MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Computer2**			**Module Delivery**	
Module Type	**B**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	NTU202				
ECTS Credits	**2**				
SWL (hr/sem)	**75**				
Module Level			**Semester of Delivery**	4	
Administering Department	Department of Cybersecurity Technical Engineering		**College**	Technical Engineering College of Computer and Artificial Intelligence - Kirkuk	
Module Leader			**e-mail**		
Module Leader's Acad. Title			**Module Leader's Qualification**		
Module Tutor			**e-mail**		
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date	2/11/202		**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	Computer 1	**Semester**	2

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Aims أهداف المادة الدراسية	This module aims to provide first-year university students with essential computer skills, digital literacy, and practical proficiency in operating systems and office productivity suites. It focuses on computer hardware/software architecture, Windows OS management, word processing (MS Word), spreadsheet manipulation and data analysis (MS Excel), professional presentations (MS PowerPoint), internet services, cloud storage, cyber hygiene, and basic algorithmic problem solving.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Understand computer system components, hardware architecture, software classification, and operating system functions. Master operating system navigation, file management, system settings, and file organization in Windows OS. Produce professional academic documents, reports, and formatted tables using Word Processing software (MS Word). Analyze numeric data, perform complex mathematical/logical formulas, and build charts using Spreadsheet software (MS Excel). Design and deliver effective slide presentations using MS PowerPoint. Utilize internet search engines, web protocols, cloud storage platforms, and electronic mail efficiently. Apply basic information security practices, cyber hygiene, anti-malware awareness, and computational thinking concepts.
Indicative Contents المحتويات الإرشادية	The module will cover the following key areas: Introduction to Computer Systems: History, Classification, Hardware Components (CPU, Memory, Storage, I/O) Software Concepts: System Software, Application Software, Licensing, and Firmware Operating Systems Management: Windows OS Architecture, GUI Navigation, File Explorer, and System Customization Word Processing (MS Word): Document Creation, Formatting, Styles, Tables, Page Setup, and Academic Citations Spreadsheets (MS Excel): Worksheets, Data Types, Formulas, Built-in Functions (SUM, AVERAGE, IF, VLOOKUP), and Formatting Data Analysis & Visualization in Excel: Charts, Data Sorting, Filtering, Conditional Formatting, and Pivot Tables Presentation Software (MS PowerPoint): Master Slides, Animations, Transitions, Slide Design, and Multimedia Computer Networks & Internet Fundamentals: Network Types (LAN/WAN), Web Browsers, Search Engine Techniques, and Protocols (HTTP/HTTPS) Cloud Services & Digital Collaboration: Google Drive, OneDrive, Shared Documents, and Cloud Computing Basics Cyber Security Fundamentals: Malware Types, Phishing, Passwords, Firewalls, Antivirus, and Data Privacy Introduction to Problem Solving: Flowcharts, Pseudo-code, and Basic Algorithmic Thinking

Learning and Teaching Strategies استراتيجيات التعلم والتعليم

Strategies	The module will employ a combination of strategies including: Lectures: To provide theoretical foundations on computer architecture, operating system concepts, and digital literacy. Interactive Workshops & Group Discussions: To evaluate digital productivity tools, cyber safety, and cloud collaboration. Practical Lab Sessions: Hands-on computer lab training on MS Office applications, Windows administration, and internet tools. Applied Assignments: Individual and group projects for creating technical reports, Excel data models, and PowerPoint slides. Tutorials: To assist students with formula writing, advanced document layout formatting, and troubleshooting. Mid-term and final exams: To evaluate theoretical understanding and hands-on office application proficiency. Preparatory Week: To give students time to revise and clarify any difficulties before the final exam.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	48	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	27	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	3
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	75		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	2	5% (5)	5, 10	LO #1, 3 and 5
	Assignments	2	5% (5)	2, 12	LO #2, 4 and 6
	Projects / Lab.	1	10% (10)	Continuous	LO #7
	Report	1	10% (10)	13	LO #3, 5 and 7
Summative assessment	**Midterm Exam**	2 hr	20% (20)	8	LO #1 - 4
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to Computer Systems: Evolution, Definitions, Hardware vs Software, and Data vs Information.
Week 2	Computer Hardware Components: CPU Structure, RAM/ROM Memory, Storage Drives (HDD/SSD), and Input/Output Devices.
Week 3	Software Architecture: Operating Systems, Application Software, Utility Programs, Systems Architecture.
Week 4	Operating Systems Concepts: OS Functions, Memory Management, File Systems (NTFS/FAT32), Windows OS GUI.
Week 5	Word Processing Fundamentals (MS Word): Interface, Text Formatting, Paragraph Alignment, Page Setup, and Margins.
Week 6	Advanced MS Word: Tables, Graphics, Header & Footer, References, Table of Contents, and Document Protection.
Week 7	Spreadsheet Essentials (MS Excel): Worksheet Structure, Cell Addressing, Data Entry, Data Types, and Formatting.
Week 8	Mid-term Exam (الفصل منتصف اختبار) & MS Excel Formulas: Basic Arithmetic Operations, Relative and Absolute Cell Referencing.
Week 9	MS Excel Built-in Functions: Mathematical, Statistical, Logical Functions (SUM, AVERAGE, COUNT, IF, VLOOKUP).
Week 10	Data Visualization in MS Excel: Creating Charts, Formatting Graphs, Data Sorting, Filtering, and Conditional Formatting.
Week 11	Presentation Software (MS PowerPoint): Creating Slides, Slide Layouts, Text Formatting, Master Slides, and Templates.
Week 12	Advanced MS PowerPoint: Slide Transitions, Animations, Inserting Multimedia (Audio/Video), and Presentation Delivery.
Week 13	Computer Networks & Internet Basics: Network Topologies, LAN/WAN/MAN, IP Addressing, Web Browsers, Search Engines.
Week 14	Cloud Computing & Online Collaboration: Cloud Storage (Google Drive/OneDrive), Shared Worksheets, and Online Productivity.

Week 15	Cybersecurity & Data Protection: Malware Types (Viruses, Trojans, Ransomware), Firewalls, Safe Web Browsing, Digital Ethics.
Week 16	**Introduction to Computational Thinking: Flowcharts, Pseudocode, Course Review & Final Examination (الاختبار النهائي).**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Windows OS Administration: File Explorer Navigation, Folder Hierarchy, File Operations, and System Settings.
Week 2	Lab 2: MS Word Lab 1: Designing Professional Documents, Text Formatting, Paragraph Styling, Page Layouts.
Week 3	Lab 3: MS Word Lab 2: Creating Multi-Column Tables, Table Formatting, Inserting Images, Headers/Footers, Table of Contents.
Week 4	Lab 4: MS Excel Lab 1: Building Worksheets, Cell Formatting, Relative/Absolute Referencing, Writing Arithmetic Formulas.
Week 5	Lab 5: MS Excel Lab 2: Applying Built-in Functions (SUM, AVERAGE, IF, COUNTIF), Data Sorting, Filtering, and Chart Creation.
Week 6	Lab 6: MS PowerPoint Lab: Designing Interactive Presentations, Applying Slide Masters, Transitions, and Animations.
Week 7	Lab 7: Revision, Internet & Cloud Tools Demonstration, Practical Computer Exam, and Course Assessment.

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Vermaat, M. E., Sebok, S. L., & Freund, S. M. (2018). "Discovering Computers 2018: Digital Technology, Data, and Devices". Cengage Learning.	Yes
Recommended Texts	Lambert, J. (2019). "Microsoft Office Step by Step (Office 2019 / Microsoft 365)". Microsoft Press.	Yes
Websites	Yes	

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.