



Ministry of Higher Education and
Scientific Research - Iraq
Northern Technical University
College of Oil & Gas Techniques
Engineering/Kirkuk
Department of Fuel and Energy
Engineering



MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Engineering Drawing		Module Delivery	
Module Type	Basic		Class Lecture Lab Practical	
Module Code	COGTEK 101			
ECTS Credits	8			
SWL (hr/sem)	200			
Module Level	1	Semester of Delivery		2
Administering Department	Type Dept. Code	College	COGTEK	
Module Leader	Rasha Sabah Aweid		e-mail	Rashasabah@ntu.edu.iq
Module Leader's Acad. Title	Assistant lecturer		Module Leader's Qualification	Ms.D.
Module Tutor	Name (if available)		e-mail	E-mail
Peer Reviewer Name	Name		e-mail	E-mail
Scientific Committee Approval Date	01/06/2023		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 أهداف المادة الدراسية	<ol style="list-style-type: none"> 1. Lectures. 2. Assigning students to do homework or writing research papers so that students can acquire self-learning and presentation skills. 3. Take sudden exams. 4. Conducting semester and final exams at the specified dates. 5. Inform students about how grades are calculated for students during the semester. 6. Providing textbooks and help books that they need in the vocabulary of the course. 7. Demonstrations such as: the smart board
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	A- Cognitive goals <ol style="list-style-type: none"> 1. Broad education to understand the impact of engineering solutions globally and economically. 2. Ability to work in multidisciplinary teams. 3. The possibility of applying cognitive sciences such as mathematics, pure sciences and engineering. - 4. The ability to use the techniques, skills and tools of contemporary engineering in the engineering field. 5. The ability to design systems to meet the required needs through realistic determinants in terms of economics. - 6. The possibility of designing and implementing experiments, analyzing the results and translating them into reality.
Indicative Contents المحتويات الإرشادية	Emotional and value goals <ol style="list-style-type: none"> 1. The ability to make decisions. - 2. Methods of innovation among students. - 3. The student's ability to think. - 4. Collecting the data required to accomplish a specific subject and their solutions. Time response (natural and step responses)

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	Lectures Graduation projects Creative thinking among students and keeping up with the latest scientific methods available in teaching and learning.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 للطلاب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	80	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	5.3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	120	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	8
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	200		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1, 2, 10 and 11
	Assignments	2	10% (10)	2, 12	LO # 3, 4, 6 and 7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO # 5, 8 and 10
Summative assessment	Midterm Exam	2 hr	10% (10)	7	LO # 1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري و العملي

	Material Covered
Week 1	Introduction to engineering drawing.
Week 2	Setting up a drawing, setting the drawing units, drawing limits

Week 3	The line command, coordinates in Auto CAD, orthogonal mode, polar tracking, snap settings, object snaps
Week 4	Drawing commands: circle, arc, polyline, rectangle, ellipse, and polygon.
Week 5	view of drawing: panning, the zoom command, named views, user coordinate systems, isometric drawing
Week 6	Editing a drawing: selecting objects, erasing objects, moving objects, copying objects, rotating objects, scaling objects, mirror command, array command, offsetting objects, breaking objects, creating chamfered corners, creating rounded corners.
Week 7	Organizing drawings with layers, colors, line types, and line weights
Week 8	Drawing dimensions
Week 9	Geometrical construction
Week 10	Orthographic projection
Week 11	Pictorial drawing
Week 12	Sectional view
Week 13	Drawing in three dimensions, Creating solids
Week 14	Solid editing command
Week 15	Rendering in 3D
Week 16	Preparatory week before the final Exam

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	1. A.W.Bound, " Engineering Drawing" .	Yes
Recommended Texts	2. Dhananjay A Jolhe, "Engineering drawing".	No
Websites		

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 (فيد 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.