



Ministry of Higher Education and
Scientific Research - Iraq
Al-Mustaqbal University
College of Engineering Technique
Department of Electrical Engineering Technique



MODULE DESCRIPTOR FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	ENGINEERING DRAWING		Module Delivery
Module Type	Basic		Theory Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input checked="" type="checkbox"/> Seminar
Module Code	UOMU0205014		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level	1	Semester of Delivery	
Administering Department	Electrical Engineering Techniques	College	Al-Mustaqbal University
Module Leader	Saja Mmuhsin abood	e-mail	saja.muhsin.abood@uomus.edu.iq
Module Leader's Acad. Title	MASTAR	Module Leader's Qualification	
Module Tutor	None	e-mail	E-mail
Peer Reviewer Name	None	e-mail	E-mail
Scientific Committee Approval Date	01/06/2025	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. To explore further and confirm the reference of engineering drawing to the varied design applications found in engineering and technology in general. 2. To further the ability to communicate information by engineering drawings. 3. To develop knowledge to two dimensional (2D) computer-aided drawing(CAD). n Further and/or Higher Education who are required to learn how to use the computer-aided design (CAD) software package AutoCAD®
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<ol style="list-style-type: none"> 1. Learning types of engineering lines and their uses and how to draw 2. Drawing geometric shapes such as square, rectangular, parallelogram and circle 3.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following: <ul style="list-style-type: none"> ● <u>Part A – AutoCAD interface</u> Setup, save, limits, grid, object snap and ortho mode [3 hrs.] ● <u>Part B- Coordinate method</u> Direct distance method, Absolute coordinate, Relative coordinate, Polar coordinate[3hrs] ● <u>Part C Draw menu</u> Line, polyline, rectangle, arc, circle, ellipse and hatch [12hrs] ● <u>Part D Modify and Properties menu</u> Copy, move, offset, erase, extend, trim and array, line shape and line size [9 hrs.] ● <u>Part D Projection</u> <u>Front, side and top ortho projections [6 hrs.]</u> ● <u>Part E stereoscopic shapes</u> <u>Method for drawing stereoscopic shapes[6hrs]</u> Revision problem classes [8 hrs.]

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	Drawing engineering is an engineers language and consider a means to communicate between them and designers The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.
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Student Workload (SWL)			
الحمل الدراسي للطالب محسوب ل ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	63	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	4.2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	62	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	4.13
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	4	10% (10)	5 and 10	LO #1, #2
	Assignments	8	10% (10)	2 and 12	LO #3
	Projects / Lab.	18	10% (10)	Continuous	All
	Report	0	10% (10)		
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - 3
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
1	Introducing AutoCAD
2	Drawing settings
3 ,4 ,5 ,6	Drawing Tools: Line, Circle, Arc, Ellipse, Donut, Polygon, Rectangle, Point, Multiline, Pline, Spline, Xline.
7 ,8, 9	Modify Tools

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	Erase, Undo, Redo, Explode, Move, Copy, Rotate, Mirror, Array, Align, Scale, Stretch, Lengthen, Trim, Extend, Break, Join, Chamfer, Fillet.
10	Display Control: Zoom, Pan, Redraw, Clean Screen.
11	Dimension - Linear, Aligned, Radius, Diameter, Center Mark, Angle, Arc length, Continuous, Baseline, Tolerance, Dimension Space, Dimension Break, Jogged radius, Ordinate dimensions.
12	Annotation Tools Text, Style, Mtext, Scale text, Spell,
13	Hatching Objects
14	Exercises drawing
15	Final Examination

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	ENGINEERING GRAPHICS FOR First Year Student Specialized Scientific Programs (SSP) Faculty of Engineering Alexandria University Prepared By Assoc. Prof. / Raafat El sayed Shaker Ismail Introduction to AutoCAD 2011. 2D and 3D Design by Alf Yarwood	Yes
Recommended Texts	DC Electrical Circuit Analysis: A Practical Approach Copyright Year: 2020, dissidents.	No
Websites	https://www.coursera.org/browse/physical-science-and-engineering/electrical-engineering	

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

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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.