

**DEPARTMENT OF INDUSTRIAL ENGINEERING  
COURSE SYLLABUS**

<i>COURSE TITLE</i>	<i>ENGLISH CODE/NO</i>	<i>ARABIC CODE/NO.</i>	<i>CREDITS</i>			
			<i>Th.</i>	<i>Pr.</i>	<i>Tr.</i>	<i>Total</i>
<b>Special Topics in Industrial Engineering</b>	<b>IE 490</b>	حص ٤٩٠	3	1	-	3
<i>Pre-requisites:</i>	Department Approval					
<i>Course Role in Curriculum</i>	<i>Required or Elective:</i>		Elective			
<i>Catalogue Description:</i> In-depth study of relevant industrial engineering topics not covered in other courses of the program in order to enhance students' knowledge in the field of industrial engineering.						

**Textbooks:**

- **NEW VENTURE CREATION: ENTREPRENEURSHIP FOR THE 21ST CENTURY**, Jeffry A. Timmons and Stephen Spinelli, ISBN: 0072498404, Irwin/McGraw-Hill, 6<sup>th</sup> Ed, (2004).
- **ENTREPRENEURSHIP: THEORY, PROCESS, AND PRACTICE (WITH INFOTRAC)**, Donald F. Kuratko and Richard M. Hodgetts, ISBN: 0324258267, South-Western College Pub; 6<sup>th</sup> Ed (2003).
- **GETTING STARTED IN ENTREPRENEURSHIP**, Jack M. Kaplan, (2001), John Wiley, ISBN: 0-471- 9456-X.
- Class notes/handout material provided by instructor.
- Web-page for the Course: Group name: ent1-kau; Group home page: <http://groups.yahoo.com/group/ent1-kau> ; Group email: [ent1-kau1@yahoogroups.com](mailto:ent1-kau1@yahoogroups.com)

**References:**

None

**Supplemental Materials:**

**Course Learning Outcomes:**

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

1. Explain the entrepreneurial traits and skills.
2. Select and evaluate a business idea against a personal vision involving lifestyle, and professional and financial goals.
3. Manage a small/medium scale industry in terms of human resource management (HRM), marketing, finance and project management, and successfully interact with experts in the field for developing an understanding of the practical aspects of the entrepreneurship.
4. Apply analytical and critical thinking skills to determine the feasibility of a business concept and build an effective and persuasive case for the feasibility of a

selected business concept.  
 5. Prepare a technically and financially viable project proposal for submission to financial institutions for approval to start an entrepreneurial venture.

<b><u>Topics to be Covered:</u></b>		<b><u>Duration in Weeks</u></b>
1	Introduction to entrepreneurship	0.5
2	Introduction to small & medium scale industries	0.5
3	Product selection	1
4	Management of small/medium scale industries: human resource management	1
5	Management of small/medium scale industries: marketing	1
6	Management of small/medium scale industries: financial management	3
7	Project management	1.5
8	Feasibility studies: operational aspects	1
9	Feasibility studies: technological aspects	0.5
10	Prototype development	4

**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. Hisham M Alidrisi

***Last updated:*** Jan. 2015