

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Principles of Information Technology		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	ZU-SC-AI-1A-PR		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level	UGI	Semester of Delivery	
Administering Department	Artificial Intelligence	College	College of Science
Module Leader	م.م امير فيصل مجيد	e-mail	Ameer.faisal@faisal@alzahu.edu.iq
Module Leader's Acad. Title	Assistant teacher	Module Leader's Qualification	
Module Tutor		e-mail	
Peer Reviewer Name		e-mail	
Scientific Committee Approval Date		Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	<p>This module aims to:</p> <ol style="list-style-type: none">1. Introduce students to the fundamental concepts of Information Technology.2. Provide understanding of computers, hardware, software, and networks.3. Develop students' ability to use IT tools for learning and problem solving.4. Explain the role of IT in education, business, and modern society.5. Increase awareness of cybersecurity, privacy, and ethical issues.6. Prepare students for advanced IT and AI-related courses.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<p>Upon successful completion of this module, students will be able to:</p> <p>LO1: Explain the concept of Information Technology and its role in modern society.</p> <p>LO2: Describe computers and the concept of digital convergence.</p> <p>LO3: Identify and explain CPU, memory, and core hardware components.</p> <p>LO4: Explain data storage technologies and their functions.</p> <p>LO5: Use and differentiate input and output devices.</p> <p>LO6: Explain the role and functions of operating systems.</p> <p>LO7: Use application software for productivity and problem solving.</p> <p>LO8: Explain how the Internet and the World Wide Web operate.</p> <p>LO9: Describe computer networks and digital communication systems.</p> <p>LO10: Identify cybersecurity threats and privacy protection methods.</p> <p>LO11: Explain the role of databases and information systems.</p> <p>LO12: Explain the basic concepts of Artificial Intelligence in IT.</p> <p>LO13: Analyze ethical, social, and professional issues in Information Technology.</p>
Indicative Contents المحتويات الإرشادية	<p><u>Part A – Foundations of Information Technology (12 hours)</u></p> <ul style="list-style-type: none">– Introduction to Information Technology– Role of IT in modern society– Digital convergence– Overview of computing systems <p><u>Part B – Computer Hardware and Storage (18 hours)</u></p> <ul style="list-style-type: none">– Central Processing Unit (CPU)– Memory (RAM, cache, ROM)– Input devices– Output devices

	<ul style="list-style-type: none"> - Data storage technologies (HDD, SSD, flash) <p><u>Part C – System Software and Applications (15 hours)</u></p> <ul style="list-style-type: none"> - Operating systems - File management - Application software - Productivity tools <p><u>Part D – Internet, Networking, and Cybersecurity (18 hours)</u></p> <ul style="list-style-type: none"> - Internet and World Wide Web - Computer networks - Digital communication technologies - Cybersecurity threats - Malware and privacy protection <p><u>Part E – Data, AI, and Professional Issues (16 hours)</u></p> <ul style="list-style-type: none"> - Databases and information systems - Introduction to Artificial Intelligence - Ethical, social, and legal issues in IT - Emerging trends in information technology
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Teaching will be delivered through: <ul style="list-style-type: none"> • Interactive lectures • Hands-on laboratory sessions • Demonstrations of hardware and software • Case-based learning • Student-centered activities • Continuous formative feedback These strategies support understanding, practical skills, and professional competence.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	79	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	5.3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	46	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	3.1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	125		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	5% (10)	4 and 10	LO1–LO3, LO7–LO9
	Assignments	2	5% (10)	7 and 12	LO1–LO6, LO7- LO10
	Lab.	5	2% (10)	Continuous	All
	Report	1	10% (10)	14	LO11–LO13
Summative assessment	Midterm Exam	2 hrs	10% (10)	8	LO1–LO7
	Final Exam/ Lab	1 hr	10% (10)	16	All
	Final Exam	3 hrs	40% (40)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to Information Technology
Week 2	Computers and Digital Convergence
Week 3	Hardware: CPU and Memory
Week 4	Storage Technologies
Week 5	Input and Output Devices
Week 6	Operating Systems
Week 7	Midterm Exam
Week 8	Application Software
Week 9	Internet and the World Wide Web
Week 10	Networks and Digital Communications
Week 11	Cybersecurity and Privacy
Week 12	Databases and Information Systems
Week 13	Artificial Intelligence Overview
Week 14	Ethics and Social Issues in IT
Week 15	Revision
Week 16	Preparatory Week for Final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Computer and OS Familiarization
Week 2	File Management and System Tools
Week 3	Hardware Identification
Week 4	Storage and Backup Tools
Week 5	Input/Output Device Usage
Week 6	Operating System Utilities
Week 7	Midterm Exam
Week 8	Application Software Practice
Week 9	Internet and Web Tools
Week 10	Network Tools and Settings
Week 11	Security and Antivirus Tools
Week 12	Database and Spreadsheet Basics
Week 13	AI-Related IT Tools (Demonstration)
Week 14	Case Study Lab
Week 15	Review
Week 16	Course Final Exam

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	William, Brain K., and Stacey Sawyer. Using Information Technology: A Practical Introduction to Computers & McGraw-Hill, 11 th ed., 2016.	Yes
Recommended Texts	Justice, Matthew. <i>How computers really work: A hands-on guide to the inner workings of the machine</i> . No Starch Press, 2020.	Yes
Websites	https://www.youtube.com/playlist?list=PLyvxjVOwiUHSpDtOfImQypkismw4jFO6W	

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings

	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(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.