

Kurdistan Region Government Ministry of Higher Education and Scientific Research Erbil Polytechnic University



Module (Course Syllabus) Catalogue 2023-2024

College/ Institute	Erbil Technology College			
Department	Construction and Materials Technology			
Department	Engineering (CMTE)			
Module Name	CONSTRUCTION MANAGEMENT			
Module Code	COM 353			
Dograo	Technical Diploma Bachelor X			
Degree	High Diploma Master Ph.D.			
Semester	Semester 5 (S₅)			
Qualification	Ph.D. in Civil/Environmental Engineering			
Scientific Title	Assistant Professor			
ECTS (Credits)	6			
Module type	Prerequisite Core X Assist.			
Weekly hours	4 hrs.			
Weekly hours (Theory)	(2)hr Class (2)Total hrs Workload			
Weekly hours (Practical)	(2)hr Class (161)Total hrs Workload			
Number of Weeks	16			
Lecturer (Theory)	Assist. Prof. Dr.Abdulfattah Ahmad Amin			
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Lecturer (Practical)	Assist. Prof. Dr.Abdulfattah Ahmad Amin			
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Websites	/			



Corse Description	In the Proposed Changes to the 2020-2021 Criteria for Accrediting Engineering Programs, ABET defines engineering design as "the process of devising a system, component or process to meet desired needs, specifications, codes and standards within constraints such as health and safety, cost, ethics, policy, sustainability, constructability, and manufacturability. It is an iterative, creative, decision-making process in which the basic sciences, mathematics, and the engineering sciences are applied to convert resources optimally into solutions." 1 This semester course strives to provide students with practice while learning the basic concepts of engineering management. The course consists of a Four hours lecture period once per week to the entire class of students on topics necessary to engineering design and engineering management. There are also one- and one-half hour laboratory sections each week given to three separate sections in which students work in teams and at computers in a computer lab. on tutorials and team design activities. In the first semester, Engineering management majors at this university are also taking their math and basic sciences courses in their first year. Students learn about teaming and team management project management techniques, design for the environment, standards and regulations, engineering ethics, and receive instruction in technical writing and oral presentation using PowerPoint. Teaming is a section of the Leadership and Organizational Management domain as identified in the Engineering Management Body of Knowledge (EMBOK). The Management of Technology, Research and Development Domain in the EMBOK. Standards and regulations fall under the Legal Issues in Engineering Management Domain.
Course objectives	 The general objectives of this module are: Understand the theory of Engineering (construction) management to tackle real live engineering problems. Apply principles of statics to solve engineering problems. Involve in team working and collaborate with colleagues.
Student's obligation	To pass this module the students should attend all lectures and complete all tests, exams and assignments.
Required Learning Materials	Forms of teaching Oral presentations lectures, Group discussions, Seminars, Problem-solving based learning, Project based learning.

	Task		Weight (Marks)	Due Week	Relevant Learning Outcome
]	Paper Review	/		
Evaluation	Assignments	Homework	10	1-12	Improve to solving problems
		Class Activity	6	1-12	To analyze and solve engineering management problems
		Report	8		To learn how to write technical reports
		Seminar	8	1-12	Improve the ability of presentation
		Essay	/		
		Project	/	1-12	
	Quiz		8	1-12	
	Lab.		/		
	Midterm Exam		20	1-12	
	Final E	xam	40	1-12	
	Total		100		
	<u>C</u>	n successful comple	tion of this mo	dule the le	earner will be
Specific learning outcome:	 Recognize basic concepts of construction management. Graduates will demonstrate the ability to communicate effectively both orally and in writing. Graduates will demonstrate knowledge of the legal and ethical environment impacting business organizations and exhibit an understanding and appreciation of the ethical implications of decisions. Graduates will demonstrate an understanding of and appreciation for the importance of the impact of globalization and diversity in modern organizations. Graduates will demonstrate an ability to engage in critical thinking by analyzing situations and constructing and selecting viable solutions to solve problems. 				

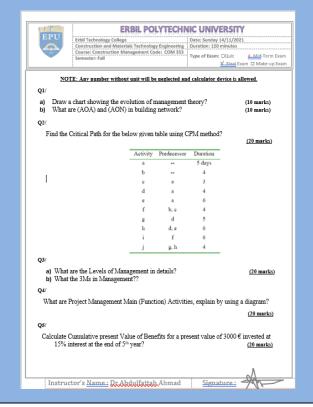
	6. Graduates will demonstrate an ability to work effectively			
	with others.			
	7. Graduates will demonstrate knowledge of current			
	information, theories and models, and techniques and			
	practices in all of the major business disciplines including			
	the general areas of Accounting and Finance, Information			
	Technologies, Management, Marketing, and Quantitative			
	Analysis.			
	- Lecture notes.			
	- 1) Managing Engineering and Technology,			
Course References:	- Daniel L. Babcock and Lucy C. Morse,			
	- Prentice Hall, 2002.			
	- 2) Lecture notes of Prof. B. Gültekin Çetiner,			
	- Department of Industrial Engineering,			
	- Istanbul Technical University, 2011.			

Course topics (Theory)	Week	Learning Outcome
INTRODUCTION TO ENGINEERING MANAGEMENT	Week 1	1
Project Planning	Week 2	1 , 2 and 7
Project Definition	Week 3	3 and 7
Project Management I	Week 4	3
Project Management II	Week 5	1,2, 4 and 7
Project Planning - Critical Path Method I	Week 6	2, 3 , 4 and 5
Midterm Examination	Week 7	
Midterm Examination	Week 8	
Project Planning – CPM II	Week 9	4 , 5 and 6
Project Name and Code	Week 10	5, 6 and 7
Important Properties of Projects	Week 11	4,7

Project Management Principles	Week 12	4, 5 and 6
(Gantt Chart)	Week	4, 5 and 6
	13 Week	-
Pert Chart	14	2, 7
Final Examination	Week 15	
Final Examination	Week 16	
Practical Topics	Week	Learning Outcome
N.A		

- Examinations (question design):

The following is an example of the examination and its answer:



- - Extra notes:	
This Course catalogue has been prepared by: 1- Assist. Prof. Dr. Abdulafattah Ahmed Amin.	
- External Evaluator: Assist. Prof. Dr. Ganjeena Jalal Medhat	