

Module Information				
معلومات المادة الدراسية				
Module Title	Computer Applications 1		Module Delivery	
Module Type	S		<input type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar	
Module Code	UOMU0000017			
ECTS Credits	3			
SWL (hr/sem)	75			
Module Level	2	Semester of Delivery		
Administering Department	Mechanical Power Eng. Dep.	College	TCB	
Module Leader	M.Sc.ali ajmi falih		e-mail	ali.ajmi.faleh@uomus.edu.iq
Module Leader's Acad. Title	Assistant Lecturer		Module Leader's Qualification	Ms. Tech.
Module Tutor	None		e-mail	None
Peer Reviewer Name	Name		e-mail	None
Scientific Committee Approval Date	20 / 6/2023		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 Aims	To make the student able to process, program, and solve arithmetic and engineering problems using Matlab
Module Learning Outcomes	1. To apply the knowledge about Matlab. 2. To enable students solve scientific and mathematical problems, write codes, design projects and process images.
Indicative Contents	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Assessment is based on hand-in assignments, written exam, Case study, Quizzes, seminars, Practical testing and Online testing.

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem)	88	Structured SWL (h/w)	6
Unstructured SWL (h/sem)	13	Unstructured SWL (h/w)	6
Total SWL (h/sem)	75		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	4	20% (20)	3,5,6,10	LO #1,2,.....10
	Assignments	2	10% (10)	7, 8	LO # 8
	Seminar	1	10% (10)	11	LO # 11
Summative assessment	Midterm Exam	2 hr	10% (10)	12	LO # 1-12
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري محتوى كل اسبوع يجب ان يغطي الوقت المحدد

	Material Covered
Week 1	Introduction to Matlab
Week 2	Mathematical Functions
Week 3	Vectors & Matrices
Week 4	Vectors & Matrices
Week 5	Introduction to Programming in MATLAB
Week 6	Control flow
Week 7	Control flow
Week 8	Debugging
Week 9	Mathematical Equations
Week 10	Graph Plot
Week 11	GUI
Week 12	GUI
Week 13	Image Processing
Week 14	Simulink
Week 15	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: Introduction to Matlab and Mathematical Functions
Week 2	Lab 2: Vectors & Matrices
Week 3	Lab 3: Control flow
Week 4	Lab 4: Mathematical Equations
Week 5	Lab 5: GUI
Week 6	Lab 6: Image Processing
Week 7	Lab 7: Simulink

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Recommended Texts (Website)	https://www.mathworks.com/products/matlab.html	

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.