

# MODULE DESCRIPTION FORM

## نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	<b>Reinforced Concrete Design 3</b>		Module Delivery
Module Type	Elective		<input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Lecture <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	<b>CIV031</b>		
ECTS Credits	4		
SWL (hr/sem)	<b>100</b>		
Module Level	UGI	Semester of Delivery	7
Administering Department	CV101	College	College of Engineering
Module Leader	Dr. Atheer Faisal Al-Anbaki	e-mail	atheer.alanbaki@uoanabr.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	Ph.D.
Module Tutor		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	Reinforced concrete-I & Reinforced concrete-II	Semester	5 & 6
Co-requisites module	None	Semester	

## Module Aims, Learning Outcomes and Indicative Contents

### أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<b>Module Aims</b> أهداف المادة الدراسية	<ol style="list-style-type: none"> <li>1. Students will be exposed to advanced topics in Serviceability of reinforced concrete structures.</li> <li>2. Students will be exposed to advanced topics in the design of two-way slabs using advanced method</li> <li>3. Students will understand the code provisions for seismic design.</li> </ol>
<b>Module Learning Outcomes</b> مخرجات التعلم للمادة الدراسية	<ol style="list-style-type: none"> <li>1. Assess the serviceability of reinforced concrete structures under various loading.</li> <li>2. Design reinforced concrete two-way slabs using advanced methods.</li> <li>3. Identify and design various reinforced concrete systems such as shear walls and stairs.</li> <li>4. Understand the requirements for seismic design of reinforced concrete structures.</li> </ol>
<b>Indicative Contents</b> المحتويات الإرشادية	<p>Indicative content includes the following.</p> <p>Cracked and deflection, Shear walls, stairs, Yield line analysis and design (Virtual work) of slabs, strip method for slabs, code provisions for seismic design.</p>
<b>Learning and Teaching Strategies</b> استراتيجيات التعلم والتعليم	
<b>Strategies</b>	Lectures supported by modes developing material covered in lectures. These modes include theoretical lectures and problem-solving tutorials.

## Student Workload (SWL)

### الحمل الدراسي للطالب

<b>Structured SWL (h/sem)</b> الحمل الدراسي المنتظم للطالب خلال الفصل	63	<b>Structured SWL (h/w)</b> الحمل الدراسي المنتظم للطالب أسبوعياً	4.2
<b>Unstructured SWL (h/sem)</b> الحمل الدراسي غير المنتظم للطالب خلال الفصل	37	<b>Unstructured SWL (h/w)</b> الحمل الدراسي غير المنتظم للطالب أسبوعياً	2.5
<b>Total SWL (h/sem)</b> الحمل الدراسي الكلي للطالب خلال الفصل	100		

## Module Evaluation

### تقييم المادة الدراسية

	Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
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Formative assessment	Quizzes	5	15% (15)	2, 4, 6, 8, 10	All
	Assignments				
	Projects / Lab.				
	Report				
Summative assessment	Midterm Exam	3 hr	25% (25)	6 and 12	All
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

### Delivery Plan (Weekly Syllabus)

#### المنهاج الاسبوعي النظري

	Material Covered
Week 1	Serviceability (deflection)
Week 2	Serviceability (deflection)
Week 3	Serviceability (crack control)
Week 4	Strip Method for Slabs
Week 5	Strip Method for Slabs
Week 6	Strip Method for Slabs
Week 7	Concrete Building Systems (shear walls)
Week 8	Concrete Building Systems (shear walls)
Week 9	Concrete Building Systems (stairs)
Week 10	Concrete Building Systems (stairs)
Week 11	Yield Line Analysis for Slabs
Week 12	Yield Line Analysis for Slabs
Week 13	Seismic Design
Week 14	Seismic Design
Week 15	Review
Week 16	Preparatory week before the final Exam

### 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	Arthur H. Nilson, David Darwin, Charles W. Dolan, Design of Concrete Structures, McGraw-Hill, 14th ed., 2004.	Yes
Recommended Texts	Design of Reinforced Concrete. Jack McCormac, Fifth Edition, Wiley, 2008. Reinforced Concrete a Fundamental Approach, E.G. Nawy, Fifth Edition, Prentic	Yes
Websites	<a href="https://www.uoanbar.edu.iq/Bank-Section.php">https://www.uoanbar.edu.iq/Bank-Section.php</a>	

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.