

**DEPARTMENT OF INDUSTRIAL ENGINEERING
COURSE SYLLABUS**

<i>COURSE TITLE</i>	<i>ENGLISH CODE/NO</i>	<i>ARABIC CODE/N O.</i>	<i>CREDITS</i>			
			<i>Th.</i>	<i>Pr.</i>	<i>Tr.</i>	<i>Total</i>
Project Management	IE 415	هـ ص ٤١٥	3	1	-	3
<i>Pre-requisites:</i>	IE 351					
<i>Course Role in Curriculum</i>	<i>Required or Elective:</i>		Elective			
<i>Catalogue Description:</i> Introduction to engineering project management. Planning successful projects. Specifying, budgeting, implementing, executing, scheduling, delivery options, and closeout. Scheduling tasks and resources. Resource leveling. Common characteristics of projects. Network tools for project planning and monitoring. Cost optimization to meet project objectives. Project crashing, time-cost trade-offs. Risk analysis. Software for project planning and scheduling						

Textbooks:

PROJECT MANAGEMENT: A MANAGERIAL APPROACH, Meredith, Jack R. and Mantel, Samuel J. Jr. (2008), 7th Edition, John Wiley and Sons. ISBN-13:9780470226216

References:

- **A GUIDE TO THE PROJECT MANAGEMENT (2004) BODY OF KNOWLEDGE**, Project Management Institute (2004) Third Edition (PMBOK® Guide), An American National Standard ANSI/PMI 99-001-2004 Four Campus Boulevard, Newtown Square, PA 19073-3299 USA.
- **PROJECT MANAGEMENT: A SYSTEMS APPROACH TO PLANNING, SCHEDULING, AND CONTROLLING**, Kerzner, Harold. (2001), 7th Edition. John Wiley and Sons New York.

Supplemental Materials:

Course Learning Outcomes:

By the completion of the course the student should be able to:

1. Understand the role of project managers in a developing country.
2. Learn how to initiate a project determining project goals, deliverables, and process outputs.
3. Acquire practical knowledge on managing project scope, schedule, and resources, document constraints, assumptions.
4. Define budgets, refine time and costs, estimates, and establish project controls.
5. Measure performance, take corrective action, evaluate its effectiveness, and ensure plan compliance.
6. Get acquainted with popular software used by project management professionals.
7. Facilitate closure, preserve product records and tools and release resources.

<u>Topics to be Covered:</u>		<u>Duration in Weeks</u>
1	Introduction to Engineering Project Management. Planning successful projects.	1
2	Specifying, budgeting, implementing, executing, scheduling, delivery options and closeout.	2
3	Common characteristics of projects	1
4	Resource levelling. Scheduling tasks and resources.	2
5	Network tools for project planning and monitoring	2
6	Project crashing, time-cost trade-offs.	2
7	Cost optimization to meet project objectives.	
8	Project risk management. Risk management planning. Risk Identification.	1
9	Qualitative Quantitative Risk Analysis. Risk Response Planning. Risk Monitoring and Control	1
10	Software for project planning, scheduling and cost estimation. MS Project, Prima-Vera, and Timberline.	2

Student Outcomes addressed by the course: (Put a \checkmark sign)

(a)	an ability to apply knowledge of mathematics, science, and engineering	\checkmark
(b)	an ability to design and conduct experiments, as well as to analyze and interpret data	\checkmark
(c)	an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	
(d)	an ability to function on multidisciplinary teams	
(e)	an ability to identify, formulate, and solve engineering problems	\checkmark
(f)	an understanding of professional and ethical responsibility	
(g)	an ability to communicate effectively	
(h)	the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	
(i)	a recognition of the need for, and an ability to engage in life-long learning	
(j)	a knowledge of contemporary issues	
(k)	an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.	

Key Student Outcomes assessed in the course: () and ()

Instructor or course coordinator: Dr. Muhammad Ehsan Ulhaque

Last updated: Jan. 2015