

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
Date of Form Completion: 01/09/2025



Signature
Name of Head of Department:

Asst. Lecturer Nabeel Najm Abdullah



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

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Engineering Mechanics 2		Module Delivery
Module Type	Core		☐ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	CE113		
ECTS Credits	8		
SWL (hr/sem)	180		
Module Level		1	
Administering Department		Type Dept. Code	College
Module Leader		e-mail	
Module Leader's Acad. Title		Module Leader's Qualification	
Module Tutor	Name (if available)		e-mail
Peer Reviewer Name		e-mail	
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	The study of Engineering Mechanics aims to enable students to understand the basic principles of force analysis and equilibrium, and apply them in the analysis and design of bridges and buildings to ensure safety and sustainability. The course also teaches scientific engineering methods for dealing with friction, the centroid of stationary bodies, and determining their moment of inertia.		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Apply knowledge of basic sciences, particularly mathematics and physics, to identify, formulate, and solve civil engineering problems, including understanding friction, methods of deriving motion, determining the centroid of regular and irregular shapes, and calculating the moment of inertia for regular and irregular shapes to assist in civil engineering analysis and design.		
Indicative Contents المحتويات الإرشادية	The objectives of CE113 (Engineering Mechanics) are to learn the fundamental principles of mechanics and develop problem-solving skills by applying these principles to basic engineering problems. Specific topics covered include: friction and its effects on bodies, determining the centroid for regular and irregular shapes, and calculating the moment of inertia for various shapes.		

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	This unit is taught using a strategy that encourages students to participate in discussions, solve exercises, and simultaneously refine and expand their critical thinking skills. This will be achieved through lectures, interactive lessons, and consideration of small projects involving activities of interest to students.

Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ 15 اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	142	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	10
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	108	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)		
	Assignments	2	10% (10)		
	Projects / Lab.	1	10% (10)		
	Report	1	10% (10)		
Summative assessment	Midterm Exam	2 hr	10% (10)		
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Friction
Week 2	Friction
Week 3	Friction
Week 4	Friction
Week 5	Friction
Week 6	Friction
Week 7	Centroid
Week 8	Centroid
Week 9	Centroid
Week 10	Centroid
Week 11	Centroid
Week 12	Moment of Inertia
Week 13	Moment of Inertia
Week 14	Moment of Inertia
Week 15	Moment of Inertia
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الأسبوعي 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	- Vector Mechanics for Engineers, Ferdinand P. Beer Statics and Dynamics - Engineering Mechanics: by R. C. HIBBELER - Engineering Mechanics: Statics and Dynamics; by Archie Higdon and William B. Stiles. - Theory and Problems of Engineering Mechanics: Statics and Dynamics; by Mclean and Nelson. - Engineering Mechanics : Dynamics; 5th Edition by R. C. Hibbeler.	Yes
Recommended Texts		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 (فقد 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.