

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Engineering drawing		Module Delivery
Module Type	Basic		<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	UOMU0201023		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Deliver	2
Administering Department	PM	College	TE
Module Leader	Mustafa Raheem Jasim	e-mail	Mustafa.raheem @uomus.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	M.Sc.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/6/2025	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 Objectives أهداف المادة الدراسية	<ol style="list-style-type: none">1. Introduction students to the Autocad software.2. Introduction to the students of engineering drawings.3. Teaching students to draw geometrically according to accurate measurements.4. To understand the basic principle for descriptive geometry.5. to train students: to read the engineering drawings through the application of computers and techniques.6. To understand standard specifications, draw simple and complex assembly drawings.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<ol style="list-style-type: none">1. Enables the students to use AutoCAD for 2-D representations.2. Enables the students to Introduce the students to engineering drawings.3. Enables the students to learn the techniques and standard practices of technical graphics.4. To develop the student's abilities of engineering imagination.5. To develop the student's engineering sense by dealing with dimensions and measurements.6. To teach the student to identify the characteristics of geometric shapes and the various ways to draw them.7. To teach the student diversity in the way of thinking and finding solutions for drawing each form.
Indicative Contents المحتويات الإرشادية	<p>Indicative content includes the following.</p> <p><u>Part A -</u> Introduction to (CAD), components of computer aided drawing (CAD), Exercises. [8 hrs.] Introducing the most important geometric shapes and their components, and how to draw each shape using the program [4hrs.] Introducing the most important commands that contribute to making modifications to the geometric shapes drawn using the program [8 hrs.] Demonstrate the method of drawing advanced geometric shapes using the program. [4 hrs.] Training students to draw advanced geometric shapes using the program [8 hrs.] Revision and quiz [8hrs]</p> <p><u>Part B -</u> Training students at this stage to draw triangular projections of geometric shapes for any geometric shape in general. [8 hrs.] Complex geometrical shape. [12 hrs.] Training the students at this stage to draw the triangular projections of the geometric</p>

	shapes of the mechanical engineering shapes in particular. [15 hrs.] Training the students at this stage to draw the Perspective. [15 hrs.] Revision and quiz [8hrs]
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The major approach used to offer this module will be to promote student engagement in the exercises while also enhancing and broadening their critical thinking abilities. This will be accomplished through lectures, interactive tutorials, and the consideration of various sorts of easy experiments incorporating some engaging sampling exercises for the students.

Student Workload (SWL) الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	63	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	112	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	7
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	175		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	3	10% (10)	2 , 7 and 13	LO #1, #5 and #6
	Assignments	5	10% (10)	3 , 5, 8,10 and	LO #2,#3, #4 and

				14	#7
	Projects / Lab.	10	20% (20)	Continuous	All
	Report				
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #4
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Demonstrates knowledge about: · Introduction to engineering drawing. · Introduction about AutoCAD 2D software in engineering drawing. · Limits, grid, object snap, view menu (zoom, pan).
Week 2&3	Correctly draw menu (line, poly line, polygon, rectangle, arc, circle, point, text).
Week 4&5	Correctly modify menu (erase, copy, mirror, offset, move, rotate, trim, extend, explode).
Week 6&7&8	Complex geometrical shape.
Week 9	Mid Semester exam
Week 10&11&12	Perspective
Week 13	Correctly implement and identify orthographic projection. Correctly implement and execute first and third angle projection method
Week 14	Correctly draw the projection with the first angle projection method Correctly draw the projection with the third angle projection method Demonstrates knowledge and implementation about drawing the three projections with the first and third angle projection method
Week 15	Semester exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	No

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?

Required Texts	Fundamentals and principles of engineering drawing Fundamentals of AutoCAD 2010	Yes
Recommended Texts	Fundamentals of AutoCAD2020	Yes
Websites	https://tr.pinterest.com/pin/343540277818420973/	

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.

Semester	ECTS	Course/Module Title	Code
2	7	ENGINEERING DRAWING	PM 105
USWL (hr/sem)	SSWL (hr/sem)	Lect/Lab./Prac./Tutor	Class (hr/w)
112	63	4	

DESCRIPTION

Engineering drawing is a universal language used exclusively by engineers, technicians, and all those working in engineering fields to convey and translate scientific and technical ideas. It is also used in communication between design professionals and product developers, regardless of the language they speak. Due to the urgent need for a means of assisting those interested in computer-aided engineering drawing, AutoCAD was chosen. It is considered one of the most advanced programs for the drafting process and one of the most popular CAD systems in the world due to its ease of use and speed of implementation.