

# MODULE DESCRIPTION FORM

## Course Description Form

Module Information			
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Module Title	<b>Engineering Drawing</b>		Module Delivery
Module Type	Basic		<input type="checkbox"/> Theory <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Rennet <input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>ENG114</b>		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	UGI	Semester of Delivery	
Administering Department	CIV	College	ENG
Module Leader	M , Ghazi Galil .Eng/ mEng. Mohammed A. Aziz Kaishish	e-mail	Mohammed.ali@uowa.edu.iq
Module Leader's Acad. Title	Assistant Lecturer	Module Leader's Qualification	Majest J
Module Tutor	M , Ghazi Galil .Eng/ mEng. Mohammed A. Aziz Kaishish	e-mail	Ghazi.alsady@uowa.edu.iq
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	019/11/2023	Version Number	1.0

Relation with other Modules			
Stuck with other subjects			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

## Module Aims, Learning Outcomes and Indicative Contents

Course objectives, learning outcomes and instructional content

<p><b>Module Objectives</b> Course Objectives</p>	<p>This course discusses the fundamental concepts of engineering graphics. It gives also an introduction to computer graphics using CAD software.</p> <p>The following topics are aimed to covered:</p> <ol style="list-style-type: none"> <li>1- Drawing conventions such as standards, line types and dimensioning.</li> <li>2- Drawing of inclined and curved surfaces.</li> <li>3- Deducing the orthographic views from a pictorial.</li> <li>4- Drawing full and half sections; deducing an orthographic view from given two views.</li> <li>5- Pictorial sketching (isometric and oblique).</li> </ol>
<p><b>Module Learning Outcomes</b> Learning outcomes of the course</p>	<ol style="list-style-type: none"> <li>1. Recognize the value of engineering graphics as a language of communication.</li> <li>2. Infer the nature of engineering graphics, the relationships between 2D and 3D environments.</li> <li>3. Comprehend and deduce orthographic projections of an object.</li> <li>4. Visualize wide variety of objects and drawing the missing views.</li> <li>5. Comprehend and deduce section views.</li> <li>6. Produce three dimensional drawings utilizing CAD software.</li> </ol>
<p><b>Indicative Contents</b> Indicative Contents</p>	<ul style="list-style-type: none"> <li>• Identify Drawing Sheets.</li> <li>• Apply Drawing Scales.</li> <li>• Respect Drawing Lettering Standard Rules and Apply Dimension Rules.</li> <li>• Apply Drawing Conventional Representations Dimensioning and Standard Abbreviations.</li> </ul>

## Learning and Teaching Strategies


Retizat Learning and Teaching

<p><b>Strategies</b></p>	<ol style="list-style-type: none"> <li>1. Delivering in-person meetings and discussion in the classroom that delivers the scientific material to the student.</li> <li>2. Directing questions and inquiries in depth and accuracy.</li> <li>3. Development of education through the conclusion of solutions to the problems raised.</li> <li>4. Solve classroom examples and give class assignments.</li> <li>5. Field exercises within the university to apply theoretical exercises.</li> <li>6. Perform the tests specified for the subject the times specified for it.</li> <li>7. See the sources and books that the subject teacher has to offer.</li> </ol>
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## Student Workload (SWL)

weeks15 The child's pregnancy calculated for

<b>Structured SWL (h/sem)</b>	63	<b>Structured SWL (h/w)</b>	6.2
Regular pregnancy of the student during the semester		Regular pregnancy for the student weekly	

<b>Unstructured SWL (h/sem)</b>	82	<b>Unstructured SWL (h/w)</b>	5.5
Regular pregnancies of the student during the semester		Regular pregnancies for the student weekly	
<b>Total SWL (h/wk)</b> The pregnancy is the 	175		

<b>Module Evaluation</b>					
Course Evaluation					
		Time/Numb there	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	2	10% (10)	5 , 10	in #3, 4, 5 and 6
	<b>Assignments</b>	5	5% (5)	14	in #3, 4,5,6 and 7
	<b>Projects / Lab.</b>	15	15% (15)	Continuous	All
	<b>Online Assignments</b>	1	10% (10)	Continuous	All
<b>Summative assessment</b>	<b>Midterm Exam</b>	2hr	20% (20)	7	LO #1 - 5
	<b>Final Exam</b>	3hr	40% (40)	16	All
<b>Total assessment</b>			100% (100 Marks)		

<b>Delivery Plan (Weekly Syllabus)</b>	
Curriculum 	
	Material Covered
<b>Week 1</b>	Introduction and Instruments
<b>Week 2</b>	Letters of Intent
<b>Week 3</b>	Principles of putting dimensions: Basic dimensions, the true dimensions, extension lines, lines of dimension
<b>Week 4 to Week 6</b>	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.

<b>Week 7 to 9</b>	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
<b>Week 10 to 11</b>	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
<b>Week 12 to 13</b>	Sections: Introduction, types of sections and symmetrical sections, cutting lines, double sections, elevations sectioned, shapes sectioned
<b>Week 14 to 15</b>	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.

### Learning and Teaching Resources

#### Learning and Teaching Resources

	Text	Available in the Library?
<b>Required Texts</b>	Drawing India by the author Abdul Rasoul Al-Khafaf	Yes
<b>Recommended Texts</b>	Interpreting Engineering Drawings, Jensen, C.H. and Helsel, G.D., 7th ed., Thomson Delmar Learning, 2007	Yes

### Grading Scheme

#### Grading chart

Group	Grade	Appreciation	Marks %	Definition
<b>Success Group (50 - 100)</b>	<b>A</b> - Excellent	privilege	90 - 100	Outstanding Performance
	<b>B</b> - Very Good	Very good	80 - 89	Above average with some errors
	<b>C</b> - Good	Good	70 - 79	Sound work with notable errors
	<b>D</b> - Satisfactory	medium	60 - 69	Fair but with major shortcomings
	<b>E</b> - Sufficient	popular	50 - 59	Work meets minimum criteria
<b>Group File (0 – 49)</b>	<b>FX</b> – File	processing) in( Deposit	(45-49)	More work required but credit awarded
	<b>F</b> – Fail	Failure	(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.