

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: Oil and Gas engineer
Date of Form Completion: 01/09/2025



Signature
Name of Head of Department:

Prof. Dr. Emad Hassan Al-Khersan



Signature

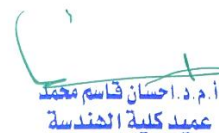
Name of Scientific Assistant: Dr. Jawad Kadhim

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

Signature:



الدكتور
جاسم محمد ياسر البتات
Dr. Jasim Al-Battat



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

Dean's Approval

MODULE DESCRIPTION FORM

Module Information				
معلومات المادة الدراسية				
Module Title	Engineering Geology		Module Delivery	
Module Type	Basic		☐ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	CE114			
ECTS Credits	6			
SWL (hr/sem)	75			
Module Level	1	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	None		e-mail	None
Peer Reviewer Name	None		e-mail	None
Scientific Committee Approval Date	01/09/2025	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	1. To outline the contribution of engineering geology to the civil and mining works 2. To explain the classical approach to solve an engineering geological problem 3. The extensive uses of engineering geology maps 4. The role and effect of engineering geology in the improvement of earth materials
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	The student will be trained to know the description of soil and rock masses for engineering purposes and is also expected to know the following: 1. Engineering geological maps and its applications. 2. Rock engineering properties and the geotechnical problems they cause. 3. The various techniques for soil and rock improvement.
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	
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Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ 15 اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	86	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	6
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	64	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	4.26
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	10% (10)	7,12	5, 6, 10, and 11
	Assignments	2	10% (10)	4, 14	1, 2, 11, and 12
	Projects / Lab.	1	10% (10)	Continuous	
	Report	1	10% (10)	13	3, 4, and 11
Summative assessment	Midterm Exam	2 hr	10% (10)	8	1-7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	An introduction to engineering geology
Week 2	Minerals and rocks
Week 3	Physical and mechanical properties of rocks
Week 4	Soil geology and properties
Week 5	Groundwater (Part 1)
Week 6	Groundwater (Part 2)
Week 7	Geology maps
Week 8	Mid-term Exam
Week 9	Topography maps (Part 1)
Week 10	Topography maps (Part 2)
Week 11	Soil investigations (Part 1)
Week 12	Soil investigations (Part 2)
Week 13	Geological principles for the selection of foundations (problems of foundations)
Week 14	Geological investigation of building materials and road paving
Week 15	Preparatory Week
Week 16	Final Exam

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Introduction
Week 2	Discovery of metal
Week 3	Discovery of rocks
Week 4	Geology maps
Week 5	Topography maps
Week 6	Final Exam
Week 7	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Engineering Geology by Dr. Majeed Al-Taa'e	Yes
Recommended Texts	ENGINEERING GEOLOGY by Sabinoy Gangopadhyay	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.