MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

<table>
<tr><td colspan="5" align="center">Module Information
معلومات المادة الدراسية</td></tr>
<tr><td>Module Title</td><td colspan="2" align="center"><strong style="color:red">Engineering Drawing</td><td colspan="2">Module Delivery</td></tr>
<tr><td>Module Type</td><td colspan="2" align="center">Core</td><td colspan="2" rowspan="4">☒ Theory
☒ Lecture
☐ Lab
☐ Tutorial
☒ Practical
☐ Seminar</td></tr>
<tr><td>Module Code</td><td colspan="2" align="center"><strong style="color:red">ENG007</td></tr>
<tr><td>ECTS Credits</td><td colspan="2" align="center">6</td></tr>
<tr><td>SWL (hr/sem)</td><td colspan="2" align="center"><strong style="color:red">150</td></tr>
<tr><td>Module Level</td><td>UGI</td><td>Semester of Delivery</td><td colspan="2">2</td></tr>
<tr><td>Administering Department</td><td>CV101</td><td>College</td><td colspan="2">Civil Engineering College</td></tr>
<tr><td>Module Leader</td><td>Wasan Mahdi Mahmood</td><td>e-mail</td><td colspan="2">eng.wasan2015@uoanbar.edu.iq</td></tr>
<tr><td>Module Leader's Acad. Title</td><td>Instructor</td><td>Module Leader's Qualification</td><td colspan="2">M.Sc.</td></tr>
<tr><td>Module Tutor</td><td></td><td>e-mail</td><td colspan="2">E-mail</td></tr>
<tr><td>Peer Reviewer Name</td><td>Name</td><td>e-mail</td><td colspan="2">E-mail</td></tr>
<tr><td>Scientific Committee Approval Date</td><td>01/06/2023</td><td>Version Number</td><td colspan="2">1.0</td></tr>
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<table>
<tr><td colspan="4" align="center">Relation with other Modules
العلاقة مع المواد الدراسية الأخرى</td></tr>
<tr><td>Prerequisite module</td><td>None</td><td>Semester</td><td></td></tr>
<tr><td>Co-requisites module</td><td>None</td><td>Semester</td><td></td></tr>
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Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Aims أهداف المادة الدراسية	1. Recognize the value of engineering graphics as a language of communication. 2. Infer the nature of engineering graphics, the relationships between 2D and 3D environments. 3. Comprehend and deduce orthographic projections of an object. 4. Visualize wide variety of objects and drawing the missing views. 5. Comprehend and deduce section views 6. Produce two and three dimensional drawings utilizing CAD software
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	By the end of successful completion of this course, the student will be able to: 1. Recognize the value of engineering graphics as a language of communication. 2. Infer the nature of engineering graphics, the relationships between 2D and 3D environments. 3. Visualize, comprehend, and deduce wide variety of objects, drawing the missing views/section views, and orthographic projections of an object. 4. Produce two and three dimensional drawings utilizing CAD software.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. **Chapter one** Introduction: graphic language, standards, instruments, letters…etc. Basics for interpreting drawings, line types, types of drawings and sketches. Rules for using calipers to draw circles. [6 hrs] **Chapter Two** Engineering processes and their application for drawing geometric shapes. Introduction to the AutoCAD program and identifying its menus and commands. Applications on the computer using the AutoCAD program. [12 hrs] **Chapter Three** Projection theory. Orthographic views. Deducing front, top, and side views from a pictorial. Dimensioning and Drawing Scale. Applications on the computer using the AutoCAD program. [21 hrs] **Chapter Four** Sectional views: full and half sections. Applications on the computer using the AutoCAD program. [15 hrs] **Chapter Five** Drawing a missed view from given two views. Pictorial sketching: isometric and oblique.

	Applications on the computer using the AutoCAD program. [18 hrs]

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	Theoretical lectures, practical training, discussion and dialogue, brainstorming, examples and problems of geometric shapes used to achieve goals.

Student Workload (SWL)			
الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	93	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	6.2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	57	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	3.8
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative Assessment	**Quizzes**	1	**3% (3)**		LO #1,2,3 and 4
	Online Assignments	7	**7% (7)**	2,3,4,,6,7,9,12,14	LO # 1,2,3 and 4
	Onsite Assignments	**10**	**20% (20)**	2,3,4,,6,7,9,12,14	LO # 1,2,3 and 4
	Report	1	**3% (3)**	13	LO # 1,2,3 and 4
	Lab	**AutoCAD**	**7% (7)**		LO #4
Summative Assessment 60%	**Midterm Exam**	**2 hr**	**10% (10)**	8	All
	Final Exam 50%	**3 hr**	**50%(50)**	**16**	**All**
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction: graphic language, standards, instruments, letters…etc
Week 2	Basics for interpreting drawings, line types, types of drawings and sketches
Week 3	Rules for using calipers to draw circles
Week 4	Engineering processes and their application for drawing geometric shapes
Week 5	Applications using the traditional tools
Week 6	Introduction to AutoCAD and Applications on the computer using the AutoCAD program
Week 7	Orthographic views. Deducing front, top, and side views from a pictorial
Week 8	Dimensioning and Drawing Scale
Week 9	Applications on the computer using the AutoCAD program
Week 10	Sectional views: full and half sections
Week 11	Applications on the computer using the AutoCAD program
Week 12	Drawing a missed view from given two views
Week 13	Applications on the computer using the AutoCAD program
Week 14	Pictorial sketching: isometric and oblique
Week 15	Applications on the computer using the AutoCAD program
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1:
Week 2	Lab 2:
Week 3	Lab 3:
Week 4	Lab 4:
Week 5	Lab 5:
Week 6	Lab 6:

Week 7	Lab 7:

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Engineering drawing, Abdul Rasul Khafaf 1988	Yes
Recommended Texts	Interpreting Engineering Drawings, Jensen, C.H. and Helsel, G.D., 7th ed., Thomson Delmar Learning, 2007	Yes
Websites	https://www.uoanbar.edu.iq/Bank-Section.php	

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.