	3	2
WIA1005	Network Technology Foundation	4	2
WIA2001	Database	3	1
WIA2002	Software Modelling	3	1
WIA2003	Probability and Statistics	3	1
WIA2004	Operating Systems	4	2
WID3006	Machine Learning	3	2
WIH3005	Professional Development*	2	1
WIH3006	Data Science and Application*	5	1
WIH3007	Industrial Solution Development*	5	1
WIH3001	Data Science Project**	3	1
WIH3002	Data Science Industrial Training*	14	2
	<b>Total</b>	<b>63</b>	
COURSE CODE	FACULTY ELECTIVE COURSES (Choose only 2 courses)	CREDITS	SEMESTER
WIX3001	Soft Computing	3	1 atau 2
WIX3002	Social Informatics	3	1 atau 2
WIX3003	Information Security Management and Ethics	3	1 atau 2
WIC2004	Internet Technology	3	1 atau 2
	<b>Total</b>	<b>6</b>	
COURSE CODE	KURSUS ELEKTIF PENGKHUSUSAN (Choose only 6 courses)	CREDITS	SEMESTER
WIH2001	Data Analytics	3	1 atau 2
WID2001	Knowledge Representation and Reasoning	3	1 atau 2
WID2002	Computing Mathematics II	3	1 atau 2
WID3001	Functional and Logic Programming	3	1 atau 2
WID3002	Natural Language Processing	3	1 atau 2
WIE3007	Data Mining and Warehousing	3	1 atau 2
WIE3010	Data Visualization	3	1 atau 2
WIE3012	Business Analytics and Intelligence	3	1 atau 2
WIH3003	Big Data Applications and Analytics	3	1 atau 2
WIH3004	Trends in Data Science	3	1 atau 2
	<b>Total</b>	<b>18</b>	
<b>TOTAL CREDITS FOR GRADUATION</b>		<b>124</b>	

# Pre-requisite.

\* Taken all Faculty and Programme Core Courses.

\*\* Pass all Faculty and Programme Core Courses except for Industrial Training.

⊗ Each Specialization Elective Course is only offered ONCE every academic session, either on Semester 1 OR Semester 2.

**COURSE PLANNING FOR BACHELOR OF COMPUTER SCIENCE (DATA SCIENCE)  
ACADEMIC SESSION 2024/2025**

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
1	GIG1003	Basic Entrepreneurship Culture	2	GIG1012/ GLT1049	Philosophy and Current Issues <i>(for local student only)</i> / Basic Malay Language <i>(for international student)</i>	2
	WIX1001	Computing Mathematics I	3	GIG1004	Information Literacy	2
	WIX1002	Fundamentals of Programming	5	GIG1005	Social Engagement	2
	WIX1003	Computer System and Organization	3	WIA1002	Data Structure (#WIX1002)	5
	WIA1001	Information Systems	3	WIA1003	Computer System Architecture (#WIX1003)	3
				WID3006	Machine Learning	3
				WIE2003	Introduction to Data Science	3
		<b>Total</b>	<b>16</b>		<b>Total</b>	<b>20</b>
Course Code	Semester 1	Credits	Course Code	Semester 2	Credits	
	English for Communication (1)	3		Co-Curriculum	2	
GIG1013	Appreciation of Ethics and Civilizations	2		English for Communication (2)	3	
WIX2001	Communication Thinking and Skills	3	WIA2004	Operating Systems	4	
WIX2002	Project Management	3	WIA1005	Network Technology Foundation	4	
WIA2001	Database	3		Specialization Elective (1) ⊗	3	
WIA2002	Software Modelling	3		Specialization Elective (2) ⊗	3	
WIA2003	Probability and Statistics	3		Faculty Elective (1)	3	
				<b>Total</b>	<b>22</b>	
Course Code	Semester 1	Credits	Course Code	Semester 2 (Industry)	Credits	
	WIH3001	Data Science Project	3	WIH3002	Data Science Industrial Training	14
		Specialization Elective (3) ⊗	3			
		Specialization Elective (4) ⊗	3			
		Specialization Elective (5) ⊗	3			
		Specialization Elective (6) ⊗	3			
		Faculty Elective (2)	3			
		External Faculty Elective	2			
		<b>Total</b>	<b>20</b>		<b>Total</b>	<b>14</b>
Course Code	Semester 1 (Industry)	Credits	Credit Distribution			
				Course Component	Credits	
	WIH3005	Professional Development*		University Courses	20	
	WIH3006	Data Science and Application*		Faculty Core Courses	17	
	WIH3007	Industrial Solution Development*		Faculty Elective Courses	6	
				Programme Core Courses	63	
				Specialization Elective Courses	18	
		<b>Total</b>	<b>12</b>	<b>TOTAL CREDITS FOR GRADUATION</b>	<b>124</b>	

- # Pre-requisite.
- \* Taken all Faculty and Programme Core Courses
- \*\* Pass all Faculty and Programme Core Courses except for Industrial Training
- ⊗ Each Specialization Elective Course is only offered ONCE every academic session, either on Semester 1 OR Semester 2.

**ENGLISH COMMUNICATION PROGRAMME (UNIVERSITY COURSE)  
FACULTY OF LANGUAGES AND LINGUISTICS  
LIST OF COURSES TO BE COMPLETED BY ALL STUDENTS (EXCEPT DATA SCIENCE PROGRAMME)  
2024/2025 ACADEMIC SESSION**

PATH 1	PATH 2	PATH 3	PATH 4
<ul style="list-style-type: none"> <li>● MUET BAND 2</li> <li>● IELTS Band 4.0</li> <li>● TOEFL Paper – Based Test (437 – 473)</li> <li>● TOEFL Computer – Based Test (123 – 150)</li> <li>● TOEFL Internet – Based Test (41 – 52)</li> <li>● PTE (Academic) – (10 – 28)</li> </ul>	<ul style="list-style-type: none"> <li>● MUET BAND 3</li> <li>● IELTS Band 4.5 – 5.0</li> <li>● TOEFL Paper – Based Test (477 – 510)</li> <li>● TOEFL Computer – Based Test (153 – 180)</li> <li>● TOEFL Internet – Based Test (53 – 64)</li> <li>● PTE (Academic) – (29 - 41)</li> </ul>	<ul style="list-style-type: none"> <li>● MUET BAND 4</li> <li>● IELTS Band 5.5 – 6.0</li> <li>● TOEFL Paper – Based Test (513 – 547)</li> <li>● TOEFL Computer – Based Test (183 – 210)</li> <li>● TOEFL Internet – Based Test (65-78)</li> <li>● PTE (Academic) – (42 – 57)</li> <li>● FCE (B &amp; C)</li> <li>● GCE A Level (English) (Minimum C)</li> <li>● IGCSE/GCSE (English) (A, B &amp; C)</li> </ul>	<ul style="list-style-type: none"> <li>● MUET BAND 5 &amp; BAND 6</li> <li>● IELTS Band 6.5 – 9.0</li> <li>● TOEFL Paper – Based Test (550 – 677)</li> <li>● TOEFL Computer – Based Test (213 – 300)</li> <li>● TOEFL Internet – Based Test (79 – 120)</li> <li>● PTE (Academic) (58 – 90)</li> <li>● FCE (A)</li> <li>● GCE A Level (English) (B &amp; A)</li> </ul>
Students need to complete 2 courses (2 courses x 2 credits each) from this PATH	Students need to complete 2 courses (2 courses x 2 credits each) from this PATH	Students need to complete 2 courses (2 courses x 2 credits each) from this PATH	Students need to complete 2 courses (2 courses x 2 credits each) from this PATH
<b><u>COMPULSORY</u></b>	<b><u>COMPULSORY</u></b>	<b><u>COMPULSORY</u></b>	
<ul style="list-style-type: none"> <li>● GLT1018 – Proficiency in English I</li> </ul>	<ul style="list-style-type: none"> <li>● GLT1021 – Proficiency in English II</li> </ul>	<ul style="list-style-type: none"> <li>● GLT1024 – Proficiency in English III</li> </ul>	<ul style="list-style-type: none"> <li>● GLT1027– Advanced Oral Communication*</li> <li>● GLT1028 – Advanced Business Writing*</li> <li>● Optional - Foreign Language course</li> </ul>
<b>** CHOOSE ONE:</b>	<b>** CHOOSE ONE:</b>	<b>** CHOOSE ONE:</b>	
<ul style="list-style-type: none"> <li>● GLT1019 – Let’s Speak</li> <li>● GLT1020 – Fundamental Writing</li> </ul>	<ul style="list-style-type: none"> <li>● GLT1022 – Speak Up</li> <li>● GLT1023 – Effective Workplace Writing</li> </ul>	<ul style="list-style-type: none"> <li>● GLT1025 – Effective Oral Communication</li> <li>● GLT1026 – Writing at the Workplace</li> </ul>	<p>*(Students can only register for one course per semester)</p>

**\*\* These courses have prerequisites and students can only register for them after obtaining a PASS in the compulsory course as stipulated in the respective PATH.**



**UNIVERSITY ENGLISH LANGUAGE COURSES**  
**FACULTY OF LANGUAGES AND LINGUISTICS**  
**LIST OF COURSES TO BE COMPLETED BY STUDENTS FROM DATA SCIENCE PROGRAMME ONLY**  
**2024/2025 ACADEMIC SESSION**

PATH 1	PATH 2	PATH 3	PATH 4
<ul style="list-style-type: none"> <li>● MUET BAND 2</li> <li># IELTS Band 4</li> <li># TOEFL Paper – Based Test (437 – 473) / Computer – Based Test (123 – 150) / Internet – Based Test (41 – 52)</li> </ul>	<ul style="list-style-type: none"> <li>● MUET BAND 3</li> <li># IELTS Band 4.5 – 5</li> <li># TOEFL Paper – Based Test (477 – 510) / Computer – Based Test (153 – 180) / Internet – Based Test (53 – 64)</li> </ul>	<ul style="list-style-type: none"> <li>● MUET BAND 4</li> <li># IELTS Band 5.5 – 6 ##</li> <li># TOEFL Paper – Based Test (513 – 547) / Computer – Based Test (183 – 210) / Internet – Based Test (65-78)</li> <li># A’ Levels English (University of Cambridge, London) – Minimum C</li> </ul>	<ul style="list-style-type: none"> <li>● MUET BAND 5 &amp; BAND 6</li> <li># IELTS Band 6.5 – 9.0</li> <li># TOEFL Paper – Based Test (550 – 677) / Computer – Based Test (213 – 300) / Internet – Based Test (79 – 120)</li> <li># A’Levels English (University of Cambridge, London) – Minimum B or A</li> </ul>
<p><b><u>COMPULSORY -</u></b> (3 Courses x 2 Credit Hours)</p> <ul style="list-style-type: none"> <li>● GLT1002 - Mastering English I</li> <li>● GLT1003 - Mastering English II</li> <li>● GLT1004 - Mastering English III</li> </ul>	<p><b><u>COMPULSORY -</u></b> (2 Courses x 3 Credit Hours)</p> <ul style="list-style-type: none"> <li>● GLT1005 - Mastering English IV [Pre-requisite]</li> </ul> <p><b>** PILIH SATU:</b></p> <ul style="list-style-type: none"> <li>● GLT1006 - Mastering English V</li> <li>● GLT1007 - Essential Writing Skills</li> <li>● GLT1008 - Effective Communication</li> </ul>	<p><b><u>COMPULSORY -</u></b> (2 Courses x 3 Credit Hours)</p> <ul style="list-style-type: none"> <li>● GLT1009 - Mastering English VI [Pre-requisite]</li> </ul> <p><b>** PILIH SATU:</b></p> <ul style="list-style-type: none"> <li>● GLT1010 - Mastering English VII</li> <li>● GLT1011 - Technical Writing Skills in English</li> <li>● GLT1012 - Presentation Skills in English</li> <li>● GLT1013 - Reading Critically</li> </ul>	<p><b><u>COMPULSORY -</u></b> (2 Courses x 3 Credit Hours)</p> <ul style="list-style-type: none"> <li>● GLT1014 – Advanced Communication Skills</li> <li>● GLT1015 – Advanced Professional Writing</li> </ul>

*\*\* These courses have pre-requisites and students can ONLY register for them after they have PASSED the COMPULSORY course as determined by the respective Paths*

# MANUAL FOR ENROLMENT PROCESS FLOW



## UMSItS ENROLMENT

Dear Students,

To ensure the registration process runs smoothly, it is advisable for students to complete the Module Registration first. You are encouraged to Generate Pre-Invoice during non peak hours followed by Enrolment Activation.



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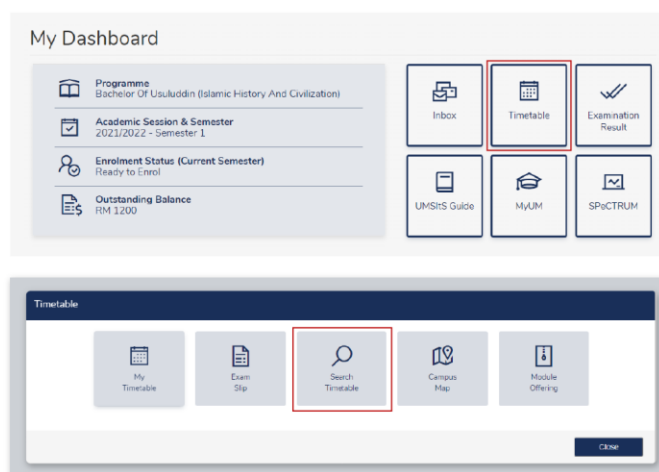
# MANUAL FOR MODULE REGISTRATION



## MAYA PORTAL

### MODULE REGISTRATION | UNDERGRADUATE & POSTGRADUATE SEMESTER SYSTEM

#### Step 1: Search Timetable



1. Click on the **Timetable** menu and choose **Search Timetable** to check details of the module i.e. location, lecturer's name, day and time.
2. Please check timetable prior to the module registration. This to ensure that the registration process runs smoothly without any clashes.

#### Important Notes:

1. Year = The first four digit of the Academic Session. i.e. 2019/2020= 2019
2. Slot: Semester System period slots are:
  - i. S1: Semester 1
  - ii. S2: Semester 2
  - iii. SS: Semester 3
  - iv. R1: Semester 1 Research Mode
  - v. R2: Semester 2 Research Mode
  - vi. E1: Semester 1 AEI
  - vii. E2: Semester 2 AEI
  - viii. ES: Semester 3 AEI

#### Important Notes:

1. Year = The first four digit of the Academic Session. i.e. 2019/2020= 2019
2. Slot: Semester System period slots are:
  - i. S1: Semester 1
  - ii. S2: Semester 2
  - iii. SS: Semester 3
  - iv. R1: Semester 1 Research Mode
  - v. R2: Semester 2 Research Mode
  - vi. E1: Semester 1 AEI
  - vii. E2: Semester 2 AEI
  - viii. ES: Semester 3 AEI

## MAYA PORTAL

### MODULE REGISTRATION | UNDERGRADUATE & POSTGRADUATE SEMESTER SYSTEM

#### Step 2: Select Module – Add module to cart

TAKE 12 CREDIT(S) FROM TF0: FACULTY CORE COURSE (KURSUS TERAS FAKULTI)

[View List](#)

AND

TAKE 27 CREDIT(S) FROM EP0: PROGRAM ELECTIVE COURSE (KURSUS ELEKTIF PROGRAM)

[Hide List](#)

Module Search

Module	Name	Sem	Occ	Add
IIK1002	ISLAMIC CIVILISATION IN AFRICA AND EUROPE	S2	1	<a href="#">Add</a>
IIK1003	ISLAMIC CIVILISATION DURING OTTOMAN PERIOD	S2	1	<a href="#">Add</a>
IIK2006	ISLAMIC HERITAGE IN NUSANTARA	S2	1	<a href="#">Add</a>

1. Click **View List** to view modules offered.
2. Search for your module.
3. Click **Add** to register module. Choose the correct occurrence/occ(Grouping).
4. Continue **Add** module if you have more than 1 module to register.

#### Important Notes:

1. Modules listed are based on the
  - i. DIET/programme structure; and
  - ii. Offer for that particular semester.
2. Refer to your faculty if modules in your DIET are not listed but are offered for that semester.
3. Please go to Request Enrolment Module to register Off DIET module (Module not in your programme structure). This will not contribute to your fulfillment but will be counted in your GPA/CGPA.

## MAYA PORTAL

### MODULE REGISTRATION | UNDERGRADUATE & POSTGRADUATE SEMESTER SYSTEM

#### Step 3: Module Selection – Save selection & check clashes

All Selections
Current Block Selections

Selected Modules

Module Code	Module Name	Semester	Occ	🗑️	✔️
GBA0021	APPRECIATING LITERATURE	S2	1	🗑️	✔️
GBC0004	PERSONAL FINANCE	S2	1	🗑️	✔️
GIG1012	PHILOSOPHY AND CURRENT ISSUES	S2	1	🗑️	✔️

Totals

Overall Progress	Required	Current	✔️
<b>Current Session progress</b>			
Credits in SEMESTER 1 or SEMESTER 2	1 - 22	6	✔️
Credits in SPECIAL SEMESTER	1 - 10	0	✔️

Add Selected Modules

1. Click submit selection to proceed with module registration after Add Selected Modules to check on clashes.

#### Important Notes:

1. At this stage, module is **only saved** and check **for clashes**.
2. It is **NOT** considered as registered modules.
3. System will display **Pop Message** if any of the selection modules has a clash.

## MAYA PORTAL

### MODULE REGISTRATION

### UNDERGRADUATE & POSTGRADUATE SEMESTER SYSTEM

#### Step 4: Module Selection Verification

**Module(s) to Verify**

Selected a total of 3 module(s) which total 6 credit(s)

Academic Session	Semester	Module Code	Module Name	Credits	Occurrence	Selection Status
2021	S2	GBA0021	APPRECIATING LITERATURE	2.00	1	ELO
2021	S2	GBC0004	PERSONAL FINANCE	2.00	1	ELO
2021	S2	GIG1012	PHILOSOPHY AND CURRENT ISSUES	2.00	1	KUO

1. Click **Verify Module Selection** to proceed with registration and to **book** for the module selection.

#### Important Notes:

1. At this stage, the module is considered as Pre-Registration **BUT** it is **NOT** considered as **CONFIRMED REGISTRATION**.
2. Student can continue to Add/Drop module.

#### Step 5: Return to 2.1 Module Selection – Add/drop modules after verification

**Module(s) to Submit**

Selected a total of 3 module(s) which total 6 credit(s)

Academic Session	Semester	Module Code	Module Name	Credit	Occurrence	Selection Status
2021	S2	GIG1012	PHILOSOPHY AND CURRENT ISSUES	2.00	1	KUO
2021	S2	GBA0021	APPRECIATING LITERATURE	2.00	1	ELO
2021	S2	GBC0004	PERSONAL FINANCE	2.00	1	ELO

1. Click Return to 2.1 Module Selection if you wish to Add/Drop module selection.

#### Important Note:

1. You may add/drop modules after the selection made at the **Module Selection Submission** stage.

**OR**

#### Step 5: Submit Module Selection – Continue Registration

**Module(s) to Submit**

Selected a total of 3 module(s) which total 6 credit(s)

Academic Session	Semester	Module Code	Module Name	Credit	Occurrence	Selection Status
2021	S2	GIG1012	PHILOSOPHY AND CURRENT ISSUES	2.00	1	KUO
2021	S2	GBA0021	APPRECIATING LITERATURE	2.00	1	ELO
2021	S2	GBC0004	PERSONAL FINANCE	2.00	1	ELO

1. Click Next to continue with registration, if there is no amendment to the module selected.

#### Important Note:

1. This will proceed with Generate Pre-Invoice.

## MAYA PORTAL

### MODULE REGISTRATION

### UNDERGRADUATE & POSTGRADUATE SEMESTER SYSTEM

#### 3.1 Pre-Invoice

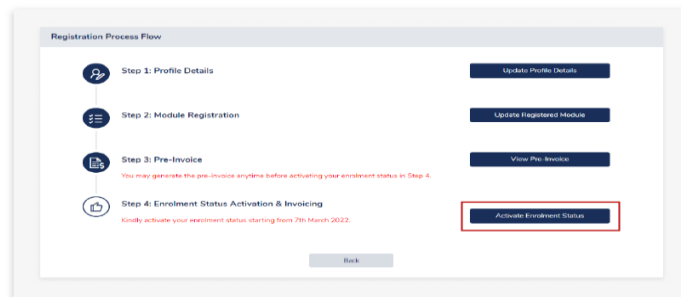
Below is the estimated fee for current semester. Actual invoice will be raised in Step 4: Enrolment Status Activation & Invoicing.

##### Fees Charge Estimation

No.	Description	Amount (RM)
1	HEALTH	20.00
2	ICT SERVICE FEE	100.00
3	INSURANCE UNDERGRADUATE	6.00
4	LIBRARY	100.00
5	SPORT AND RECREATION	10.00
6	WELFARE FEES	5.00
7	JOURNAL - USULUDDIN	7.50
8	TUITION FEES	901.50
<b>Total</b>		<b>1,150.00</b>

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### Step 6: Enrolment Status Activation & Invoicing – Confirm Module Registration And Ready to Receive Invoice



1. Click on the **Activate Enrolment Status** button at Step 4: Enrolment Status Activation & Invoicing section to confirm on the modules that have been submitted for selection.

#### Important Notes:

1. Confirm the registration after you are satisfied with all the modules selected.
2. At this stage you have finalized the selected modules to register for the semester.
3. Do not confirm registration if you are not sure what module to enrol for that semester. But this must be done **before end of module registration period**.
4. Invoice will be generated after confirming the registration.
5. Changes to the module enrolment are **NOT ALLOWED** after registration confirmation. (No more Add/Drop)
6. Changes to the module enrolment after confirmation can be done after Week 2. The implication is that Fees is **NOT** Refundable.

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