MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية					
Module Title	**Construction management & Engineering Economy**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☒ **Lecture** ☐ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**CIV013**				
ECTS Credits	**7**				
SWL (hr/sem)	**175**				
Module Level		UGIV	**Semester of Delivery**		5
Administering Department		CV105	**College**	Civil Engineering College	
Module Leader	Saadi Shartooh Sharqi		**e-mail**	eng.saadish@uoanbar.edu.iq	
Module Leader's Acad. Title		Lecturer	**Module Leader's Qualification**		M.Sc.
Module Tutor			**e-mail**	E-mail	
Peer Reviewer 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	
Module Aims أهداف المادة الدراسية	1. Perform in the construction industry. 2. To study project planning & scheduling 3. Allocate the resources in project and control 4. Learn project deliveries and the types of contract 5. Helping to take the most economical decision regarding construction projects. 6. Assistance in making the most economical decision regarding investment projects 7. Determine basic resource needs for projects 8. Find alternatives between projects.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. To introduce a concepts of projects formulation 2. To impart the idea about planning and scheduling of activities. 3. To introduce the concepts of resource planning , allocation and control. 4. To provide a bird's eye view of optimization techniques. 5. learn the basics of engineering economics. 6. recognize the concepts of economic materials. 7. expand understanding, knowledge and economic analysis. 8. develop creative and critical thinking skills.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. **Chapter one** Introduction : Management, - Engineering Management, Engineering Project Management, Programming construction projects ((project scheduling)), Projective of planning project : [6 hrs] **Chapter Two** Method Of Planning, Construction Activity, [6 hrs] **Chapter Three** Net Work Analysis Method • Activity On Arrow (A.O.A)تنفيذ الفعاليات على الأسهم • Activity On Nods (A.O.N)تنفيذ الفعاليات على العقد **Chapter Four** Line Of Balance Methodطريقة خط التوازن [6 hrs] **Chapter Five** Program Evolution Review Techniques Methodطريقة بيرت [6 hrs] **Chapter Six** Time Grade Methodطريقة المشبك الزمني [6 hrs]

	Chapter Seven البرنامج الفوري Crash Program, [6 hrs] **Chapter Eight** Resource Allocation(المصادر) برمجة الموارد [6 hrs] **Chapter Nine** Concept of Engineering Economics, Cash flow, Break-Even Analysis, Depreciation, [10 hrs] **Chapter Ten** Interest Formulas , Time Value of Money ,. Present worth method of comparison, . Future worth method, Annual equivalent method, Inflation, [8 hrs]

Learning and Teaching Strategies
استراتيجيات التعلم والتعليم

Strategies	Foundation engineering courses require effective learning and teaching strategies to ensure students develop a strong understanding of complex concepts and their practical applications. The range of strategies that can enhance the learning experience for students in foundation engineering courses. These strategies include lecture-based teaching, practical applications, problem-solving assignments, group work and discussions, technology integration, field trips and site visits, guest speakers, assessments and feedback, continuous learning, and encouraging self-directed learning. By incorporating these strategies, educators can create an engaging and comprehensive learning environment that equips students with the knowledge, skills, and critical thinking abilities necessary for success in the field of Construction management & Engineering Economy.

Student Workload (SWL)
الحمل الدراسي للطالب

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5.2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6.47
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation
تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	4	10% (10)	3, 6,10,14	LO #1, 3,5, and 7
	Assignments	2	5% (5)	2, 12	LO # 4 and 7

	Projects / Lab.	1			
	Report	1	5% (5)	13	LO # 2,6 and 7
Summative assessment	**Midterm Exam**	2 hr	20% (20)	7	LO # 1-7
	Final Exam	3hr	60% (60)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	Material Covered
Week 1	Management, Introduction, definition
Week 2	Method Of Planningأنواع طرق تخطيط المشروع Bar Chart Method طريقة المخطط الشريطي.
Week 3	Net Work Analysis Method • Activity On Arrow (A.O.A)تنفيذ الفعاليات على الأسهم • Activity On Nods (A.O.N)تنفيذ الفعاليات على العقد
Week 4	Line Of Balance Methodطريقة خط التوازن
Week 5	Program Evolution Review Techniques Methodطريقة بيرت
Week 6	Time Grade Methodطريقة المشبك الزمن
Week 7	Crash Programالبرنامج الفوري
Week 8	Resource Allocation(المصادر) برمجة الموارد
Week 9	Mid-term Exam
Week 10	Concept of Engineering Economics
Week 11	Cash flow
Week 12	Break-Even Analysis
Week 13	Depreciation
Week 14	Interest
Week 15	Inflation
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Lab 1:
Week 2	Lab 2:
Week 3	Lab 3:
Week 4	Lab 4:
Week 5	Lab 5:
Week 6	Lab 6:
Week 7	Lab 7:

Learning and Teaching Resources
مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	● كتاب إدارة المشاريع الانشائية للمؤلف احسان العطار ((عربي)) ● Engineering Economy – R. Panneerselvam	Yes
Recommended Texts	● الادارة والاقتصاد الهندسي. د. انور نعيم قصيرة و د. جورج يوسف حلبي وحيدر اسماعيل اللعيبي ● principles of construction management – Roy Pilcher. ● المفاهيم الإدارية الحديثة للمؤلف الدكتور فؤاد الشيخ واخرون ● إدارة المشاريع ((منهج كمي)) للدكتور محمود العبيدي ودكتور مؤيد	Yes
Websites	https://www.uoanbar.edu.iq/staff-page.php?ID=727	

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.