

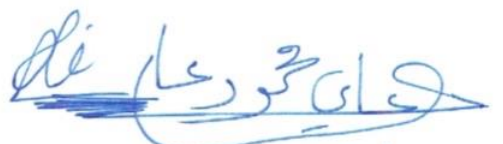


MODULE DESCRIPTION FORM



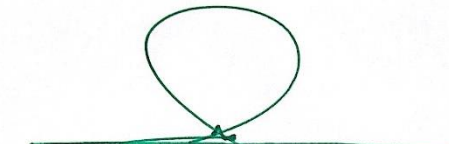
Module Information			
Module Title	Computer Technology		Module Delivery
Module Type	C		☒ Theory Lecture ☒ Lab ☒ Tutorial Practical ☐ Seminar
Module Code	AI1103		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level	1	Semester of Delivery	
Administering Department	Artificial Intelligence	College	Computer Science and Information Technology
Module Leader	Karar Sadiq	e-mail	karar.sadeq@uowa.edu.iq
Module Leader's Acad. Title	Assistant Lecturer	Module Leader's Qualification	M.Sc.
Module Tutor	Karar Sadiq	e-mail	karar.sadeq@uowa.edu.iq
Peer Reviewer Name	Hayder alghanimi	e-mail	Hayder.alghanimi@uowa.edu.iq
Scientific Committee Approval Date	01/11/2025	Version Number	1.0

Relation with other Modules			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	


 م.م. عابد محمود علي
 مقر قسم الذكاء الاصطناعي
 ٢٠٢٦ - ٢٠٢٥

Department Head Approval




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 ٢٠٢٥ - ٢٠٢٦

Dean of the College Approval

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	- Provide a basic knowledge of computer hardware and software - Introduce the business areas to which computers may be applied. - Provide an introduction to business organization and information systems. - Develop the skills in network & communication, which play an important part in business computing and information processing
Module Learning Outcomes	-The student should understand the architecture of any IT systems. -The student should understand the parts of hardware. -The student should understand the system software. -The student should understand the architecture of networks, protocols and communications devices.
Indicative Contents	Data Conversion · D/A converters · A/D converters · Sample and Hold circuits Digital Component Operations · Multiplexing · Data storage · Integrated Circuits Digital Technology · Memory Technology · Circuit Board Technology · Nano-Technology

Learning and Teaching Strategies	
Strategies	- The student should use utilities in the lab to apply scientific experiment - The ability to execute the applications software.

Student Workload (SWL)			
Structured SWL (h/sem)	78	Structured SWL (h/w)	5
Unstructured SWL (h/sem)	47	Unstructured SWL (h/w)	3
Total SWL (h/sem)	125		

Module Evaluation					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	5	10% (10)	2,4,6,9,11	LO #1, LO #2, LO #3
	Assignments	5	10% (10)	3,5,7,10,12	LO #2, LO #4,
	Projects / Lab.	1	10% (10)	Continuous	All Learning Outcomes (LO #1 – LO #4)
	Report	1	10% (10)	13	LO #4
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1, LO #2, LO #3
	Final Exam	3hr	50% (50)	16	All Learning Outcomes (LO #1 – LO #4)
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
	Material Covered
Week 1	Introduction of Computers and Programming
Week 2	Brief history of computer
Week 3	Generation of Computers & Computer hierarchy
Week 4	Basic Computer Components
Week 5	Computer function (fetch cycle, interrupt cycle, I/O function)
Week 6	Semiconductor main memory (RAM, ROM, CACHE)
Week 7	Midterm Exam
Week 8	Computer Software (application software)
Week 9	External & Internal memory
Week 10	Telecommunications system & Network
Week 11	Topology of a network and layering
Week 12	data representation
Week 13	Multimedia
Week 14	Computer Security
Week 15	All Topics
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)	
	Material Covered
Week 1	Basic Computer Components
Week 2	Computer function (fetch cycle, interrupt cycle, I/O function
Week 3	Computer function (fetch cycle, interrupt cycle, I/O function
Week 4	Semiconductor main memory (RAM, ROM, CACHE)
Week 5	Computer Software (application software)
Week 6	Computer Software (application software)
Week 7	External & Internal memory
Week 8	External & Internal memory
Week 9	Telecommunications system & Network
Week 10	Topology of a network
Week 11	Topology of a network
Week 12	Layering model
Week 13	Layering model
Week 14	Protocols
Week 15	addressing communications

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts	Computer Organization and Architecture Designing for Performance (8th Edition).	No
Recommended Texts	Computing Essentials Making IT work for you 2017 by Timothy J. O'Leary.	No
Websites	https://www.geeksforgeeks.org/computer-science/	

Grading Scheme				
Group	Grade	Mark	Marks %	Definition
Success Group (50 - 100)	A - Excellent	Excellent	90 - 100	Outstanding Performance
	B - Very Good	Very Good	80 - 89	Above average with some errors
	C - Good	Good	70 - 79	Sound work with notable errors
	D - Satisfactory	Fair / Average	60 - 69	Fair but with major shortcomings
	E - Sufficient	Pass / Acceptable	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	Fail (Pending)	(45-49)	More work required but credit awarded
	F – Fail	Fail	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				