

	<p>Ministry of Higher Education and Scientific Research - Iraq</p> <p>University of Warith Al-Anbiyaa Engineering Department</p> <p>Refrigeration and Air Conditioning Techniques Engineering</p>	
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## MODULE DESCRIPTION FORM

### نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Matlab		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	MPAC207		
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	2	Semester of Delivery	
Administering Department	Refrigeration and Air Conditioning Techniques	College	Engineering
Module Leader	Noor Ulhuda Salam Ahmed	e-mail	nooralhuda.salam@uowa.edu.iq
Module Leader's Acad. Title	Assistant lecturer	Module Leader's Qualification	M.SC
Module Tutor	None	e-mail	None
Peer Reviewer Name	Name	e-mail	None
Scientific Committee Approval Date	31.08.2025	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

<b>Total assessment</b>		100% (100 Marks)	
<b>Delivery Plan (Weekly Syllabus)</b>			
المنهاج الاسبوعي النظري محتوى كل اسبوع يجب ان يغطي الوقت المحدد			
	<b>Material Covered</b>		
<b>Week 1</b>	Introduction to Matlab		
<b>Week 2</b>	Mathematical Functions		
<b>Week 3</b>	Vectors & Matrices		
<b>Week 4</b>	Vectors & Matrices		
<b>Week 5</b>	Introduction to Programming in MATLAB		
<b>Week 6</b>	Control flow		
<b>Week 7</b>	Control flow		
<b>Week 8</b>	Debugging		
<b>Week 9</b>	Mathematical Equations		
<b>Week 10</b>	Graph Plot		
<b>Week 11</b>	GUI		
<b>Week 12</b>	GUI		
<b>Week 13</b>	Image Processing		
<b>Week 14</b>	Simulink		
<b>Week 15</b>	<b>Preparatory week before the final Exam</b>		
<b>Delivery Plan (Weekly Lab. Syllabus)</b>			
المنهاج الاسبوعي للمختبر			
	<b>Material Covered</b>		
<b>Week 1</b>	Lab 1: Introduction to Matlab and Mathematical Functions		
<b>Week 2</b>	Lab 2: Vectors & Matrices		
<b>Week 3</b>	Lab 3: Control flow		
<b>Week 4</b>	Lab 4: Mathematical Equations		
<b>Week 5</b>	Lab 5: GUI		
<b>Week 6</b>	Lab 6: Image Processing		
<b>Week 7</b>	Lab 7: Simulink		
<b>Learning and Teaching Resources</b>			

مصادر التعلم والتدريس				
Text				Available in the Library?
Recommended Texts (Website)	<a href="https://www.mathworks.com/products/matlab.html">https://www.mathworks.com/products/matlab.html</a>			
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
<p><b>Note:</b> 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.</p>				

استاذ المادة

التاريخ : ٢٠٢٥-٠٨-٣١

رئيس القسم

ا.م.د محمد حسن عبود

التاريخ: ٢٠٢٥-٠٨-٣١

