

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Engineering Drawing		Module Delivery
Module Type	Core		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	ENDR 106		
ECTS Credits	4.00		
SWL (hr/sem)	100		
Module Level		Semester of Delivery	one
Administering Department	General	College	Civil Engineering
Module Leader	Nawal Abdul Amir Khamis	e-mail	40173@uotechnology.edu.iq
Module Leader's Acad. Title	lecturer	Module Leader's Qualification	MSC
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Nawal Abdul Amir Khamis	e-mail	40173@uotechnology.edu.iq
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module		Semester	
Co-requisites module		Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<p>Module Aims</p> <p>أهداف المادة الدراسية</p>	<ol style="list-style-type: none">1. This course aims to develop the student's ability to read plans, imagination and perception, in addition to developing his skill in transforming elements into geometric shapes, controlling their proportions and distances.2. To introduce students to the principles and concepts of engineering drawing, to introduce them to the methods and techniques used in engineering drawing and training on the use of its tools and to understand the foundations and rules of engineering drawing. Identifying the terms, signs and marks of the engineering drawing and reading the finished engineering drawings.3. Training of students on the implementation of various engineering drawings, drawing two-dimensional shapes, drawing three-dimensional shapes in accordance with the basic engineering drawings. Studying the simplified perspective methods, their applications, and development of the students with the ability to imagine, through training them in the work of the engineering perspective of these forms.
<p>Module Learning Outcomes</p> <p>مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none">1. Preparing the engineers with basic concepts of engineering drawing and how to use drawing tools according to the internationally recognized standards of quality assurance and academic accreditation of engineering programs corresponding with the commitment to the ethics of the engineering profession.2. Enabling the student to understand the basic processes of the engineering drawing and the way to complete each of these operations with the tools of traditional engineering drawing.3. Enabling the student to learn and understand how to add text to the engineering drawings4. An ability to function effectively on a team whose members together provide leadership, create collaborative and inclusive environment, establish goals, plan tasks and meet objectives.5. An ability to develop and conduct appropriate experimentation, analyze and interpret data and use engineering judgment to draw conclusion.6. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
<p>Indicative Contents</p>	<ul style="list-style-type: none">• Introduction of the importance of engineering drawing.• Defining the principles of engineering drawing, and the methods, used

المحتويات الإرشادية	<p>techniques in engineering drawing and training in the using of tools.</p> <ul style="list-style-type: none"> • Introducing the concept of engineering drawing, understanding the bases and rules of engineering drawing, font types, the dimensions, and the drawing scale. • Learning the terminology and signs and tags for rendering, and they can understand engineering drawings of any project, three-dimensional modeling, curves, surfaces.
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	<p>Type something like: 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.</p>

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	63	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	37	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	2.5
Total SWL (h/sem)	100		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5, 10	LO #1,2,3,4,5and 6
	Assignments	3	10% (10)	2, 12	LO # 1,2,3,4,5and 6
	Projects / Lab.				
	Midterm Exam 1	2hr	15% (15)	7	LO#
Summative assessment	Midterm Exam 2	2hr	15% (15)	14	LO #
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction - Concepts of engineering drawing. Geometric drawing tools and their uses, how to install paper drawing, terminology and signs and tags for engineering drawing. Practical applications in engineering script writing
Week 2	Drawing scale, Drawing board sizes & Engineering drawing lines and their types.
Week 3	Types of engineering drawings for the projections, orthographic Projections. Regular Projections with asymmetric lines
Week 4	Types of engineering drawings for the projections, oblique Projections
Week 5	Orthographic Projections for Geometric shapes with curves
Week 6	Perspective of geometric shapes (Isometric of asymmetric lines)

Week 7	Mid-term Exam 1
Week 8	Perspective of geometric shapes (Isometric of non-standard lines)
Week 9	Simple geometric sections.
Week 10	complicated geometric sections.
Week 11	geometric sections through curved shapes
Week 12	Conclusion of third projection of simple geometric shapes
Week 13	Conclusion of third projection of complicated geometric shapes
Week 14	Mid-term Exam 2
Week 15	Preparatory week before final exam
Week 16	Final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Practical applications in Engineering script writing. Practical exercises in the way of drawing lines.
Week 2	Practical exercises in orthographic Projections.
Week 3	Practical exercises in oblique Projections.
Week 4	Practical exercises in Isometric
Week 5	Practical exercises in Sections
Week 6	Practical exercises in conclusion
Week 7	Practical exercises in sections and conclusion

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	1. عبد الرسول الخفاف، الرسم الهندسي، الجامعة التكنولوجية، 1994	Yes
Recommended Texts	2. Alex Krulikowski, Fundamentals of Geometric Dimensioning and Tolerancing, Delmar Learning, 2nd edition, 1997. 3. Colin Simmons, Dennis Maguire, Neil Phelps, Manual of Engineering Drawing: Technical Product Specification and Documentation to British and International Standards, Publisher: Butterworth-Heinemann, 2009. 4. David Madsen, Engineering Drawing and Design, 5th, Delmar Learning, 2011. 5. Eric N. Wiebe, Gary Robert Bertoline, Fundamentals of Graphics Communication, 5th. McGraw-Hill Higher Education, 2007. 6. Thomas E. French, Robert Foster, Engineering Drawing and Graphic Technology, Published May 11th, 2001 by McGraw-Hill Science/Engineering/Math (first published January 1st 1972).	yes
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 (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.