MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية			
Module Title	Mechanical Drawing		**Module Delivery**
Module Type	C		• ☐ **Theory** • ☒ **Lecture** • ☒ **Lab** • ☐ **Tutorial** • ☐ **Practical** • ☐ **Seminar**
Module Code	UOMU021033		
ECTS Credits	6		
SWL (hr/sem)	150		
Module Level	2	**Semester of Delivery**	3
Administering Department	Power Mechanical Engineering Technology.	**College**	Engineering and Engineering Technology
Module Leader	Mustafa Raheem Jasim	**e-mail**	mustafa.raheem.jasim@uomus.edu.iq
Module Leader's Acad. Title	Assist. Lecture	**Module Leader's Qualification**	Ph.D.
Module Tutor	Name (if available)	**e-mail**	E-mail
Peer Reviewer Name	Name	**e-mail**	E-mail
Scientific Committee Approval Date		**Version Number**	

Relation with other Modules العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	UOMU021012	**Semester**	1
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Aims أهداف المادة الدراسية	To teach the student, 1- The basic skill of reading engineering drawing along with their simples and terms as well as the standards. 2- Joining, bolts and gears, knowledge of assembly drawings. 3- How to use ACD in mechanical drawing. 4- Fits and tolerances.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Upon completion of the course, students should be able to: 1- Focus on engineering drawing along with their simples and terms as well as the standards. 2- Joining, bolts and gears, knowledge of assembly drawings. 3- How to use ACD in mechanical drawing. 4- Fits and tolerances.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. 1- Application on computer, basic of engineering drawing with their simples and terms as well as their standards. [12hrs]. 2- Using AutoCAD to draw an example of joining by bolts. [10 hrs]. 3- Classification of keys, pins and rivets. [10hrs]. 4- Application on computer, using AutoCAD to draw an example of joining of keys or pins. [10 hrs]. 5- Tolerances, basic size, limits of size and deviation. [10 hrs]. 6- Fits, classes of fit/ clearance. Transition. Interference. Calculation of fits & tolerance. [15 hrs]. 7- Assembly drawing using AutoCAD to draw general assembly. [10hrs]. 8- Application on computer, using AutoCAD to draw an example of spur gear. [10 hrs].

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) الحمل الدراسي المنتظم للطالب خلال الفصل	116	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	8
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	34	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	3
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation **تقييم المادة الدراسية**				
	Time/N	**Weight (Marks)**	**Week Due**	**Relevant Learning**

		umber			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	3 hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Symbols, expressions, general review
Week 2	Screws, bolts, studs and nuts, Keys.
Week 3	Screws, bolts, studs and nuts, Keys.
Week 4	Pulleys.
Week 5	Gears (bevel gear, warm gear, spur gear).
Week 6	Fit and tolerance.
Week 7	Surface finishing and part tables.
Week 8	Surface finishing and part tables.
Week 9	Assembly drawing and working drawing for advanced mechanisms.
Week 10	Assembly drawing and working drawing for advanced mechanisms.
Week 11	Pipes and tubes.
Week 12	Pipes and tubes.
Week 13	Gears assembly.
Week 14	Advanced machine assembly.
Week 15	Final Exam.

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Recommended Texts	AutoCAD reference book.	Yes

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	**FX –** Fail	راسب (قيد	(45-49)	More work required but credit

(0 – 49)		المعالجة)		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.