# UNDERGRADUATE KIT 2025/2026 SESSION

- BACHELOR OF COMPUTER SCIENCE (ARTIFICIAL INTELLIGENCE)
  - BACHELOR OF COMPUTER SCIENCE (COMPUTER SYSTEM & NETWORK)
- BACHELOR OF COMPUTER SCIENCE (MULTIMEDIA COMPUTING)
- BACHELOR OF COMPUTER SCIENCE (INFORMATION SYSTEMS)
- BACHELOR OF COMPUTER SCIENCE (DATA SCIENCE)
- BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING)

## **CURRICULUM STRUCTURE** BACHELOR OF COMPUTER SCIENCE (COMPUTER SYSTEM AND NETWORK) ACADEMIC SESSION 2025/2026

COURSE CODE	COURSE COMPONENT	CDEDITO	CEMECTED		
COURSE CODE	UNIVERSITY COURSES	CREDITS	SEMESTER		
GIG1012	Philosophy and Current Issues (for local student only)	0	2		
GLT1049	Basic Malay Language (for international student)	2	2		
GIG1013					
GIG1003	Basic Entrepreneurship Culture	2	1		
GLTXXXX GLTXXXX	English for Communication (1) English for Communication (2)	2	2		
GLIXXX	Co-Curriculum (1)	2	2		
	Co-Curriculum (1)	2	1		
	Total	14			
	1000				
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		
	Total	17			
COURSE CODE	EXTERNAL UNIVERSITY ELECTIVE COURSES STUDENT HOLISTIC EMPOWERMENT (SHE)	KREDIT	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		
	Total	8			
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER		
WIA1002	Data Structure (#WIX1002)	5	2		
WIA1003	Computer System Architecture (#WIX1003)	3	2		
WIA1005 WIA1006	Network Technology Foundation  Machine Learning	3	2 2		
WIA2001	Database	3	1		
WIA2001 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		
	Total	59			
COURCE CORE	CDECIALIZATION ELECTIVE COURCES (Chance only 40 payment)	CDEDITO	CEMECTED		
COURSE CODE	SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)	CREDITS	SEMESTER		
WIC2002 WIC2004	Network Security Internet Technology	3	1 or 2 1 or 2		
WIC2004 WIC2005	Programmable Network (#WIA2008)	3	1 or 2		
WIC2005 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		
/V/IC3000	I Parallel Programming				
WIC3009	Parallel Programming  Total	3 30	1 or 2		
WIC3009	Parallel Programming  Total  TOTAL CREDITS FOR GRADUATION	30 128	1 01 2		

- 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 2025/2026

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 /	Philosophy and Current Issues (for local student only) / Basic	
				GLT1049	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
1	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
		Total	18		Total	19
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	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) ®	3
	WIA2008	Advanced Network Technology (#WIA1005)	4		Specialization Elective (3) <sup>®</sup>	3
2	\A/I A 0000	Digital Design and Hardware Description Language	3		KIAR: Integrity and Anti-Corruption course	2
	WIA2009	(#WIX1003 & #WIA1003)	3		NAM: Integrity and Anti Goriaption course	2
		Total	21		Total	21
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	WIA3001	Industrial Training *	12	WIA3002	Academic Project I **	3
					Specialization Elective (4) <sup>⊗</sup>	3
					Specialization Elective (5) ®	3
					Specialization Elective (6) ®	3
					Specialization Elective (7) <sup>⊗</sup>	3
					University Elective (Cluster 1): Thinking Matters: Mind &	
3					Intellect	2
					University Elective (Cluster 2): Technology/Artificial	2
					Intelligence and Data Analytics: i-Techie	
		Total	12		Total	19
	Course Cod	Comercial	One I'll		One dit Dietribution	
	Course Code	Semester 1	Credits		Credit Distribution	One dit-
	14/14.0000	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
	I	Specialization Elective (9) <sup>⊗</sup>	3		University Elective Courses Programme Core Courses	8
		0 : " " FI " (40) 8			Programme Core Courses	59
4		Specialization Elective (10) <sup>⊗</sup>	3		1 Togramme dore dourses	
4		University Elective (Cluster 3): Global Issues and			•	
4		`	2		Specialization Elective Courses	30
4		University Elective (Cluster 3): Global Issues and			•	

- 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.

  Specialization Elective Courses will be offered on a rotation basis. Each Specialization Elective is scheduled to run only once in every academic session, either in Semester 1 or Semester 2.

## CURRICULUM STRUCTURE BACHELOR OF COMPUTER SCIENCE (ARTIFICIAL INTELLIGENCE) ACADEMIC SESSION 2025/2026

	COURSE COMPONENT			
COURSE CODE	UNIVERSITY COURSES	CREDITS	SEMESTER	
GIG1012	Philosophy and Current Issues (for local student only)	2	1	
GLT1049	Malay Language Communication (for international student)	2	2	
GIG1013				
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	
	Total	14		
COURSE		CREDIT	SEMESTE	
CODE	FACULTY CORE COURSES	S	R	
WIX1001	Computing Mathematics I	3	1	
WIX1001	Fundamentals of Programming	5	1	
WIX1003	Computer Systems and Organization	3	1	
WIX2001	Thinking and Communication Skills	3	3	
WIX2002	Project Management	3	3	
***************************************	Total	17		
COURSE	EXTERNAL UNIVERSITY ELECTIVE COURSES	CREDIT	SEMESTE	
CODE	STUDENT HOLISTIC EMPOWERMENT (SHE)	S	R	
<u>-</u>	University Elective (Cluster 1) - Thinking Matters: Mind & Intellect	2	4	
	University Elective (Cluster 2) - Technology/Artificial Intelligence and Data Analytics: i-Techie	2	6	
	University Elective (Cluster 3 - Global Issues and Community Sustainability: Making the World a Better Place	2	6	
	KIAR: Integrity and Anti-Corruption course	2	2	
	Total	8		
	1.5.00			
COURSE	PROGRAMME CORE COURSES	CREDIT	SEMESTE	
CODE WIA1002	Data Structure (#WIX1002)	<b>S</b> 5	<b>R</b> 2	
WIA1002 WIA1003	Computer System Architecture (#WIX1003)	3	2	
WIA1005	Network Technology Foundation	4	2	
WIA1005 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	
	Total	59		
COLIDOR		ODEDIT	OFMECTE	
COURSE	SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)	CREDIT	SEMESTE	
CODE		<u>S</u>	R	
WIC2008 WID2001	Internet of Things (#WIA1005)  Knowledge Representation and Reasoning	3 3	4	
WID2001 WID2002	Computing Mathematics II	3	4	
WID2002 WID2003	Cognitive Science	3	4	
WID3001	Functional and Logic Programming	3	7	
WID3001 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	
	Total	30		
	TOTAL CREDITS FOR GRADUATION	128		

- 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 2025/2026

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 / GLT1049	Philosophy and Current Issues (for local student only) / Malay Language Communication (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
1	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
		Total	18		Total	19
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	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
2	WIA2003	Probability and Statistics	3		Specialization Elective (2)	3
- L	WIA2006	System Analysis and Design	3		Specialization Elective (3)	3
	WIA2007	Mobile Application Development	4		University Elective (Cluster 1)	2
-		Total	21		Total	21
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	WIA3001	Industrial Training *	12	WIA3002	Academic Project I **	3
					Specialization Elective (4)	3
					Specialization Elective (5)	3
					Specialization Elective (6)	3
3					Specialization Elective (7)	3
					University Elective (Cluster 2)	2
					University Elective (Cluster 3)	2
		Total	12		Total	19

	Course Code	Semester 1	Cred its	Credit Distribution	
		Co-Curriculum (2)	2	Course Component	Credits
	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
4		Specialization Elective (10)	3	Programme Core Courses	59
		University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place	2	University Courses	14
		Total	18	TOTAL CREDITS FOR GRADUATION	128

- 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.

  Specialization Elective Courses will be offered on a rotation basis. Each Specialization Elective is scheduled to run only once in every academic session, either in Semester 1 or Semester 2.

# CURRICULUM STRUCTURE BACHELOR OF COMPUTER SCIENCE (INFORMATION SYSTEMS) ACADEMIC SESSION 2025/2026

	COURSE COMPONENT			
COURSE CODE	UNIVERSITY COURSES	CREDITS	SEMESTER	
GIG1012	Philosophy and Current Issues (for local student only)		0	
GLT1049	Malay Language Communication (for international student)	2	2	
GIG1013	l ''			
	GIG1003 Basic Entrepreneurship Culture			
GLTXXXX	English for Communication (1)	2	1	
GLTXXXX	English for Communication (2)	2	2	
	Co-Curriculum (1)	2	2	
	Co-Curriculum (1)	∠ 14	1	
	Total	17		
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	
	Total	17		
COURSE CODE	EXTERNAL UNIVERSITY ELECTIVE COURSES	CREDITS	SEMESTER	
	STUDENT HOLISTIC EMPOWERMENT (SHE)	2	2	
	University Elective (Cluster 1) - Thinking Matters: Mind & Intellect University Elective (Cluster 2) - Technology/Artificial Intelligence and Data		2	
	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	
	Total	8		
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 Database	3	2	
WIA2001		2	4	
11/11/12/02		3	1	
WIA2003	Probability and Statistics	3	1	
WIA2004	Probability and Statistics Operating Systems	3 4	1 2	
WIA2004 WIA2005	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002)	3 4 4	1 2 2	
WIA2004 WIA2005 WIA2006	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design	3 4 4 3	1 2 2 1	
WIA2004 WIA2005	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development	3 4 4	1 2 2	
WIA2004 WIA2005 WIA2006 WIA2007	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I **	3 4 4 3 4	1 2 2 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training *	3 4 4 3 4 12	1 2 2 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I **	3 4 4 3 4 12 3	1 2 2 1 1 1 1 2	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002) Total	3 4 4 3 4 12 3 5 59	1 2 2 1 1 1 2 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)	3 4 4 3 4 12 3 5 5 59	1 2 2 1 1 1 1 2 2 1 1 SEMESTER	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things	3 4 4 3 4 12 3 5 59 CREDITS	1 2 2 1 1 1 2 1 1 1 2 1 1 1 1 1 1 1 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems	3 4 4 3 4 12 3 5 59 CREDITS 3 3	1 2 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology	3 4 4 3 4 12 3 5 59 CREDITS 3 3 3	1 2 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems	3 4 4 3 4 12 3 5 59 CREDITS 3 3	1 2 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science	3 4 4 3 4 12 3 5 59 CREDITS 3 3 3	1 2 2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce	3 4 4 3 4 12 3 5 59 CREDITS 3 3 3 3 3 3	1 2 2 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005 WIE3001 WIE3002 WIE3002 WIE3002 WIE3002 WIE3003	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce Information System Control and Security	3 4 4 4 3 4 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3	1 2 2 1 or 2	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005 WIE3001 WIE3002 WIE3001 WIE3002 WIE3003 WIE3003 WIE3003	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce Information System Control and Security Knowledge Management and Engineering	3 4 4 4 3 4 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3	1 2 2 1 or 2	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005 WIE3001 WIE3002 WIE3005 WIE3006	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce Information System Control and Security Knowledge Management and Engineering Information System Auditing	3 4 4 4 3 4 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 2 2 1 or 2	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005 WIE3001 WIE3002 WIE3005 WIE3006 WIE3006 WIE3007	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce Information System Control and Security Knowledge Management and Engineering Information System Auditing Data Mining and Warehousing	3 4 4 4 3 4 12 3 5 59  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 2 2 1 or 2 1 o	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005 WIE3001 WIE3002 WIE30005 WIE30005 WIE30005 WIE30005 WIE30006 WIE30007 WIE3001	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce Information System Control and Security Knowledge Management and Engineering Information System Auditing Data Mining and Warehousing Data Visualization	3 4 4 4 3 4 12 3 5 59  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 2 2 1 or 2	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005 WIE3001 WIE3002 WIE3005 WIE3006 WIE3006 WIE3007 WIE3010 WIE3010	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce Information System Control and Security Knowledge Management and Engineering Information System Auditing Data Mining and Warehousing Data Visualization Business Analytics and Intelligence	3 4 4 4 3 4 12 3 5 59  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 2 2 2 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005 WIE3001 WIE3002 WIE30005 WIE30005 WIE30005 WIE30005 WIE30006 WIE30007 WIE3001	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce Information System Control and Security Knowledge Management and Engineering Information System Auditing Data Mining and Warehousing Data Visualization Business Analytics and Intelligence Web Programming	3 4 4 4 3 4 12 3 5 59  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 2 2 1 or 2	
WIA2004 WIA2005 WIA2006 WIA2007 WIA3001 WIA3002 WIA3003  COURSE CODE WIC2008 WIE2001 WIE2002 WIE2003 WIE2005 WIE3001 WIE3002 WIE3005 WIE3006 WIE3006 WIE3007 WIE3010 WIE3010	Probability and Statistics Operating Systems Algorithm Design and Analysis (#WIA1002) System Analysis and Design Mobile Application Development Industrial Training * Academic Project I ** Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses) Internet of Things Trends in Information Systems Open-Source Programming: Application and Technology Introduction to Data Science Information Retrieval and Web Search Advanced Database Electronic Commerce Information System Control and Security Knowledge Management and Engineering Information System Auditing Data Mining and Warehousing Data Visualization Business Analytics and Intelligence	3 4 4 4 3 4 12 3 5 59  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 2 2 1 or 2	

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
	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 / GLT1049	Philosophy and Current Issues (for local student only) / Malay Language Communication (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
1	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
-		Total	18		Total	19
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	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
2	WIA2006	System Analysis and Design	3		Specialization Elective (3) <sup>⊗</sup>	3
-	WIA2007	Mobile Application Development	4		KIAR: Integrity and Anti-Corruption course	2
					,	
		Total	21		Total	21
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	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
3					University Elective (Cluster 1): Thinking Matters: Mind & Intellect	2
					University Elective (Cluster 2): Technology/Artificial Intelligence and Data Analytics: i-Techie	2
		Total	12		Total	19
-		lotai	12		lotai	19
	Course Code	Semester 1	Credits		Credit Distribution	
		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
4		Specialization Elective (10) <sup>®</sup>	3		Programme Core Courses	59
		University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place	2		Specialization Elective Courses	30
1		Total	18		TOTAL CREDITS FOR GRADUATION	128

- 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.
- Specialization Elective Courses will be offered on a rotation basis. Each Specialization Elective is scheduled to run only once in every academic session, either in Semester 1 or Semester 2.

### CURRICULUM STRUCTURE BACHELOR OF COMPUTER SCIENCE (SOFTWARE ENGINEERING) ACADEMIC SESSION 2025/2026

	COURSE COMPONENT			
COURSE CODE	UNIVERSITY COURSES	CREDITS	SEMESTER	
GIG1012	Philosophy and Current Issues (for local student only)			
GLT1049	Malay Language Communication (for international student)	2	2	
GIG1013	7 9 9			
GIG1013	Basic Entrepreneurship Culture	2 2	1	
GLTXXXX	English for Communication (1)	2	1	
GLTXXXX	English for Communication (1)	2	2	
GETTOOK	Co-Curriculum (1)	2	2	
	Co-Curriculum (2)	2	1	
	Total	14		
	Total			
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	
	Total	17		
COURSE CODE	EXTERNAL UNIVERSITY ELECTIVE COURSES	CREDITS	SEMESTER	
COURSE CODE	STUDENT HOLISTIC EMPOWERMENT (SHE)			
	University Elective (Cluster 1) - Thinking Matters: Mind & Intellect	2	2	
	University Elective (Cluster 2) - Technology/Artificial Intelligence and Data	2	2	
	Analytics: i-Techie	_	_	
	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	
	Total	8		
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER	
14/14 :				
WIA1002	Data Structure (#WIX1002)	5	2	
WIA1002 WIA1003	Computer System Architecture (#WIX1003)	5 3	2	
WIA1003 WIA1005	Computer System Architecture (#WIX1003) Network Technology Foundation	3 4	2 2	
WIA1003 WIA1005 WIA1006	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning	3	2	
WIA1003 WIA1005 WIA1006 WIA2001	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database	3 4	2 2	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling	3 4 3 3 3	2 2 2 1 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics	3 4 3 3 3 3	2 2 2 1 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems	3 4 3 3 3 3 4	2 2 2 1 1 1 2	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)	3 4 3 3 3 3 4 4	2 2 2 1 1 1 2 2	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development	3 4 3 3 3 3 4 4 4	2 2 2 1 1 1 2 2	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction	3 4 3 3 3 3 4 4 4 4 3	2 2 2 1 1 1 2 2 2	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *	3 4 3 3 3 3 4 4 4 4 3 12	2 2 2 1 1 1 2 2 1 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3002	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **	3 4 3 3 3 3 4 4 4 4 3 12	2 2 2 1 1 1 2 2 2 1 1 1 1 2	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)	3 4 3 3 3 3 4 4 4 4 3 12 3 5	2 2 2 1 1 1 2 2 1 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3002	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **	3 4 3 3 3 3 4 4 4 4 3 12	2 2 2 1 1 1 2 2 2 1 1 1 1 2	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3002 WIA3003	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)	3 4 3 3 3 3 4 4 4 4 3 12 3 5 5	2 2 2 1 1 1 2 2 2 1 1 1 2	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3002 WIA3003  COURSE CODE	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total	3 4 3 3 3 3 4 4 4 4 4 3 12 3 5 59	2 2 2 1 1 1 2 2 1 1 1 2 1 1 5 8 8 8 8 8 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2002	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering	3 4 3 3 3 3 4 4 4 4 4 3 12 3 5 5 59	2 2 2 1 1 1 2 2 1 1 2 1 2 1 1 2 1 1 2 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2002 WIF2003	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming	3 4 3 3 3 3 4 4 4 4 4 3 12 3 5 5 59  CREDITS 3 3	2 2 2 1 1 1 2 2 2 1 1 1 2 1 2 1 1 2 1 1 2 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2003 WIF3001	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3	2 2 2 1 1 1 1 2 2 1 1 1 2 1 1 2 1 1 1 2 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2003 WIF3001 WIF3001 WIF3002	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3	2 2 2 1 1 1 1 2 2 1 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2003 WIF3001	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3	2 2 2 1 1 1 1 2 2 1 1 1 2 1 1 2 1 1 1 2 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2007 WIA2010 WIA3001 WIA3001 WIA3002 WIA2003 WIF2003 WIF2003 WIF3001 WIF3002 WIF3004	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality  Software Architecture and Design Paradigms (#WIA2002)  Software Maintenance and Evolution	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3	2 2 2 1 1 1 1 2 2 1 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2010 WIA3001 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2003 WIF2003 WIF3001 WIF3001 WIF3002 WIF3004 WIF3005	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality  Software Architecture and Design Paradigms (#WIA2002)  Software Maintenance and Evolution  Component Based Software Engineering (#WIA2002)  Real Time Systems	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3	2 2 2 1 1 1 1 2 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2010 WIA3001 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2003 WIF2003 WIF3001 WIF3004 WIF3005 WIF3006	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality  Software Architecture and Design Paradigms (#WIA2002)  Software Maintenance and Evolution  Component Based Software Engineering (#WIA2002)	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3	2 2 2 1 1 1 1 2 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2005 WIA2007 WIA2010 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2003 WIF2003 WIF3001 WIF3002 WIF3004 WIF3005 WIF3006 WIF3008	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality  Software Process and Quality  Software Maintenance and Evolution  Component Based Software Engineering (#WIA2002)  Real Time Systems  Python for Scientific Computing  Programming Language Paradigm	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 1 1 1 1 2 2 1 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2010 WIA3001 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2003 WIF2003 WIF3001 WIF3005 WIF3004 WIF3005 WIF3006 WIF3008 WIF3009	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality  Software Architecture and Design Paradigms (#WIA2002)  Software Maintenance and Evolution  Component Based Software Engineering (#WIA2002)  Real Time Systems  Python for Scientific Computing	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 1 1 1 1 2 2 1 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2010 WIA3001 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2002 WIF2002 WIF2003 WIF3001 WIF3005 WIF3004 WIF3005 WIF3006 WIF3008 WIF3009 WIF3011 WIG3005	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality  Software Architecture and Design Paradigms (#WIA2002)  Software Maintenance and Evolution  Component Based Software Engineering (#WIA2002)  Real Time Systems  Python for Scientific Computing  Programming Language Paradigm  Concurrent and Parallel Programming (#WIX1002) (#WIA2004)  Game Development	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 1 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 1 2 1 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2010 WIA3001 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2002 WIF2003 WIF3001 WIF3005 WIF3004 WIF3005 WIF3006 WIF3008 WIF3009 WIF3011	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality  Software Architecture and Design Paradigms (#WIA2002)  Software Maintenance and Evolution  Component Based Software Engineering (#WIA2002)  Real Time Systems  Python for Scientific Computing  Programming Language Paradigm  Concurrent and Parallel Programming (#WIX1002) (#WIA2004)  Game Development  Internet of Things (#WIA1005)	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 1 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1	
WIA1003 WIA1005 WIA1006 WIA2001 WIA2002 WIA2003 WIA2004 WIA2005 WIA2010 WIA3001 WIA3001 WIA3002 WIA3003  COURSE CODE WIF2002 WIF2002 WIF2003 WIF3001 WIF3005 WIF3004 WIF3005 WIF3006 WIF3008 WIF3009 WIF3011 WIG3005	Computer System Architecture (#WIX1003)  Network Technology Foundation  Machine Learning  Database  Software Modeling  Probability and Statistics  Operating Systems  Algorithm Design and Analysis (#WIA1002)  Mobile Application Development  Human Computer Interaction  Industrial Training *  Academic Project I **  Academic Project II (#WIA3002)  Total  SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)  Software Requirements Engineering  Web Programming  Software Testing  Software Process and Quality  Software Architecture and Design Paradigms (#WIA2002)  Software Maintenance and Evolution  Component Based Software Engineering (#WIA2002)  Real Time Systems  Python for Scientific Computing  Programming Language Paradigm  Concurrent and Parallel Programming (#WIX1002) (#WIA2004)  Game Development	3 4 3 3 3 3 3 4 4 4 4 4 3 12 3 5 5 9  CREDITS 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1 1 1 1 2 1	

- 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 SOFTWARE ENGINEERING **ACADEMIC SESSION 2025/2026**

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	GIG1003	Basic Entrepreneurship Culture	2	GIG1012 /	Philosophy and Current Issues (for local student only) /	2
		' '		GLT1049	Malay Language Communication (for international student)	_
	GLTXXXX	English for Communication (1)	2	GLTXXXX	English for Communication (2)	2
	WIX1001	Computing Mathematics I	3	WIA1002	Data Structure (#WIX1002)	5
1	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
		T-(-1	40		T-/-I	40
		Total	18		Total	19
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	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
	WIA2002	Software Modeling	3		Specialization Elective (2) <sup>⊗</sup>	3
2	WIA2003	Probability and Statistics	3		Specialization Elective (3) <sup>⊗</sup>	3
	WIA2007	Mobile Application Development	4		KIAR: Integrity and Anti-Corruption course	2
		Total	21		Total	21
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	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
3					University Elective (Cluster 1): Thinking Matters: Mind &	2
3					Intellect	2
					University Elective (Cluster 2): Technology/Artificial	2
					Intelligence and Data Analytics: i-Techie	
		7.41	40			40
		Total	12		Total	19
	Course Code	Semester 1	Credits		Credit Distribution	
		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
4		Specialization Elective (10) <sup>⊗</sup>	3		Programme Core Courses	59
		University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place	2		Specialization Elective Courses <sup>⊗</sup>	30
		Total	18		TOTAL CREDITS FOR GRADUATION	128

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.

Specialization Elective Courses will be offered on a rotation basis. Each Specialization Elective is scheduled to run only once in every academic session, either in Semester 1 or Semester 2.

# S nk buat lagi kompem aCURRICULUM STRUCTURE BACHELOR OF COMPUTER SCIENCE (MULTIMEDIA COMPUTING) ACADEMIC SESSION 2025/2026

	COURSE COMPONENT		
COURSE CODE	UNIVERSITY COURSES	CREDITS	SEMESTER
GIG1012	Philosophy and Current Issues (for local student only)		
GLT1049	Basic Malay Language (for international student)	2	2
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) Co-Curriculum (2)	2	2 1
	Total	14	ı
	Total	1-4	
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 Total	3 <b>17</b>	1
	Total		
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
	Total	8	
COURSE CODE	PROGRAMME CORE COURSES	CREDITS	SEMESTER
WIA1002 WIA1003	Data Structure (#WIX1002)  Computer System Architecture (#WIX1003)	5 3	2 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 WIA2006	Algorithm Design and Analysis (#WIA1002) 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
	Total	59	
COURSE CODE	SPECIALIZATION ELECTIVE COURSES (Choose only 10 courses)	CREDITS	SEMESTER
WIG2001	Digital Image Processing	3	1 atau 2
WIG2001 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  Virtual Poolity	3	1 atau 2
WIG3004 WIG3005	Virtual Reality Game Development	3	1 atau 2 1 atau 2
WIG3005 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
	Total	30	
	TOTAL CREDITS FOR GRADUATION	128	

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 2025/2026

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	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
1	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
		Total	18		Total	19
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	GIG1013	Appreciation of Ethics and Civilizations	2	Oourse ooue	Co-Curriculum (1)	2
	WIX2001	Thinking and Communication Skills	3	WIA2004	Operating Systems	4
	WIX2001 WIX2002	Project Management	3	WIA2004 WIA2005	Algorithm Design and Analysis (#WIA1002)	4
	WIA2002 WIA2001	Database	3	WIA2003	Specialization Elective (1) 8	3
	WIA2001 WIA2003	Probability and Statistics	3		Specialization Elective (1)	3
2	WIA2003 WIA2006	System Analysis and Design	3		Specialization Elective (2)	3
	WIA2007	Mobile Application Development	4		KIAR: Integrity and Anti-Corruption course	2
					The state of the s	
		Total	21		Total	21
	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	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
3					University Elective (Cluster 1): Thinking Matters: Mind & Intellect	2
					University Elective (Cluster 2): Technology/Artificial Intelligence and Data Analytics: i-Techie	2
		Total	12		Total	19
	Course Code	Semester 1	Credits		Credit Distribution	
	· · · · · · · · · · · · · · · · · · ·	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
4		Specialization Elective (10) <sup>⊗</sup>	3		Programme Core Courses	59
		University Elective (Cluster 3): Global Issues and Community Sustainability: Making the World a Better Place	2		Specialization Elective Courses	30
		Total	18		TOTAL CREDITS FOR GRADUATION	128

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.

Specialization Elective Courses will be offered on a rotation basis. Each Specialization Elective is scheduled to run only once in every academic session, either in Semester 1 or Semester 2.

### CURRICULUM STRUCTURE BACHELOR OF COMPUTER SCIENCE (DATA SCIENCE) ACADEMIC SESSION 2025/2026

COURSE CODE	COURSE COMPONENT UNIVERSITY COURSES	CREDITS	SEMESTER
GIG1012 / GLT1049	Philosophy and Current Issues (for local student only) / Basic Malay Language (for international student)	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-Curriuculum	2	1
	External Faculty Elective	2	1
	Total	20	
COURSE CODE	FACULTY CORE COURSES	CREDITS	SEMESTER
WIX1001	Computing Mathematics I	3	1
WIX1001 WIX1002	Fundamentals of Programming	5	1
WIX1002 WIX1003	Computer System and Organization	3	1
WIX2001	Thinking and Communication Skills		
		3	1
WIX2002	Project Management	3	1
	Total	17	
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
WII 13002	Total	63	
COURSE CODE	FACULTY ELECTIVE COURSES (Choose only 2 courses)	CREDITS	SEMESTER
WIX3001	Soft Computing	3	1 or 2
WIX3002	Social Informatics	3	1 or 2
WIX3003	Information Security Management and Ethics	3	1 or 2
WIC2004	Internet Technology Total	3 <b>6</b>	1 or 2
COURSE CODE	SPECIALIZATION ELECTIVE COURSES (Choose only 6 courses)	CREDITS	SEMESTER
WIH2001	Data Analytics	3	1 or 2
WID2001	Knowledge Representation and Reasoning	3	1 or 2
WID2002	Computing Mathematics II	3	1 or 2
WID3001	Functional and Logic Programming	3	1 or 2
WID3002	Natural Language Processing	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
WIH3003	Big Data Applications and Analytics	3	1 or 2
WIH3004	Trends in Data Science	3	1 or 2
	Total		
	TOTAL CREDITS FOR GRADUATION	124	

- \*\*
- 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 2025/2026**

Level	Course Code	Semester 1	Credits	Course Code	Semester 2	Credits
	GIG1003	Basic Entrepreneurship Culture	2	GIG1012/	Philosophy and Current Issues (for local student only) / Basic	2
		'		GLT1049	Malay Language (for international student)	_
	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
1	WIA1001	Information Systems	3	WIA1003	Computer System Architecture (#WIX1003)	3
				WID3006	Machine Learning	3
				WIE2003	Introduction to Data Science	3
		Total	16		Total	20
					-	
	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
2	WIA2002	Software Modelling	3		Specialization Elective (2) ⊗	3
	WIA2003	Probability and Statistics	3		Faculty Elective (1)	3
		Total	20		Total	22
	0	0	0	0	One of the design of	0
	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			
3		Faculty Elective (2)	3			
		External Faculty Elective	2			
		Total	20		Total	14
	Course Code	Semester 1 (Industry)	Credits		Credit Distribution	
4					Course Component	Credits
	WIH3005	Professional Development*	2		University Courses	20
	WIH3006	Data Science and Application*	5		Faculty Core Courses	17
	WIH3007	Industrial Solution Development*	5		Faculty Elective Courses	6
					Programme Core Courses	63
					Specialization Elective Courses	18
			40		TOTAL OPERATOR FOR OPARIATION	101
		Total	12		TOTAL CREDITS FOR GRADUATION	124

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.

Specialization Elective Courses will be offered on a rotation basis. Each Specialization Elective is scheduled to run only once in every academic session, either in Semester 1 or Semester 2.

# ENGLISH COMMUNICATION PROGRAMME (UNIVERSITY COURSE) (KURSUS BAHASA INGGERIS KOMUNIKASI - KURSUS UNIVERSITI)

### LIST OF COURSES TO BE COMPLETED BY ALL STUDENTS (NEW COHORT) -EXCEPT DATA SCIENCE

PATH 1	PATH 2	PATH 3	PATH 4	
<ul> <li>MUET Band 2 *(2008-2020)</li> <li>MUET Band 2 &amp; 2.5 (2021)</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> <li>TOEFL Essentials (Online)</li> <li>Cambridge English Qualifications &amp; Tests  <ol> <li>B1 Preliminary, B2 First, C1 Advanced, C2 Proficiency;</li> <li>B2 Business Vantage, C1 Business Higher;</li> <li>Linguaskill Online;</li> <li>Cambridge English: First (FCE)</li> </ol> </li> <li>ELS  <ol> <li>Certified Intensive English Programme Level (CIEP)</li> </ol> </li> </ul>	<ul> <li>MUET Band 3 (2008-2020)</li> <li>MUET Band 3 &amp; 3.5 (2021)</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> <li>TOEFL Essentials (Online)</li> <li>Cambridge English Qualifications &amp; Tests  <ol> <li>B1 Preliminary, B2 First, C1 Advanced, C2 Proficiency;</li> <li>B2 Business Vantage, C1 Business Higher;</li> <li>Linguaskill Online;</li> <li>Cambridge English: First (FCE)</li> </ol> </li> <li>ELS  <ol> <li>Certified Intensive English Programme Level (CIEP)</li> </ol> </li> </ul>	<ul> <li>MUET Band 4 (2008 – 2020)</li> <li>MUET Band 4 &amp; 4.5 (2021)</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> <li>Cambridge English Qualifications &amp; Tests <ol> <li>B1 Preliminary, B2 First, C1 Advanced, C2 Proficiency;</li> <li>B2 Business Vantage, C1 Business Higher;</li> <li>Linguaskill Online;</li> <li>Cambridge English: First (FCE)</li> </ol> </li> <li>ELS <ol> <li>Certified Intensive English Programme Level (CIEP)</li> </ol> </li> </ul>	MUET Band 5 & Band 6 (2008-2020)  MUET Band 5 & 5+ (2021)  IELTS Band 6.5 - 9.0  TOEFL Paper-Based Test (550 - 677)  TOEFL Computer - Based Test (213 - 300)  TOEFL Internet - Based Test (79 - 120)  PTE (Academic) (58 - 90)  FCE (A)  GCE A Level (English) (B & A)  Cambridge English Qualifications & Tests  i. B1 Preliminary, B2 First, C1 Advanced, C2 Proficiency; ii. B2 Business Vantage, C1 Business Higher; iii. Linguaskill Online; iv. Cambridge English: First (FCE)  ELS  i. Certified Intensive English Programme Level (CIEP)	
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	
COMPULSORY  • GLT1018 – Proficiency in English I  ** CHOOSE ONE:  • GLT1019 – Let's Speak • GLT1020 – Fundamental Writing	COMPULSORY  • GLT1021 – Proficiency in English II  ** CHOOSE ONE:  • GLT1022 – Speak Up • GLT1023 – Effective Workplace Writing	COMPULSORY  GLT1024 – Proficiency in English III  ** CHOOSE ONE:  GLT1025 – Effective Oral Communication GLT1026 – Writing at the Workplace	GLT1027-Advanced Oral Communication* GLT1028 - Advanced Business Writing*  * (Students can only register for one course per semester)  Note: Path 4 students have the option to choose between a Communication English course or a Foreign Language course (GLT-coded courses).	

<sup>\*\*</sup> 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

Note: UM Foundation (China) students without an English language qualification are required to follow Path 1.

# UNIVERSITY ENGLISH LANGUAGE COURSES FACULTY OF LANGUAGES AND LINGUISTICS LIST OF COURSES TO BE COMPLETED BY STUDENTS FROM DATA SCIENCE PROGRAMME ONLY 2025/2026 ACADEMIC SESSION

PATH 1	PATH 2	PATH 3	PATH 4		
MUET BAND 2	MUET BAND 3	MUET BAND 4	MUET BAND 5 & BAND 6		
# IELTS Band 4	# IELTS Band 4.5 – 5	# IELTS Band 5.5 – 6 ##	# IELTS Band 6.5 - 9.0		
# TOEFL Paper – Based Test	# TOEFL Paper – Based Test	# TOEFL Paper – Based Test (513	# TOEFL Paper – Based Test		
(437 – 473) / Computer – Based Test (123	(477 – 510) / Computer – Based — 547) / Computer – Based Test		(550 – 677) / Computer –		
- 150) /Internet - Based Test (41 - 52)	Test (153 – 180) / Internet – Based	(183 – 210) / Internet – Based Test	Based Test (213 – 300) /		
	Test (53 – 64)	(65-78)	Internet – Based Test (79 –		
		# A' Levels English (University of	120)		
		Cambridge, London) –	# A'Levels English		
		Minimum C	(University of Cambridge,		
			London) – Minimum B or A		
COMPULSORY -	COMPULSORY -	COMPULSORY -	COMPULSORY -		
(3 Courses x 2 Credit Hours)	(2 Courses x 3 Credit Hours)	(2 Courses x 3 Credit Hours)	(2 Courses x 3 Credit Hours)		
<ul> <li>GLT1002 - Mastering English I</li> <li>GLT1003 - Mastering English II</li> <li>GLT1004 - Mastering English III</li> </ul>	GLT1005 - Mastering English IV [Pre-requisite]	GLT1009 - Mastering English VI [Pre-requisite]	GLT1014 – Advanced     Communication Skills     GLT1015 – Advanced Professional		
	** <u>PILIH SATU</u> :	** PILIH SATU:	Writing		
	<ul> <li>GLT1006 - Mastering English V</li> <li>GLT1007 - Essential Writing Skills</li> <li>GLT1008 - Effective Communication</li> </ul>	<ul> <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>			

<sup>\*\*</sup> 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

Note: UM Foundation (China) students without an English language qualification are required to follow Path 1.

ACADEMIC CALENDAR 2025/2026 ACADEMIC SESSION (BACHELOR DEGREE LEVEL)  AMENDMENT					
	SEN	MESTER I			
Orientation (Week of Welcome) - WOW	1	week	05.10.2025	-	12.10.2025
Lectures	6	weeks*	13.10.2025	-	23.11.2025
Mid Semester I Break	1	week	24.11.2025	-	30.11.2025
Lectures	8	weeks*	01.12.2025	-	25.01.2026
Revision Week	1	weeks*	26.01.2026	-	01.02.2026
Semester I Final Examination	3	weeks*	02.02.2026	-	22.02.2026
Semester I Break	2	week	23.02.2026	-	08.03.2026
	22	weeks			
	SEN	IESTER II			
Lectures	7	weeks*	09.03.2026	-	26.04.2026
Mid Semester II Break	1	week	27.04.2026	-	03.05.2026
Lectures	7	weeks*	04.05.2026	-	21.06.2026
Revision Week	1	week*	22.06.2026	-	28.06.2026
Semester II Final Examination	3	weeks*	29.06.2026	-	19.07.2026
Semester II Break	4	weeks	20.07.2026	-	16.08.2026
	23	weeks			
SPECIAL SEMESTER					
Lectures	7	weeks*	27.07.2026	-	13.09.2026
Special Semester Final Examination		week*	14.09.2026	-	20.09.2026
Special Semester Break	1	week	21.09.2026		28.09.2026
	9	weeks			

### Notes:

- (1) The Module Registration and Examination Schedule can be referred to at <a href="https://umsitsguide.um.edu.my">https://umsitsguide.um.edu.my</a>. All information is subject to change.
- (\*) The Academic Calendar has taken into account public and festive holidays and is subject to change:

Deepavali	20 October 2025 (Monday)
Christmas Day	25 December 2025 (Thursday)
New Year	01 January 2026 (Thursday)
Thaipusam	01 February 2026 (Sunday)
Federal Territory Day	01 February 2026 (Sunday)
Chinese New Year	17 & 18 February 2026 (Tuesday & Wednesday)
Nuzul Al-Quran	07 March 2026 (Saturday)
Eidul Fitri	20 & 21 March 2026 (Friday & Saturday)
Labour Day	01 May 2026 (Friday)
Eidul Adha	27 May 2026 (Wednesday)
Wesak Day	31 May 2026 (Sunday)
His Majesty the King's Birthday	01 June 2026 (Monday)
Awal Muharram	16 June 2026 (Tuesday)
Prophet Muhammad's (Maulidur Rasul)	25 August 2026 (Tuesday)
National Day	31 August 2026 (Monday)
Malaysia Day	16 September 2026 (Wednesday)

<sup>(\*)</sup> UM UG iFest 2026 09 - 11 June 2026 (Tuesday - Thursday)

Faculty of Computer Science & Information Technology
Universiti Malaya
50603 Kuala Lumpur
https://fsktm.um.edu.my/