	Ministry of Higher Education and Scientific Research - Iraq University of Warith Al_Anbiyaa.... Engineering Department	

MODULE DESCRIPTOR FORM
نموذج وصف المادة الدراسية

Module Information
معلومات المادة الدراسية

Module Title	**ENGINEERING DRAWING**		**Module Delivery**
Module Type	ENG114		☐ **Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☒ **Practical** ☐ **Seminar**
Module Code	**CIV016**		
ECTS Credits	**7**		
SWL (hr/sem)	**175**		
Module Level	UGI	**Semester of Delivery**	1
Administering Department		**College**	Engineering College
Module Leader	Asst. lect. Hibatallah abd alameer	**e-mail**	Hiba.allah@uowa.edu.iq
Module Leader's Acad. Title		**Module Leader's Qualification**	
Module Tutor		**e-mail**	E-mail
Peer Reviewer Name		**e-mail**	E-mail
Review Committee Approval	25/9/2024	**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	The module aims to provide students with a solid understanding of the fundamental concepts and techniques of linear algebra. This includes the study of linear equations. Students will also learn how to apply these concepts to solve real-world problems in various fields such as engineering, physics, economics, and computer science. By the end of the module, students should be able to manipulate and analyze mathematical models using linear algebraic tools and communicate their findings effectively.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	This course discusses the fundamental concepts of engineering graphics. It gives also an introduction to computer graphics using CAD software. 1 . aimed to covered Drawing conventions such as standards, line types and dimensioning Drawing of inclined and curved surfaces Deducting the orthographic views from a pictorial Drawing fullland half sections , deducting an orthographic view from given two views Pictorial sketching (isometric and oblique)
Indicative Contents المحتويات الإرشادية	Recognize the value of engineering graphics as a language of communication.. . 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. 5

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	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 types of simple experiments involving some sampling activities that are interesting to the students.

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	6.0
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	82	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5.5
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**	2	8 % (8)	5 and 10	LO #3, 4, 5 and 6
	Assignments	1	2 % (2)	14	LO # 3, 4, 5,6 and 7
	Projects / Lab.	15	15% (15)	Continuous	All
	Report	15	15% (15)	Continuous	All
Summative assessment	**Midterm Exam**	2hr	20% (20)	7	LO # 1-5
	Final Exam	3hr	40% (40)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction and Instruments
Week 2	Kufic letters1
Week 3	Principles of putting dimensions: Basic dimensions, the true dimensions, extension lines, lines of dimension
Week 4 to 6	Geometric construction: Draw an arc touches two intersecting lines, draw arc touches two brackets, draw an arc touches a straight and passes a point, draw an ellipse, draw a hexagon, draw the quinary, draw shape with eight faces, sketching inverted arc, identify points of contact
Week 7 to 9	Projections The theory of projection, the projection lines, oblique projection level, the vertical projection system, multiple projections, conclusion the third projected, draw curves and oblique surfaces on the projections

Week 10 to 11	Isometric Projection by the first even angles, projection by the third even angles, draw circles on dimensional figure, draw oblique surfaces on dimensional figure, Isometric drawing and its application
Week 12	Sections: Introduction, types of sections and symmetrical sections, cutting lines, double sections, elevations sectioned, shapes sectioned
Week 13	
Week 14	CAD Drawing Introduction to AutoCAD software, control page in AutoCAD software, types of coordinate, the command line and applications, the modified commands, the help orders in drawing, the commands circle, rectangle, offset, the command layers array, scale and aligned, the command arc with all options, the command polyline with options , types of dimensions with application examples, the command text and its types, preparing and printing options with examples
Week 14	
Week 15	

Delivery Plan (Weekly Lab. Syllabus)
المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	الرسم الهندي س للمؤلف عبد الرسول الخفاف	YES
Recommended Texts	Interpreting Engineering Drawings, Jensen, C.H. and Helsel, G.D., 7th ed., Thomson Delmar Learning, 2007	NO
Websites		

APPENDIX:

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	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				

NB 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.