هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

2023
TP-153

Course Specification
(Bachelor)

Course Title:	**Project Management**
Course Code:	**GE1401**
Program:	**Electrical Engineering**
Department:	**Civil Engineering Department**
College:	**College of Engineering**
Institution:	**Imam Mohammad Ibn Saud Islamic University**
Version:	**V5**
Last Revision Date:	01-01-2025

Table of Contents

A. General information about the course:

1. Course Identification

1. Credit hours: (4 Credit hours)					
2. Course type					
A.	☐University	☒ College	☐ Department	☐Track	☐Others
B.	☒ Required		☐Elective		
3. Level/year at which this course is offered: (7th level / 4th year)					
4. Course general Description:					
This course concentrates on the general methodology of managing a technical project from concept to operational use, with emphasis on the functions, roles, and responsibilities of the project manager. Topics include professional aspects of project management, business factors affecting the project, the manager, and the project organization. The course emphasizes planning, scheduling, using networks, execution and communications, project lifecycle, risk analysis, interface management, design review, design control assessment, reporting, and reaction to critical problems. Further emphasis is on project resources: money, labor, material, and equipment utilization. Discussions focus on cost estimation, pricing and contracting, planning and cost control, monitoring, and management systems.					
5. Pre-requirements for this course (if any):					
STAT 1215					
6. Co-requirements for this course (if any):					
None					
7. Course Main Objective(s):					
1. To develop an understanding of key principles and practices of project management as employed in the industry. 2. To foster an in-depth understanding of all aspects of a project from inception to its occupancy and lifecycle. 3. To develop important concepts in areas of project scope, schedule, cost, quality, resources, communication, risk, procurement, and stakeholder management.					

2. Teaching mode (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	Traditional classroom	50	100%
2	E-learning		
3	Hybrid		

No	Mode of Instruction	Contact Hours	Percentage
	• Traditional classroom • E-learning		
4	Distance learning		

None

3. Contact Hours (based on the academic semester)

No	Activity	Contact Hours
1.	**Lectures**	40
2.	**Laboratory/Studio**	
3.	**Field**	
4.	**Tutorial**	10
5.	**Others (specify)**	
Total		50

B. Course Learning Outcomes (CLOs), Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
1.0	**Knowledge and understanding**			
1.1	Recognize basic specific terminology of project management, scope, and schedule management. Recognize professional and ethical responsibility related to project management processes, standard for project management, and in submitting assignments or project as well as during exams.	**K. 1**	Lectures, Discussion, Tutorials	Grading of Quizzes, Mid-semester, and Final Exams
...				
2.0	**Skills**			
2.1	Solve complex engineering problems	**S. 1**	Lectures, Discussion,	Grading of Quizzes, Mid-

Code	Course Learning Outcomes	Code of CLOs aligned with program	Teaching Strategies	Assessment Methods
	related to project budget, cost estimate, s-curve, and progress reports as well as apply earned value method (EVM).		Tutorials	semester, and Final Exams
2.2	Identify Work Breakdown Structure (WBS) and create and update schedule. Also analyze and apply project management techniques and methods in resource leveling, least cost scheduling, and risk management.	**S. 2**	Lectures, Discussion, Tutorials	Grading of Quizzes, Mid-semester, and Final Exams
2.3	Communicate effectively during class discussions as well as on the semester project and deliver presentation by using project management methods and techniques	**S. 4**	Coursework Assignments / Group Project, Discussion	Coursework Project presentation
3.0	**Values, autonomy, and responsibility**			
3.1	Apply new knowledge related to standards for project management including initiating process, planning process, executing process, monitoring, and controlling, and closing process.	**V. 2**	Lectures, Discussion, Tutorials, Personal study	Grading of Quizzes, Mid-semester, and Final Exams

C. Course Content

No	List of Topics	Contact Hours
1.	Introduction, The Environment in Which Projects Operate, Nature of Project Management, Relationship Between Projects and Other Production Systems, Difference between Engineering and Management	1
2.	Role of the Project Manager, Characteristics of Projects, Function of Project Manager, Life Cycle of a Project, Factors that Affect Success of a Project,	3
3.	Project Integration Management, Integration, Project Charter, Project Plan, Scope, Time, Cost, Quality, Resource, Communication, Risk and Procurement Management, Close Project	4
4.	Project Scope Management, Organizational Structure of a Project, Types of Organizational Structures, Organizational Breakdown Structures (OBS), Work Breakdown Structure (WBS) of a Project	5
5.	Project Schedule Management, Defining Activities, Managing Relationships, Gantt Chart, Activity on Arrow and Node Network Approach, Lead and Lag Relationships, Critical Path Method, develop schedule / Project Time Management, Dealing with Uncertainty, PERT	6
6.	Project Resource Management	9
7.	Project Cost Management, Estimate Cost, Determine Budget, Techniques for Managing the Budget, Control cost	7
8.	Project Quality Management	8
9.	Project Procurement Management, Project Stakeholder Management	12, 13
10.	Project Communication Management, Project Risk Management	10, 11
11.	Project Control- Common form of Project Control, Cost and Schedule Control, Reporting progress, Earned Value Method,	7
Total		**50**

D. Students Assessment Activities

No	Assessment Activities *	Assessment timing (in week no)	Percentage of Total Assessment Score
1.	Quiz	3rd or 4th	5%
2.	Term Project	10th	5%
3.	Mid-I Exam	4th or 5th	25%
4.	Mid-2 Exam	8th or 9th	25%
5.	Final Exam	As per the Uni. Schedule	40%
	Total		100%

*Assessment Activities (i.e., Written test, oral test, oral presentation, group project, essay, etc.).

E. Learning Resources and Facilities

1. References and Learning Resources

Essential References	A Guide to the Project Management Body of Knowledge PMBOK Guide, 6th Edition, Project Management Institute, 2017
Supportive References	• Project Management: A Managerial Approach by Jack R. Meredith, Samuel J. Mantel Jr., Scott M. Shafer, John Wiley & Sons, 11th Edition, 2021. • Project Management (Process, Methodologies, and Economics) by Avraham Shtub, Jonathan F. Bard, Shlomo Globerson, Pearson, 3rd Edition, 2017 • Project Management: The Managerial Process by Clifford F. Gray & Erik W. Larson, McGraw Hill, 8th Edition, 2020 • Project Management: A System Approach to Planning, Scheduling, and Controlling by Kerzner, Harold. John Wiley & Sons, 13th Edition, 2022.
Electronic Materials	https://ascelibrary.org/journal/jmenea
Other Learning Materials	https://www.microsoft.com/en-us/download/details.aspx?id=53048 http://download.cnet.com/Microsoft-Project-Professional-2010-64-Bit/3000-2076_4-75451125.html https://www.oracle.com/applications/primavera/products/project-management.html

2. Required Facilities and equipment

Items	Resources
facilities (Classrooms, laboratories, exhibition rooms, simulation rooms, etc.)	A classroom and computer lab of size that can accommodate 35 students is fine.
Technology equipment (projector, smart board, software)	Multimedia Support, Smart Board, Overhead Projectors for Lectures, and Microsoft office software
Other equipment (depending on the nature of the specialty)	Computer Lab with installed Primavera P6 professional

F. Assessment of Course Quality

Assessment Areas/Issues	Assessor	Assessment Methods
Effectiveness of teaching	Course evaluation survey	Indirect method – Course evaluation survey is conducted by the University
Effectiveness of Students' assessment	Program Chair	Assessment grades are reviewed by the Program Chair
Quality of learning resources	Course evaluation survey	Indirect method – Course evaluation survey is conducted by the University

Assessment Areas/Issues	Assessor	Assessment Methods
The extent to which CLOs have been achieved	Faculty Member	Direct evaluation by the instructor based on the student performance.
Other		

Assessors (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

Assessment Methods (Direct, Indirect)

G. Specification Approval

COUNCIL /COMMITTEE	Construction Engineering and Management - Focus Group
REFERENCE NO.	
DATE	26 Nov 2024