

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Building Materials</b>		Module Delivery
Module Type	<b>Core learning activity</b>		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	CE 103		
ECTS Credits	4		
SSWL (hr/sem)	63		
USSWL (hr/sem)	37		
SWL (hr/sem)	100		
Module Level	1	Semester of Delivery	
Administering Department	CE	College	GE
Module Leader	Nada Mahdi Fawzi Hadeel Khalid Awad Rawa Khalid Abood	e-mail	<a href="mailto:Nada.aljalawi@coeng.uobaghdad.edu.iq">Nada.aljalawi@coeng.uobaghdad.edu.iq</a> <a href="mailto:hadeel.Kalid@coeng.uobaghdad.edu.iq">hadeel.Kalid@coeng.uobaghdad.edu.iq</a> <a href="mailto:Rawaa.khalid@coeng.uobaghdad.edu.iq">Rawaa.khalid@coeng.uobaghdad.edu.iq</a>
Module Leader's Acad. Title	Professor Assist. Prof. Lecture	Module Leader's Qualification	Ph.D. MS.C. MS.C.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Nada Mahdi Fawzi	e-mail	<a href="mailto:Nada.aljalawi@coeng.uobaghdad.edu.iq">Nada.aljalawi@coeng.uobaghdad.edu.iq</a>
Scientific Committee Approval Date	09/06/2023	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

<p><b>Module Objectives</b> أهداف المادة الدراسية</p>	<ol style="list-style-type: none"> <li>1. Introduce basic definition and explain the basic concepts that essential in connection with materials and illustrate these concepts by examples and tests.</li> <li>2. Explain the uses of the materials and their applications.</li> <li>3. Enable the student to analyze the material (chemically and physically).</li> <li>4. Introduce basic definition and explain the basic concepts of materials available in the local market.</li> <li>5. Enable the student to perform tests on the studied materials</li> </ol>
<p><b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية</p>	<p>A- Cognitive goals.</p> <ol style="list-style-type: none"> <li>1. Define any building materials.</li> <li>2. Graph basic relationships considering materials properties.</li> <li>3. Know the raw and ingredients of the materials.</li> <li>4. Tests materials for basic and most important experiments.</li> <li>5. Know the standards related to the specifications of the materials.</li> <li>6. Calculate the mathematic relations for some materials.</li> <li>7. Specify the quality of good material theoretically and practically.</li> </ol> <p>B- The skills goals special to the course.</p> <ol style="list-style-type: none"> <li>1. Construction materials test methods.</li> </ol> <p>C- Affective and value goals</p> <ol style="list-style-type: none"> <li>1. Increasing student's self-confidence to perform his (homework, classwork and assessment) within the corresponding time.</li> <li>2. Encouraging the teamwork between the students.</li> <li>3. Cooperating the universal activities.</li> <li>4. Supporting the extra-curricular university activities and urging students to participate in them.</li> </ol> <p>D- personal development</p> <ol style="list-style-type: none"> <li>1. Enhancing the skills to perform any significant lab test for different engineering purposes</li> </ol>
<p><b>Indicative Contents</b> المحتويات الإرشادية</p>	<p>Indicative content includes the following:</p> <p><u>Part A</u> Introduction of Construction Materials Science. [12 hrs]</p> <p><u>Part B</u> Bonding Material. [20 hrs]</p> <p><u>Part C</u> Bricks. [20 hrs]</p> <p><u>Part D</u> Blocks. [16 hrs]</p> <p><u>Part E</u> Tiles. [16 hrs]</p> <p><u>Part F</u> Timber. [16 hrs]</p> <p><u>Part G</u> Metal. [16 hrs]</p> <p><u>Part H</u> Nano-Materials. [4 hrs]</p>

## Learning and Teaching Strategies

### استراتيجيات التعلم والتعليم

<b>Strategies</b>	<p>The main adopted strategy in delivering this module, encourage students' participation in the exercises, refining and expanding their critical thinking skills comprised:</p> <ol style="list-style-type: none"> <li>1. Lectures.</li> <li>2. Tutorials.</li> <li>3. Homework and Assignments.</li> <li>4. Lab. Experiments.</li> <li>5. Tests and Exams.</li> <li>6. In-Class Questions and Discussions.</li> <li>7. Connection between Theory and Application.</li> <li>8. Field Trips.</li> <li>9. Extracurricular Activities.</li> <li>10. Seminars.</li> <li>11. In- and Out-Class oral conversations.</li> <li>12. Preparing reports about the lab tests.</li> </ol>
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## Student Workload (SWL)

### الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطلاب خلال الفصل	63	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطلاب أسبوعيا	4
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطلاب خلال الفصل	37	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطلاب أسبوعيا	3
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطلاب خلال الفصل	<b>100</b>		

## Module Evaluation

### تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	1	10% (100)	6 and 12	LO #A, #B and #C
	<b>Home work</b>	1	10% (10)	8	LO #A, #B and #C
	<b>seminar</b>	1	10% (10)	7	LO #B and #D
	<b>Laboratory</b>	1	10% (100)	5,6,11 and 12	LO #B and #D
<b>Summative assessment</b>	<b>Midterm Exam</b>	<b>1hr</b>	<b>10% (100)</b>	9	LO #A, #B and #C
	<b>Final Exam</b>	<b>3hr</b>	<b>50% (100)</b>	16	All
<b>Total assessment</b>			100% (100 Marks)		

## Delivery Plan (Weekly Syllabus) - course I

### المنهاج الاسبوعي النظري – الفصل الدراسي الاول

	<b>Material Covered</b>
<b>Week 1</b>	Introduction of Construction Materials Science
<b>Week 2</b>	Types of building Materials properties of materials
<b>Week 3</b>	<b><u>Bonding Material</u></b> 1. Gypsum Plaster Introduction of Gypsum plaster
<b>Week 4</b>	Manufacture of gypsum plaster
<b>Week 5</b>	Gypsum products a. Plaster of Paris b. Ordinary plaster c. Technical plaster d. Anhydrous plaster e. Keen cement
<b>Week 6</b>	2. Lime Plaster Definition
<b>Week 7</b>	Lime Plaster classification a. Quick lime b. Hydrated lime
<b>Week 8</b>	Manufacture of lime - Theory of calcinations Properties of quick lime Properties of hydrated lime
<b>Week 9</b>	<b><u>Midterm Exam</u></b> <b><u>Bricks</u></b> Introduction and classification of bricks according to constituent raw material
<b>Week 10</b>	1. Clay bricks a. Raw materials b. Composition of good clay brick c. Harmful ingredients in clay bricks
<b>Week 11</b>	d. Manufacture of bricks e. Classification of clay bricks in accordance with Iraqi standard No. 25/1988
<b>Week 12</b>	Properties of bricks: a. Compressive strength b. Water absorption c. Effloresce
<b>Week 13</b>	2. Sand - Lime bricks a. Mix proportion b. Manufacture
<b>Week 14</b>	2.4 Properties of lime sand brick
<b>Week 15</b>	3. Concrete bricks Properties of concrete bricks
<b>Week 16</b>	<b>A preparatory week before the Final Exam</b>

## Delivery Plan (Weekly Lab. Syllabus) - course I

المنهاج الاسبوعي للمختبر – الفصل الدراسي الاول

	Material Covered
Week 1	Introduction to the laboratory tests and test devices
Week 2	<b><u>Bonding Material</u></b> Gypsum Plaster - Standard consistency test
Week 3	Gypsum Plaster - Fineness test
Week 4	Gypsum Plaster - Setting time test
Week 5	Gypsum Plaster - Preparing for the Compressive strength test
Week 6	Compressive strength test
Week 7	Bonding Material exam
Week 8	report submission and results discussion
Week 9	<b><u>Bricks</u></b> Brick dimension test
Week 10	Brick preparing for the Efflorescence test
Week 11	Brick absorption test
Week 12	Brick compressive strength test
Week 13	Brick efflorescence test
Week 14	Brick exam
Week 15	report submission and results discussion
Week 16	<b>A preparatory week before the Final Exam</b>

## Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	-	-
Recommended Texts	Construction materials by zuhair Sakoo I.Q.S. for all the materials used in the semester Construction materials by zuhair Sakoo	YES
Websites	-	

## Grading Scheme

## مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
<b>Success Group (50 - 100)</b>	<b>A</b> - Excellent	امتياز	90 - 100	Outstanding Performance
	<b>B</b> - Very Good	جيد جدا	80 - 89	Above average with some errors
	<b>C</b> - Good	جيد	70 - 79	Sound work with notable errors
	<b>D</b> - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	<b>E</b> - Sufficient	مقبول	50 - 59	Work meets minimum criteria
<b>Fail Group (0 - 49)</b>	<b>FX</b> – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	<b>F</b> – 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.

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Computer science/ I</b>		Module Delivery
Module Type	Basic learning activities		<input type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>UOB103</b>		
ECTS Credits	3		
SSWL (hr/sem)	48		
USSWL (hr/sem)	27		
SWL (hr/sem)	75		
Module Level	1	Semester of Delivery	
Administering Department	CE	College	GE
Module Leader	Mohammed Sadeq Salman Maather safaa hussein Alyaa hussain Esraa Mubder Edaan Marwa Makki Dishar	e-mail	<a href="mailto:M.sadiq@uobaghdad.edu.iq">M.sadiq@uobaghdad.edu.iq</a> <a href="mailto:maatheral-khafaji@coeng.uobaghdad.edu.iq">maatheral-khafaji@coeng.uobaghdad.edu.iq</a> <a href="mailto:alyaa.hussain@coeng.uobaghdad.edu.iq">alyaa.hussain@coeng.uobaghdad.edu.iq</a> <a href="mailto:e.edaan1901p@coeng.uobaghdad.edu.iq">e.edaan1901p@coeng.uobaghdad.edu.iq</a> <a href="mailto:m.dishar1901m@coeng.uobaghdad.edu.iq">m.dishar1901m@coeng.uobaghdad.edu.iq</a>
Module Leader's Acad. Title	Lecturer Lecturer	Module Leader's Qualification	Professor MSc MSc MSc MSc
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail

<b>Scientific Committee Approval Date</b>	14/06/2023	<b>Version Number</b>	1.0
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<b>Relation with other Modules</b>			
العلاقة مع المواد الدراسية الأخرى			
<b>Prerequisite module</b>		<b>Semester</b>	
<b>Co-requisites module</b>	None	<b>Semester</b>	

<b>Module Aims, Learning Outcomes and Indicative Contents</b>	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
<b>Module Objectives</b> أهداف المادة الدراسية	<ol style="list-style-type: none"> <li>1. Introduce basic definitions and introductory concepts of computer.</li> <li>2. This course will be study the computer fundamentals (origin and history of the computer and its development during the last years).</li> <li>3. To understand the computer components (hardware and software components)</li> <li>4. To develop problem solving skills and understanding of circuit theory through the application of techniques.</li> <li>5. To learn computer safety and software licenses and windows systems will study.</li> <li>6. To study some computer programs such as: Word, Excel, and PowerPoint.</li> </ol>
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة	<p>Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks.</p> <ol style="list-style-type: none"> <li>1. An ability to observe, formulate, and solve civil engineering problems by applying engineering, science, and mathematics principles.</li> <li>2. An ability to produce civil engineering designs that meet desired needs within safety, economy, and serviceability limitations by applying both analysis and</li> </ol>



الدراسية	<p>design procedures.</p> <ol style="list-style-type: none"> <li>3. An ability to perform proper measurements and tests based on different standards and specifications, then analyze the results and use engineering judgment to make decisions.</li> <li>4. An ability to communicate effectively with different individuals.</li> <li>5. An ability to understand ethical and professional responsibilities in engineering conditions and make smart judgments that take into consideration the effect on worldwide financial, ecological, and societal considerations.</li> <li>6. An ability to realize the current civil engineering issues, recognize the necessity for continual professional knowledge growth ,and use modern techniques, skills, and tools in engineering practice.</li> <li>7. An ability to work effectively in multi-disciplinary teams, set up objectives, plan activities, meet deadlines, and manage risk and uncertainty.</li> </ol>
<p><b>Indicative Contents</b></p> <p>المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p><u>Part A</u></p> <p>المقدمة ( تعريف الحاسوب واطواره ونظم تشغيل الحاسوب واجيال الحاسوب والذكاء الاصطناعي) (4 ساعات)</p> <p><u>Part B</u></p> <p>مكونات الحاسوب المادية ومقارنته بين الحواسيب واجهزة الاخراج والادخال (4 ساعة)</p> <p><u>Part D</u></p> <p>وحدة المعالجة المركزية واجزاءها (2 ساعات)</p> <p><u>Part E</u></p> <p>الكيان البرمجي والبرامج التطبيقية (4 ساعات)</p> <p><u>Part F</u></p> <p>الاختراقات (اختراقات العالم الرقمي وامن الحاسوب والمخاطر الامنية الاكثر انتشارا على امان الحاسوب) (2 ساعة)</p> <p><u>Part G</u></p> <p>تراخيص البرمجيات وانواعها والملكية الفكرية (2 ساعة)</p> <p><u>Part H</u></p> <p>البرمجيات الخبيثة وصفاتها وانواعها وكيفية حماية جهاز الحاسوب (4 ساعات)</p> <p><u>Part I</u></p> <p>انواع انظمة التشغيل ووظائفها واهدافها ومميزاتها (6 ساعات)</p>

## Learning and Teaching Strategies

### استراتيجيات التعلم والتعليم

<b>Strategies</b>	<p>The main adopted strategy in delivering this module, encourage students' participation in the exercises, refining and expanding their critical thinking skills comprised:</p> <ol style="list-style-type: none"> <li>1. Lectures.</li> <li>2. Homework and Assignments.</li> <li>3. Tests and Exams.</li> <li>4. In-Class Questions and Discussions.</li> <li>5. Connection between Theory and Application.</li> <li>6. Extracurricular Activities.</li> <li>7. In- and Out-Class oral conservations.</li> </ol>
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## Student Workload (SWL)

### الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطلاب خلال الفصل	48	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطلاب أسبوعيا	3
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطلاب خلال الفصل	27	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطلاب أسبوعيا	2
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطلاب خلال الفصل	<b>75</b>		

## Module Evaluation

### تقييم المادة الدراسية

	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
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Formative assessment	Quizzes	1	5% (5)	6	LO #1, #2 and #4, #6
	Assignments	1	5% (5)	10	All
	Projects / Lab.	1	20% (20)	Continuous	All
	Report	2	5% (5)	12	---
Summative assessment	Midterm Exam	2hr	10% (10)	8	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

### Delivery Plan (Weekly Syllabus)

#### المنهاج الاسبوعي النظري

	Material Covered
Week 1	تعريف الحاسوب واطواره ونظم تشغيل الحاسوب واجيال الحاسوب والذكاء الاصطناعي
Week 2	تعريف الحاسوب واطواره ونظم تشغيل الحاسوب واجيال الحاسوب والذكاء الاصطناعي
Week 3	مكونات الحاسوب المادية ومقارنة بين الحواسيب واجهزة الاخراج والادخال
Week 4	مكونات الحاسوب المادية ومقارنة بين الحواسيب واجهزة الاخراج والادخال
Week 5	وحدة المعالجة المركزية واجزاءها
Week 6	الكيان البرمجي والبرامج التطبيقية
Week 7	الكيان البرمجي والبرامج التطبيقية
Week 8	الامتحان الفصلي
Week 9	اختراقات العالم الرقمي وامن الحاسوب والمخاطر الامنية الاكثر انتشارا على امان الحاسوب
Week 10	تراخيص البرامجيات و انواعها والملكية الفكرية
Week 11	البرامجيات الخبيثة وصفاتها وانواعها وكيفية حماية جهاز الحاسوب
Week 12	البرامجيات الخبيثة وصفاتها وانواعها وكيفية حماية جهاز الحاسوب
Week 13	انواع انظمة التشغيل ووظائفها واهدافها ومميزاتها

Week 14	انواع انظمة التشغيل ووظائفها واهدافها ومميزاتها
Week 15	انواع انظمة التشغيل ووظائفها واهدافها ومميزاتها
Week 16	التهيئة لامتحان النهائي

### Delivery Plan (Weekly Lab. Syllabus)

#### المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1: Introduction to the computer and its components.
Week 2	Lab 2: Microsoft WORD software.
Week 3	Lab 3: Microsoft EXCIL software.
Week 4	Lab 4: Microsoft POWER POINT software.

### Learning and Teaching Resources

#### مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Abboud Z. M., Abdel Majeed G. H., Murad A. H., and. Ahmed B. K " Computer basics and software applications "	No
Recommended Texts	-----	--
Websites		

### Grading Scheme

#### مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group	A - Excellent	امتياز	90 - 100	Outstanding Performance

<b>(50 - 100)</b>	<b>B - Very Good</b>	جيد جدا	80 - 89	Above average with some errors
	<b>C - Good</b>	جيد	70 - 79	Sound work with notable errors
	<b>D - Satisfactory</b>	متوسط	60 - 69	Fair but with major shortcomings
	<b>E - Sufficient</b>	مقبول	50 - 59	Work meets minimum criteria
<b>Fail Group (0 - 49)</b>	<b>FX – Fail</b>	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	<b>F – Fail</b>	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.

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Engineering Drawing</b>		Module Delivery
Module Type	Support or related learning activity		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>CE110</b>		
ECTS Credits	<b>7</b>		
SSWL (hr/sem)	<b>108</b>		
USSWL (hr/sem)	<b>67</b>		
SWL (hr/sem)	<b>175</b>		
Module Level	1	Semester of Delivery	
Administering Department	CE	College	GE
Module Leader	Aliaa Faleh Ban Fadhil Ahmed Salman Ahmed Ibrahim Rania Sadiq	e-mail	<a href="mailto:Aliaa.faleh@coeng.uobaghdad.edu.iq">Aliaa.faleh@coeng.uobaghdad.edu.iq</a> <a href="mailto:a.jawad1901p@coeng.uobaghdad.edu.iq">a.jawad1901p@coeng.uobaghdad.edu.iq</a> <a href="mailto:ahmed.ibrahim@coeng.uobaghdad.edu.iq">ahmed.ibrahim@coeng.uobaghdad.edu.iq</a> <a href="mailto:rania.s@coeng.uobaghdad.edu.iq">rania.s@coeng.uobaghdad.edu.iq</a>
Module Leader's Acad. Title	Lecturer Lecturer Lecturer Ass. Lecturer	Module Leader's Qualification	Ms.c Ph.D Ms.c Ms.c
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Aliaa Faleh	e-mail	<a href="mailto:Aliaa.faleh@coeng.uobaghdad.edu.iq">Aliaa.faleh@coeng.uobaghdad.edu.iq</a>
Scientific Committee Approval Date	11/06/2023	Version Number	1.0

### Relation with other Modules

العلاقة مع المواد الدراسية الأخرى

Prerequisite module		Semester	
Co-requisites module	None	Semester	

### Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<b>Module Objectives</b> أهداف المادة الدراسية	This unit will enable learners to produce engineering drawings of different components, assemblies and circuits using a variety of sketching, drawing and computer-aided drafting techniques.
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	The fulfillment of the requirements of this course will enable the student to be able to perform the following <ol style="list-style-type: none"> <li>1- Basic principles of engineering drawing</li> <li>2- Types of drawing lines</li> <li>3- Drawing various curves and knowledge of Geometry processes</li> <li>4-Projection drawing</li> <li>5- Drawing sections and how to put dimensions on the drawing</li> <li>6- Learning to draw the three-dimensional shape by giving the projections of the body</li> </ol>
<b>Indicative Contents</b> المحتويات الإرشادية	Indicative content includes the following. <u>Part A</u> Introduction (Defining the principle of engineering drawing and identifying the types and sizes of pens and sheets Used in drawing as well as the tools used in drawing). [3 hrs] <u>Part B</u> Basic principles of engineering drawing Writing letters and numbers [3 hrs] <u>Part C</u>

	<p>Types of drawing lines [6 hrs]</p> <p><u>Part D</u></p> <p>Geometry processes [6 hrs]</p> <p><u>Part E</u></p> <p>Projections [9 hrs]</p> <p><u>Part F</u></p> <p>Sectional view [6 hrs]</p> <p><u>Part G</u></p> <p>Dimensions 3 hrs]</p> <p><u>Part H</u></p> <p>Isometric shape [9 hrs]</p>
<p><b>Learning and Teaching Strategies</b></p> <p>استراتيجيات التعلم والتعليم</p>	
<b>Strategies</b>	<p>The main adopted strategy in delivering this module, encourage students' participation in the exercises, refining and expanding their critical thinking skills comprised:</p> <ol style="list-style-type: none"> <li>1) Lectures.</li> <li>2) Tutorials.</li> <li>3) Homework and Assignments.</li> <li>4) Lab. Experiments.</li> <li>5) Tests and Exams.</li> <li>6) In-Class Questions and Discussions.</li> <li>7) Connection between Theory and Application.</li> <li>8) Field Trips.</li> <li>9) Extracurricular Activities.</li> <li>10) Seminars.</li> <li>11) In- and Out-Class oral conversations.</li> <li>12) Reports, Presentations, and Posters.</li> </ol>

<p><b>Student Workload (SWL)</b></p> <p>الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا</p>			
<b>Structured SWL (h/sem)</b>	108	<b>Structured SWL (h/w)</b>	7



الحمل الدراسي المنتظم للطالب خلال الفصل		الحمل الدراسي المنتظم للطالب أسبوعيا	
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	67	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	4
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	<b>175</b>		

<b>Module Evaluation</b>					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	1	10% (10)	5,9,11,14	Lo#2,#3,#4,#5,#6
	<b>Assignments (CW)</b>	1	10% (10)	From 3 to 15	All
	<b>Assignments (HW)</b>	1	10% (10)	From 3 to 15	All
	<b>Lab. (Auto CAD)</b>	1	10% (10)	4,14,15	All
<b>Summative assessment</b>	<b>Midterm Exam</b>	<b>2hr</b>	<b>10% (10)</b>	8	All
	<b>Final Exam</b>	<b>3hr</b>	<b>50% (50)</b>	16	All
<b>Total assessment</b>			100% (100 Marks)		

<b>Delivery Plan (Weekly Syllabus)</b>	
المنهاج الاسبوعي النظري	
	Material Covered
<b>Week 1</b>	Introduction
<b>Week 2</b>	Basic principles of engineering drawing
<b>Week 3</b>	Types of drawing lines
<b>Week 4</b>	Types of drawing lines

<b>Week 5</b>	Geometry processes
<b>Week 6</b>	Geometry processes
<b>Week 7</b>	Projections
<b>Week 8</b>	Projections
<b>Week 9</b>	Projections
<b>Week 10</b>	Sectional view
<b>Week 11</b>	Sectional view
<b>Week 12</b>	Dimensions
<b>Week 13</b>	Isometric shape
<b>Week 14</b>	Isometric shape
<b>Week 15</b>	Isometric shape
<b>Week 16</b>	<b>Preparatory week before the final Exam</b>

### Delivery Plan (Weekly Lab. Syllabus)

#### المنهاج الاسبوعي للمختبر

	<b>Material Covered</b>
<b>Week 1</b>	Introduction to Auto CAD software.
<b>Week 2</b>	Control page in Auto CAD software.
<b>Week 3</b>	Type of coordinate.
<b>Week 4</b>	The command line and applications.
<b>Week 5</b>	the modified command (copy, move) with examples
<b>Week 6</b>	The help order in drawing (Grid, Snap, Polar, Object Tracking).
<b>Week 7</b>	The command circle ,rectangle, offset with solving examples.
<b>Week 8</b>	solving examples by using polar and nature coordinates options.
<b>Week 9</b>	The command array with types and ellipase with solving examples using auto cad software.

<b>Week 10</b>	The command scale and aligned with slaving example for house building.
<b>Week 11</b>	The command arc with all options.
<b>Week 12</b>	The command layers with solving examples.
<b>Week 13</b>	The command polyline with options.
<b>Week 14</b>	Types of dimensions with application examples
<b>Week 15</b>	the command text and types
<b>Week 16</b>	Preparing and printing options with examples

### Learning and Teaching Resources

#### مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>	<ul style="list-style-type: none"> <li>- "Principle of technical drawing" by Frederick E. Giesecke, Alva Mitchell, Henry Cecil Spencer, Ivan Hill, John Thomas, James E. Novak, 1992.</li> </ul> "Graphics Drawing workbook" by Gray R. Bertoline, 2000	Yes
<b>Recommended Texts</b>	<ul style="list-style-type: none"> <li>- Engineering drawing by Abed Alrasul Al Khafaf, 1986.</li> </ul>	Yes
<b>Websites</b>	Electronic references, Internet sites...	

### Grading Scheme

#### مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
<b>Success Group (50 - 100)</b>	<b>A</b> - Excellent	امتياز	90 - 100	Outstanding Performance
	<b>B</b> - Very Good	جيد جدا	80 - 89	Above average with some errors
	<b>C</b> - Good	جيد	70 - 79	Sound work with notable errors
	<b>D</b> - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings

	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
<b>Fail Group (0 – 49)</b>	<b>FX – Fail</b>	راسب (قييد المعالجة)	(45-49)	More work required but credit awarded
	<b>F – Fail</b>	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.

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Engineering Mechanics 1</b>		Module Delivery
Module Type	Core learning activity		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>CE101</b>		
ECTS Credits	7		
SSWL (hr/sem)	93		
USSWL (hr/sem)	82		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	
Administering Department	CE	College	GE
Module Leader	Ahmad Jabbar Hussain Alshimmeri Madhi Hameed Mohammed Al-Farttoosi	e-mail	<a href="mailto:dr.ahmadalshimmeri@coeng.uobaghdad.edu.iq">dr.ahmadalshimmeri@coeng.uobaghdad.edu.iq</a> <a href="mailto:Mahdi_farttoosi@coeng.uobaghdad.edu.iq">Mahdi_farttoosi@coeng.uobaghdad.edu.iq</a>
Module Leader's Acad. Title	Professor Lecturer	Module Leader's Qualification	Ph.D. Ph.D.
Module Tutor		e-mail	
Peer Reviewer Name	Nazar Kamil Oukaili	e-mail	<a href="mailto:nazar.oukaili@coeng.uobaghdad.edu.iq">nazar.oukaili@coeng.uobaghdad.edu.iq</a>
Scientific Committee Approval Date	12/06/2023	Version Number	1.0

### Relation with other Modules

العلاقة مع المواد الدراسية الأخرى

<b>Prerequisite module</b>	None	<b>Semester</b>	
<b>Co-requisites module</b>	None	<b>Semester</b>	

### Module Aims, Learning Outcomes and Indicative Contents

#### أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<p><b>Module Objectives</b></p> <p>أهداف المادة الدراسية</p>	<p><b>Statics:</b></p> <ol style="list-style-type: none"> <li>1. To give a statement of Newton's Laws of Motion and Gravitation.</li> <li>2. To review the principles for applying the SI system of units.</li> <li>3. To resolve the forces into components</li> <li>4. To show how to find the resultant different forces system.</li> <li>5. To introduce the concept of the free-body diagram.</li> <li>6. To discuss the concept of the moment of a force and show how to calculate it in two and three dimensions.</li> <li>7. To provide a method for finding the moment of a force about a specified axis.</li> <li>8. To define the moment of a couple.</li> <li>9. To indicate how to reduce a simple distributed loading to a resultant force acting at a specified location.</li> <li>10. To develop the equations of equilibrium for a rigid body</li> <li>11. To introduce the concept of the free-body diagram for a rigid body.</li> <li>12. To show how to solve rigid-body equilibrium problems using the equations of equilibrium.</li> <li>13. To show how to determine the forces in the members of a truss using the method of joints and the method of sections.</li> <li>14. To analyze the forces acting on the members of frames and machines composed of pin-connected members</li> </ol> <p><b>Dynamics:</b></p> <ol style="list-style-type: none"> <li>15. To introduce the concepts of position, displacement, velocity, and acceleration.</li> <li>16. To state Newton's Second Law of Motion and to define mass and weight.</li> <li>17. To analyze the accelerated motion of a particle using the equation of motion with different coordinate systems.</li> <li>18. To develop the principle of work and energy and apply it to solve problems that involve force, velocity, and displacement.</li> <li>19. To develop the principle of linear impulse and momentum for a particle and apply it to solve problems that involve force, velocity, and time.</li> </ol>
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<p><b>Module Learning Outcomes</b></p> <p>مخرجات التعلم للمادة الدراسية</p>	<p><b>Cognitive goals:</b></p> <p><b>Static:</b></p> <p>Analyze forces and moments in two and three dimensions,</p> <p>Find out the resultant forces in two and three dimensions</p> <p>Draw free-body-diagram, Compute the reaction force in simple structure (beam, frame, truss)</p> <p><b>Dynamics:</b></p> <ol style="list-style-type: none"> <li>1. Understand the engineering applications that evolve dynamics.</li> <li>2. Solve engineering problems involving objects moving along a linear path.</li> <li>3. Simplify engineering problems involving objects moving along a curved path.</li> <li>4. Recognize and deal with projectile problems.</li> <li>5. Write the equation of motion of a moving object.</li> <li>6. Solve problems involving the force in accelerated bodies.</li> </ol>
<p><b>Indicative Contents</b></p> <p>المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p><b>Statics:</b></p> <p><b>Part A</b></p> <p>Introduction to mechanics (scalar quantities, vector quantities, units , resolution of the force in plane). (8hrs)</p> <p><b>Part B</b></p> <p>Resultant different forces system. (resultant of two perpendicular forces, resultant of non-perpendicular forces, resolution of the force in space, resultant of a concurrent, coplanar force system, resultant of a concurrent, non-coplanar force system, moment of a force, resultant of a non-concurrent, coplanar force system, resultant of a parallel coplanar force system, resultant of a parallel coplanar force system in space, examples). [12 hr.]</p> <p><b>Part C</b></p> <p>Equilibrium of a rigid body (Free body diagram F.B.D. types of supports, uniformly distributed load, internal forces, examples). [20 hr.]</p> <p><b>Part D</b></p> <p>Analysis of Trusses (definition, common types, internal forces, analysis of simple trusses, examples). [20 hr.]</p> <p><b>Dynamics:</b></p> <p><b>Part F</b></p> <p>Solve engineering problems involving objects moving along a linear path.</p>

	<p>Simplify engineering problems involving objects moving along a curved path.</p> <p>Recognize and deal with projectile problems.</p> <p>Write the equation of motion of a moving object.</p> <p>Midterm Exam (Dynamics)</p> <p>Solve problems involving the force in accelerated bodies.</p> <p>Apply the theorem of conservation of energy to solve kinetic problems.</p> <p>[30 hr.]</p>
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<b>Learning and Teaching Strategies</b> استراتيجيات التعلم والتعليم	
<b>Strategies</b>	<p>The main adopted strategy in delivering this module, encourage students' participation in the exercises, refining and expanding their critical thinking skills comprised:</p> <ol style="list-style-type: none"> <li>1. Lectures.</li> <li>2. Tutorials.</li> <li>3. Homework and Assignments.</li> <li>4. Tests and Exams.</li> <li>5. In-Class Questions and Discussions.</li> <li>6. Connection between Theory and Application.</li> <li>7. Extracurricular Activities.</li> <li>8. In- and Out-Class oral conservations.</li> </ol>

<b>Student Workload (SWL)</b> الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
<b>Structured SWL (h/sem)</b>	93	<b>Structured SWL (h/w)</b>	6
الحمل الدراسي المنتظم للطالب خلال الفصل		الحمل الدراسي المنتظم للطالب أسبوعيا	
<b>Unstructured SWL (h/sem)</b>	82	<b>Unstructured SWL (h/w)</b>	5



الحمل الدراسي غير المنتظم للطلاب خلال الفصل		الحمل الدراسي غير المنتظم للطلاب أسبوعيا	
<b>Total SWL (h/sem)</b>	<b>175</b>		
الحمل الدراسي الكلي للطلاب خلال الفصل			

<b>Module Evaluation</b>					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	<b>2</b>	<b>20% (20)</b>	3,5,7,10, 13 and 14	LO #1, #2 and #10, #11, #15, #17, # 19
	<b>Assignments</b>	<b>1</b>	<b>5% (5)</b>	3,5,7,10, 13 and 14	LO #1, #2 and #10, #11, #15, #17, # 19
	<b>Projects / Lab.</b>	<b>1</b>	<b>10% (10)</b>	13	All
	<b>Report</b>	<b>1</b>	<b>5% (5)</b>	14	All
<b>Summative assessment</b>	<b>Midterm Exam</b>	<b>2hr</b>	<b>10% (10)</b>	8	LO #1 - #19
	<b>Final Exam</b>	<b>3hr</b>	<b>50% (50)</b>	16	All
<b>Total assessment</b>			100% (100 Marks)		

<b>Delivery Plan (Weekly Syllabus)</b>	
المنهاج الاسبوعي النظري	
	Material Covered
<b>Week 1</b>	Introduction to mechanics (scalar quantities, vector quantities, units).
<b>Week 2</b>	Introduction to mechanics (resolution of the force in plane). (8hrs)

	Resultant different forces system. (resultant of two perpendicular forces)
<b>Week 3</b>	Resultant different forces system. (resultant of non-perpendicular forces, resolution of the force in space, resultant of a concurrent, coplanar force system, , moment of a force).
<b>Week 4</b>	Resultant different forces system. (resultant of a non-concurrent, coplanar force system, resultant of a parallel coplanar force system, resultant of a parallel coplanar force system in space, examples).  Equilibrium of a rigid body (Free body diagram F.B.D)
<b>Week 5</b>	Equilibrium of a rigid body (Free body diagram F.B.D. types of supports)
<b>Week 6</b>	Equilibrium of a rigid body (uniformly distributed load, internal forces).
<b>Week 7</b>	Equilibrium of a rigid body (examples).  Analysis of Trusses (definition)
<b>Week 8</b>	Analysis of Trusses (common types, internal forces).
<b>Week 9</b>	Analysis of Trusses (analysis of simple trusses).
<b>Week 10</b>	Analysis of Trusses (examples).
<b>Week 11</b>	Midterm Exam (Statics)  Solve engineering problems involving objects moving along a linear path.
<b>Week 12</b>	Simplify engineering problems involving objects moving along a curved path.  Recognize and deal with projectile problems.
<b>Week 13</b>	Write the equation of motion of a moving object.
<b>Week 14</b>	Midterm Exam (Dynamics)  Solve problems involving the force in accelerated bodies.
<b>Week 15</b>	Apply the theorem of conservation of energy to solve kinetic problems.
<b>Week 16</b>	<b>Preparatory week before the final Exam</b>

## Learning and Teaching Resources

### مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>	1. Engineering Mechanics STATICS 15th Edition in SI Units Hibbeler 2023	Yes
	2. ENGINEERING MECHANICS statics and DYNAMICS 14th EDITION HIBBELER 2016	Yes
	3. solutions manual to Engineering Mechanics Statics 8th edition Meriam Kraige 2016	NO
	4. solutions manual to ENGINEERING MECHANICS statics and DYNAMICS 14th EDITION HIBBELER 2016	No
<b>Recommended Texts</b>	solutions manual to Engineering Mechanics Statics 8th edition Meriam Kraige 2016	No
<b>Websites</b>	<a href="https://en.m.wikipedia.org/wiki/Mechanics">https://en.m.wikipedia.org/wiki/Mechanics</a>	

## Grading Scheme

### مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
<b>Success Group (50 - 100)</b>	<b>A - Excellent</b>	امتياز	90 - 100	Outstanding Performance
	<b>B - Very Good</b>	جيد جدا	80 - 89	Above average with some errors
	<b>C - Good</b>	جيد	70 - 79	Sound work with notable errors
	<b>D - Satisfactory</b>	متوسط	60 - 69	Fair but with major shortcomings
	<b>E - Sufficient</b>	مقبول	50 - 59	Work meets minimum criteria
<b>Fail Group (0 - 49)</b>	<b>FX – Fail</b>	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	<b>F – Fail</b>	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.

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	الديمقراطية وحقوق الانسان <b>Democracy and Human Rights</b>		Module Delivery
Module Type	Basic learning activities		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>UOB104</b>		
ECTS Credits	2		
SSWL (hr/sem)	33		
USSWL (hr/sem)	17		
SWL (hr/sem)	50		
Module Level	1	Semester of Delivery	
Administering Department	CE	College	GE
Module Leader	Hayder Zuhair Jasim	e-mail	h.alwaeli@uobaghdad.coeng.edu.iq
Module Leader's Acad. Title	Assist. Professor	Module Leader's Qualification	Ph.D.
Module Tutor	Hayder Zuhair Jasim	e-mail	h.alwaeli@uobaghdad.coeng.edu.iq
Peer Reviewer Name	None	e-mail	none
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None		Semester

Co-requisites module	None	Semester	
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## Module Aims, Learning Outcomes and Indicative Contents

### أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<p><b>Module Objectives</b></p> <p>أهداف المادة الدراسية</p>	<ol style="list-style-type: none"> <li>1. للتعريف بالديمقراطية ونشأتها وما المقصود بحقوق الانسان وكيفية ممارستها.</li> <li>2. مقارنة بين النظم الديمقراطية وما توفرها الديمقراطية من اجل ممارسة حقوق الانسان بحرية دون قيود.</li> <li>3. التعريف بخصائص وسمات حقوق الانسان.</li> <li>4. توضيح الوثائق الدولية والمنظمات الدولية التي ارسى مبادئ حقوق الانسان.</li> <li>5. التعرف على النظم الانتخابية التي تمارسها الدول في اختيار الحكومات الديمقراطية.</li> <li>6. التعرف على القوانين الدولية التي تحمي وتضمن ممارسة حقوق الانسان في المجتمعات كافة.</li> <li>7. المقارنة بين النظم الديمقراطية والنظم الدكتاتورية في تطبيق وممارسة حقوق الانسان</li> <li>8. تعريف ما حقوق المرأة وتوضيح المقصود بالتعايش السلمي.</li> </ol>
<p><b>Module Learning Outcomes</b></p> <p>مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none"> <li>1. فهم ما تعني الديمقراطية وما هي حقوق الانسان.</li> <li>2. جعل الطالب يدرك اهمية السياق التاريخي وكيف تطورت الممارسات الشعبية من اجل ارساء نظام حكم ديمقراطي يكفل المساواة في الحقوق والالتزامات.</li> <li>3. معرفة الطالب بحقوقه الاساسية التي يمكن ان يمارسها بحرية ، والالتزامات التي يجب عليه اتباعها دون المساس بالنظام الديمقراطي.</li> <li>4. ارشاد الطالب الى ممارسة حقوقه حسب القوانين الدولية والدستور العراقي .</li> <li>5. تعليم الطالب كيفية ممارسة حقه في الانتخابات حسب نوع النظام المعتمد .</li> <li>6. جعل الطالب يدرك اهمية النظام الديمقراطي ودوره في حماية حقوق الانسان.</li> <li>7. ضمان ظهور جيل متعلم واعي يساهم في نشر حقوق الانسان في المجتمع .</li> <li>8. المساواة في الحقوق بين الجنسين في مختلف الممارسات الديمقراطية دون تمييز.</li> <li>9. الوصول الى تطبيقات وممارسات مجتمعية تضمن التعايش السلمي في المجتمع الواحد.</li> </ol>
<p><b>Indicative Contents</b></p> <p>المحتويات الإرشادية</p>	<p>الديمقراطية وحقوق الانسان</p> <p>تتكون هذه المفردات من مادتين هما الديمقراطية وحقوق الانسان وهما حقلين مختلفين في المعنى والاختصاص والتطبيق ، لكن احدهما يكمل الاخر كونهما من ضمن العلوم الاجتماعية لا سيما حقل العلوم السياسية. فبدون النظام الديمقراطي لا يمكن ممارسة حقوق الانسان ولا يوجد لها ذكر اصلا ، وتكون مجهولة بالنسبة للمجتمعات التي تحكمها النظم الاستبدادية والاولتوقراطية تلك التي تقييد الحقوق والحريات.</p> <p>لذلك ستحدد لمادة الديمقراطية (25) ساعة.</p> <p>و ستحدد لحقوق الانسان (25) ساعة.</p>

## Learning and Teaching Strategies

## استراتيجيات التعلم والتعليم

<b>Strategies</b>	1. شرح معنى المفردات التي تتضمنها المادة من الاستاذ.
	2. اعطاء دور للطلبة لممارسة حقوقهم في ابداء الرأي من دون تعصب واحترام الرأي الاخر.
	3. تنظيم ممارسات داخل القاعات لمحاكاة تجربة انتخابية او تناول قضية معينة تحتاج وضع حلول مناسبة لها عن طريق تقسيم الطلبة الى مجموعات واعطاء ادوار لهم فيها.
	4. عرض محتويات فيديو تساهم في كسر الروتين في القاء المحاضرة.
	5. القيام بزيارات ميدانية لأبرز المنظمات الراعية لحقوق الانسان كاللجنة الدولية لحقوق الانسان وفتح منظمة العفو الدولية في العراق والمفوضية العليا لحقوق الانسان ومؤسسات الدولة الاخرى.
	6. تكليف الطلبة بالعمل الميداني والتطوعي في رعاية حقوق الانسان كراعية دور الايتام او دار كبار السن او دور المرأة، او المساهمة بفعالية مجتمعية توعوية... الخ هدفها ارساء مبدأ التكافل الاجتماعي والتعايش السلمي وتقوية الاواصر المجتمعية.
	7. تكليف الطلبة بعمل تقرير من اختياره من ضمن عدة مواضيع تعرض عليهم تكون قابلة للتطبيق في المجتمع او تعالج حالة انسانية معينة.

## Student Workload (SWL)

الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطلاب خلال الفصل	33	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطلاب أسبوعيا	2
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطلاب خلال الفصل	17	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطلاب أسبوعيا	1
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطلاب خلال الفصل	50		

## Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	1	10% (10)	4, 11	LO# 1,2,3, 4
	<b>Assignments</b>	1	10% (10)	5, 12	LO# 4, 5 , 8 ,9
	<b>Projects / Lab.</b>	1	10% (10)		

	Report	1	10% (10)	12	LO# 8, 9
Summative assessment	Midterm Exam	2hr	10% (10)	8	1-9
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

### Delivery Plan (Weekly Syllabus)

#### المنهاج الاسبوعي النظري

	Material Covered
Week 1	مفهوم الديمقراطية والتطور التاريخي لممارساتها في حضارة وادي الرافدين وادي النيل
Week 2	الديمقراطية في الحضارات القديمة الاخرى
Week 3	الديمقراطية في الاسلام والديانة المسيحية
Week 4	انواع الديمقراطية
Week 5	الانتخاب ونظمه
Week 6	امتحان
Week 7	معنى حقوق الانسان وابرز خصائصه
Week 8	التعريف بالقانون الدولي الانساني والقانون الدولي لحقوق الانسان
Week 9	زيارة ميدانية
Week 10	مصادر القانون الدولي لحقوق الانسان
Week 11	انواع حقوق الانسان والمواثيق الدولية لحقوق الانسان
Week 12	التجارب الحديثة لحقوق الانسان
Week 13	حقوق المرأة والتعايش السلمي
Week 14	المنظمات الرائدة لحقوق الانسان
Week 15	حقوق الانسان في الدستور العراقي
Week 16	امتحان



## Learning and Teaching Resources

### مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>	1- رياض عزيز هادي، حقوق الانسان تطورها -مضامينها- حمايتها 2- مصادر متنوعة من الانترنت	Yes
<b>Recommended Texts</b>	صالح جواد الكاظم، علي غالب العاني، الانظمة السياسية، كلية القانون، بغداد، ط 2 ، 2007	No
<b>Websites</b>		

## Grading Scheme

### مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
<b>Success Group (50 - 100)</b>	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
<b>Fail Group (0 - 49)</b>	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.

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Mathematics/ I</b>		Module Delivery
Module Type	Support or related learning activity		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>CE107</b>		
ECTS Credits	5		
SSWL (hr/sem)	63		
USSWL (hr/sem)	62		
SWL (hr/sem)	125		
Module Level	1	Semester of Delivery	
Administering Department	CE	College	GE
Module Leader	Hasan Hussein Ali Mohammed Ibrahim Mohammed Hussein	e-mail	<a href="mailto:hasan.ali2001d@coeng.uobaghdad.edu.iq">hasan.ali2001d@coeng.uobaghdad.edu.iq</a> <a href="mailto:mohanned.algharawi@coeng.uobaghdad.edu.iq">mohanned.algharawi@coeng.uobaghdad.edu.iq</a>
Module Leader's Acad. Title	Lecturer Lecturer	Module Leader's Qualification	Ph.D. Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	

Co-requisites module	None	Semester	
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### Module Aims, Learning Outcomes and Indicative Contents

#### أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<b>Module Objectives</b> أهداف المادة الدراسية	<ol style="list-style-type: none"> <li>1. Introduce basic definition and explain the basic concepts that essential in connection with Limits and continuity and illustrate these concepts by examples.</li> <li>2. Introduce the basic concept and rules of differentiations and their applications.</li> <li>3. Introduce basic definition and explain the basic concepts that essential in connection with function and their graph.</li> <li>4. Summarizing the definition and explain the concepts and the essential of Transcendental functions including their derivatives, graphs and applications and illustrate these concepts by examples.</li> <li>5. Introducing basic definition and explain the basic concepts that essential in connection with Hyperbolic functions including their derivatives, graphs and applications and illustrate these concepts by examples.</li> </ol>
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	<ol style="list-style-type: none"> <li>1. Enable students to solve the Limits.</li> <li>2. Enable students to classify functions that have continuity or not.</li> <li>3. Graphing all types of functions.</li> <li>4. Summarize the rules of differentiations.</li> <li>5. Describing and solving the chain rule and the implicit differentiation.</li> <li>6. Discussing and solving the applications of derivatives.</li> <li>7. Describing the transcendental functions including their derivatives, applications and graphs.</li> <li>8. Describing the Hyperbolic functions and their graphs.</li> </ol>
<b>Indicative Contents</b> المحتويات الإرشادية	<p><u>Part A – Limits, Functions and Continuity</u></p> <p>Introduction definition of functions including the domain and range. In addition, preview the rules of differentiation. [12 hrs]</p> <p><u>Part B – Graph Functions</u></p> <p>Graphing all types of functions. [12 hrs]</p> <p><u>Part C – Application on derivatives</u></p> <p>Definitions of chain rules and the implicit of derivatives and including the applications on differentiations. [12 hrs]</p>

	<p><u>Part D – Transcendental functions</u></p> <p>Definitions, types and derivatives of functions and their inverse of the transcendental functions and including their graphs and applications. [10 hrs]</p> <p><u>Part E – Hyperbolic functions</u></p> <p>Definitions, types and derivatives of functions and their inverse of the hyperbolic functions and including their graphs. [10 hrs]</p>
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### Learning and Teaching Strategies

#### استراتيجيات التعلم والتعليم

<b>Strategies</b>	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 types of simple experiments involving some sampling activities that are interesting to the students.
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### Student Workload (SWL)

#### الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	63	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	4
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	62	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	4
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	<b>125</b>		

### Module Evaluation

#### تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	1	10% (10)	10	LO #1, #2 and #10, #11
	Assignments	1	10% (10)	12	LO #3, #4 and #6, #7
	Projects / Lab.	-	-	-	-
	Seminar	1	10% (10)	11	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (20)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

### Delivery Plan (Weekly Syllabus)

#### المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction – Limits and continuity
Week 2	Type of functions, domain and range
Week 3	Rules of derivatives
Week 4	Examples on differentiations
Week 5	Trigonometric Functions
Week 6	Inverse Trigonometric Functions
Week 7	Mid-term Exam + Graph of functions

<b>Week 8</b>	Graph of functions
<b>Week 9</b>	Chain rules
<b>Week 10</b>	Implicit differentiations
<b>Week 11</b>	Applications on differentiations
<b>Week 12</b>	Derivatives and graph the functions of hyperbolic functions.
<b>Week 13</b>	Derivatives and graph the inverse functions of hyperbolic functions.
<b>Week 14</b>	Derivatives and graph the functions of transcendental functions.
<b>Week 15</b>	Derivatives and graph the inverse functions of transcendental functions.
<b>Week 16</b>	<b>Preparatory week before the final Exam</b>

### Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
<b>Week 1</b>	-----

### Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>	Thomas' Calculus, Early Transcendentals by George B. Thomas	Yes
<b>Recommended Texts</b>	Calculus by Howard Anton	No
<b>Websites</b>	-----	

### Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
<b>Success Group (50 - 100)</b>	<b>A</b> - Excellent	امتياز	90 - 100	Outstanding Performance
	<b>B</b> - Very Good	جيد جدا	80 - 89	Above average with some errors
	<b>C</b> - Good	جيد	70 - 79	Sound work with notable errors
	<b>D</b> - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	<b>E</b> - Sufficient	مقبول	50 - 59	Work meets minimum criteria
<b>Fail Group (0 – 49)</b>	<b>FX</b> – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	<b>F</b> – 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.

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Physics Fundamentals</b>		Module Delivery
Module Type	Support or related learning activity		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>CE109</b>		
ECTS Credits	2		
SSWL (hr/sem)	33		
USSWL (hr/sem)	17		
SWL (hr/sem)	50		
Module Level	1	Semester of Delivery	
Administering Department	CE	College	GE
Module Leader	Mohammed Zuhear Abdulameer Al-Mulali	e-mail	mohammed.almulali@coeng.uobaghdad.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.
Module Tutor	Nazar Kamil Oukaili	e-mail	nazar.oukaili@coeng.uobaghdad.edu.iq
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/06/2023	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

<p><b>Module Objectives</b></p> <p>أهداف المادة الدراسية</p>	<p>20. To introduce the principles of thermal performance of construction materials and buildings.</p> <p>21. To introduce the principles of acoustic properties of buildings.</p> <p>22. The students will understand the hazards of buildings.</p>
<p><b>Module Learning Outcomes</b></p> <p>مخرجات التعلم للمادة الدراسية</p>	<p>The students will have a better understanding of the following fundamentals:</p> <ol style="list-style-type: none"> <li>1. Thermal performance of buildings which includes Heat transfer through materials, thermal insulation and its benefits, heat gain and heat loss estimation.</li> <li>2. Principles of natural ventilation, ventilation measurements, design of natural ventilation, and air-conditioning systems for different types of buildings.</li> <li>3. Acoustics, Classification of sound, Absorption coefficient and its determination, and Factors affecting acoustics of buildings and their remedies.</li> <li>4. Methods of sound absorptions, Absorbing materials, Noise and its measurements, Sound insulation and its measurements, Impact of noise in multistoried buildings.</li> <li>5. Hazards, Seismology and seismic waves, Earthquake ground motion, Basic concepts and estimation techniques, Site effects, Probabilistic and deterministic seismic hazard analysis, and Cyclone and flood hazards.</li> <li>6. Fire hazards and fire protection, Fireproofing of materials, Fire safety regulations and firefighting equipment, Prevention and safety measures. Protection against fire to be caused by A.C. Systems.</li> </ol>
<p><b>Indicative Contents</b></p> <p>المحتويات الإرشادية</p>	<p>Indicative content includes the following.</p> <p><u>Part A – Thermal Performance of Buildings</u></p> <p>Thermal performance of buildings, Heat transfer through materials, Thermal insulation and its benefits, Heat gain and heat loss estimation, Factors affecting the thermal performance of buildings, Thermal measurements, Principles of natural ventilation, Ventilation measurements, Design for natural ventilation, Air conditioning systems for different types of buildings. [16 hours]</p>

	<p><u>Part B – Acoustics</u></p> <p>Acoustics, Classification of sound, Absorption coefficient and its determination, Factors affecting acoustics of buildings and their remedies, Methods of sound absorptions, Absorbing materials, Noise and its measurements, Sound insulation and its measurements, Impact of noise in multistoried buildings [16 hours]</p> <p><u>Part C - Hazards</u></p> <p>Hazards, Seismology and seismic waves, Earthquake ground motion, Basic concepts and estimation techniques, Site effects, Probabilistic and deterministic seismic hazard analysis, Cyclone and flood hazards, Fire hazards and fire protection, Fire-proofing of materials, Fire safety regulations and firefighting equipment, Prevention and safety measures. Protection against fire to be caused by A.C. Systems. [16 hours]</p>
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### Learning and Teaching Strategies

#### استراتيجيات التعلم والتعليم

<b>Strategies</b>	<p>The main strategy adopted in this module is to increase the students' courage to participate in sharing their thoughts, participate in exercises and at the same time expand the grasp on their critical thinking skills and solution finding.</p> <p>This will be achieved through classes, interactive tutorials and exposing the students to factual examples that they can relate to their study.</p>
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### Student Workload (SWL)

#### الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	33	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعيا	2
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	17	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعيا	1

<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	<b>50</b>
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<b>Module Evaluation</b> تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
<b>Formative assessment</b>	<b>Quizzes</b>	1	10% (10)	5 , 9 and 14	LO #1- #6
	<b>Assignments</b>	1	10% (10)	4, 8, and 13	LO #1- #6
	<b>Seminar</b>	1	10% (10)	12	All
	<b>Report</b>	1	10% (10)	14	LO #1- #6
<b>Summative assessment</b>	<b>Midterm Exam</b>	<b>2hr</b>	<b>10% (10)</b>	8	LO #1 - #4
	<b>Final Exam</b>	<b>3hr</b>	<b>50% (50)</b>	16	All
<b>Total assessment</b>			100% (100 Marks)		

<b>Delivery Plan (Weekly Syllabus)</b> المنهاج الاسبوعي النظري	
	Material Covered
<b>Week 1</b>	Thermal performance of buildings, Heat transfer through materials, Thermal insulation and its benefits
<b>Week 2</b>	Heat gain and heat loss estimation, Factors affecting the thermal performance of buildings
<b>Week 3</b>	Thermal measurements, Principles of natural ventilation, Ventilation measurements
<b>Week 4</b>	Design for natural ventilation, Air conditioning systems for different types of buildings
<b>Week 5</b>	Acoustics, Classification of sound, Absorption coefficient and its determination

<b>Week 6</b>	Factors affecting acoustics of buildings and their remedies, Methods of sound absorptions
<b>Week 7</b>	Absorbing materials, Noise and its measurements, Sound insulation and its measurements
<b>Week 8</b>	Impact of noise in multi-storied buildings
<b>Week 9</b>	Hazards, Seismology and seismic waves, Earthquake ground motion
<b>Week 10</b>	Basic concepts and estimation techniques, Site effects
<b>Week 11</b>	Probabilistic and deterministic seismic hazard analysis
<b>Week 12</b>	Cyclone and flood hazards
<b>Week 13</b>	Fire hazards and fire protection, Fire-proofing of materials, Fire safety regulations and firefighting equipment
<b>Week 14</b>	Prevention and safety measures. Protection against fire to be caused by A.C. Systems
<b>Week 15</b>	Final Exam

### Learning and Teaching Resources

#### مصادر التعلم والتدريس

	Text	Available in the Library?
<b>Required Texts</b>	1. Budinski, K.G. & Budinski, M.K. "Engineering Materials Properties and Selection", Prentice Hall, 2009.	Yes
<b>Recommended Texts</b>	1. Alexander, D. "Natural disaster", Springer (1993). 2. Gaur R.K. and Gupta S.L., Engineering Physics. Dhanpat Rai publishers, 2012. 3. Reiter, L. "Earthquake hazard analysis – Issues and insights", Columbia University Press, 1991.	No
<b>Websites</b>		

### Grading Scheme

#### مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
<b>Success Group</b> <b>(50 - 100)</b>	<b>A - Excellent</b>	امتياز	90 - 100	Outstanding Performance
	<b>B - Very Good</b>	جيد جدا	80 - 89	Above average with some errors
	<b>C - Good</b>	جيد	70 - 79	Sound work with notable errors
	<b>D - Satisfactory</b>	متوسط	60 - 69	Fair but with major shortcomings
	<b>E - Sufficient</b>	مقبول	50 - 59	Work meets minimum criteria
<b>Fail Group</b> <b>(0 – 49)</b>	<b>FX – Fail</b>	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	<b>F – Fail</b>	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.