

**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>
Industrial Information Systems	IE 421	حص ٤٢١	3	1	-	3
<i>Pre-requisites:</i>	IE 323					
<i>Course Role in Curriculum</i>	<i>Required or Elective:</i>		Elective			
<i>Catalogue Description:</i> General concepts. Values and attributes of information. Different types of information systems. Concepts of managerial information systems. Analysis, design and development of industrial information systems. Developing information systems by using microcomputers.						

Textbooks:

MANAGEMENT INFORMATION SYSTEMS – MANAGING THE DIGITAL FIRM,
Laudon&Laudon, Prentice Hall: ISBN: 0-13-153841-1

References:

- **MANAGEMENT INFORMATION SYSTEMS**, Effy OzThomson: ISBN 0-619-21538-0
- Class notes and handouts material by the instructor is available on website at <http://elearning.alhaque.com>. The site requires registration by the students.

Supplemental Materials:

Course Learning Outcomes:

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

1. Explain the importance of Information Systems for business & management.
2. Identify ethical implications of Information Systems.
3. Describe how enterprise applications promote business process integration.
4. Identify how to improve organizational performance with Information Systems.
5. Explain the Strategic Role of Information Systems in Organizations.
6. Analyze how internet technology has changed value propositions and business models.
7. Identify the challenges posed by enterprise applications and management solutions.
8. Describe how building new systems produce organizational change.
9. Demonstrate harmony by communicating effectively in multi-disciplinary teams.
10. Deliver clear oral and written presentation using visual aids.
11. Demonstrate Information Systems' fundamentals during class project using computers.

<u>Topics to be Covered:</u>		<u>Duration in Weeks</u>
1	Introduction to Information Systems	1½
2	Information Systems for Competitive Advantage	1
3	Using Information Technology to Engage in Electronic Commerce	1½
4	System Users and Developers	1½
5	Systems Development	2
6	Information in Action	1½
7	Information Security	1½
8	Ethical Implications of Information Technology	1½
9	Decision Support Systems	2
10	Web /HTML Project Using Microsoft FrontPage – I	1½
11	Web/HTML Project Using Microsoft FrontPage - II	1½
12	Class Project	1

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

(a) an ability to apply knowledge of mathematics, science, and engineering	
(b) an ability to design and conduct experiments, as well as to analyze and interpret data	√
(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	√
(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