Ministry of Higher Education and Scientific Research
Supervision and Scientific Evaluation Authority
Department of Quality Assurance and Academic Accreditation

Academic Program Description Form for Colleges and Institutes
Academic Year

University: Shatt Al-Arab
College/Institute: Engineering
Scientific Department: Civil Engineering
Date of Form Completion: 01/09/2025

Signature	**Signature**
Name of Head of Department:	**Name of Scientific Assistant**
Asst. Lecturer Nabeel Najm Abdullah	Dr. Jawad Kadhim

Reviewed by:
Quality Assurance and University Performance Division
Name of Division Director: Dr. Jasem Mohsen Yasser

Signature:

الدكتور
جاسم محسن ياسر
Dr.Jasim Al-Battat

جامعة شط العرب
كلية الهندسة
العمادة
SHATT AL-ARAB UNIVERSITY

أ.م.د.احسان قاسم محمد
عميد كلية الهندسة

Dean's Approval

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Reinforced concrete designs-1**			**Module Delivery**	
Module Type	**Core**			☐ **Theory** ☐ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**CE314**				
ECTS Credits	**10**				
SWL (hr/sem)	**250**				
Module Level	4		**Semester of Delivery**	2	
Administering Department	Type Dept. Code		**College**	Type College Code	
Module Leader			**e-mail**		
Module Leader's Acad. Title			**Module Leader's Qualification**		
Module Tutor			**e-mail**		
Peer Reviewer Name	Name		**e-mail**	E-mail	
Scientific Committee Approval Date	1/09/2025		**Version Number**	1.0	

Relation with other Modules العلاقة مع المواد الدراسية الاخرى			
Prerequisite module	Reinforced concrete designs-1	**Semester**	
Co-requisites module	None	**Semester**	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الارشادية	
Module Aims أهداف المادة الدراسية	A- Cognitive objectives A1- Apply basic knowledge in understanding the analysis and design of two-way reinforced concrete slabs. A2- Analyze and design different reinforced concrete columns with central and eccentric loading. A3- Apply methods for calculating the overlap distances of reinforcing steel and the span distance inside concrete beams when cutting a number of reinforcing bars. B- Course specific skill objectives. B1- Apply mathematical methods approved in international codes for analysis and design purposes. B2- Use basic knowledge to research new technologies. B3- Use simplified methods by relying on diagrams and tables to design columns subjected to central and eccentric loads.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• Readings, self-learning, panel discussions. • Exercises and activities in the lecture. • Homework. • Directing students to some websites to benefit and develop their capabilities. • Conducting seminars to explain and analyze a specific issue and find solutions to it
Indicative Contents المحتويات الارشادية	• Interacting within the lecture. • Homework and reports. • Short exams (quizzes). • Semester and final exams.
	• The usual theoretical presentation method using the writing board and depending on the style (how and why) of the subject and according to the curriculum of the subject. • The theoretical presentation method using the (data show) device and depending on the method (how and why) of the subject and according to the subject curriculum. • The method of laboratory display using special devices for measuring the different properties of the substance under experiment.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• The usual theoretical presentation method using the writing board and depending on the style (how and why) of the subject and according to the curriculum of the subject. • The theoretical presentation method using the (data show) device and depending on the method (how and why) of the subject and according to the subject curriculum. • The method of laboratory display using special devices for measuring the different properties of the substance under experiment.
	• Direct questions in a manner (how and why) for the subject during the theoretical and practical lecture. • Sudden exams during the theoretical and practical lecture. • Quarterly exams for the theoretical and practical side. • Final exams for the theoretical and practical side. D. General and Transferable Skills (other skills relevant to employability and personal development) D1- Develop the student's ability to perform the duties and deliver them on time D2 - Logical and programmatic thinking to find programmatic solutions to various problems D3 - developing the student's ability to dialogue and debate D4 - Develop the student's ability to deal with modern technology, especially the Internet

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ 15 اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	160	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	10
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	90	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	7.2
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	250		

Module Evaluation

تقييم المادة الدراسية

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

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction
Week 2	Introduction
Week 3	Introduction
Week 4	Introduction
Week 5	Working Stress Method
Week 6	Working Stress Method
Week 7	Flexural Beam Analysis And Design
Week 8	Flexural Beam Analysis And Design
Week 9	Application Examples
Week 10	Flexural Beam Analysis And Design
Week 11	Flexural Beam Analysis And Design
Week 12	Flexural Analysis And Design of T-Beams.
Week 13	Shear and Diagonal Tension in Beams.
Week 14	Shear and Diagonal Tension in Beams.
Week 15	Design and Analysis of slabs.
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	1-Structural Concrete Theory and Design, By Nadim Hasson ,Akthem Aktham Al manseer,6th Edition 2015	Yes
Recommended Texts	2- Reinforced concrete Design ,7th Edition 2007 By Chu K ai Wang	No
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.