

FACULTY OF ENGINEERING - DEPARTMENT OF MECHANICAL ENGINEERING PRODUCTION AND MECHANICAL SYSTEMS DESIGN PROGRAM COURSE SYLLABUS						
COURSE TITLE	ENGLISH CODE /NO	ARABIC CODE/NO.	UNITS			
			Th.	Pr.	Tr.	CU
Cooperative Work Program	MENG 400	٤٠٠ هـ م	-	-	1000	8
Pre-requisites		-				
Course Role in Curriculum		Required or Elective:		Required for Co-op track		
		A pre-requisite for:		None		
1000 hours (25-weeks) of supervised hands-on work experience at a recognized firm in a capacity which ensures that the student applies his engineering knowledge and acquires professional experience in his field of study at KAU. The student is required to communicate, clearly and concisely, training details and gained experience both orally and in writing. The student is evaluated based on his abilities to perform professionally, demonstrate technical competence, work efficiently, and to remain business focused, quality oriented, and committed to personal professional development.						

Faculties and departments requiring this course (if any): none

**Textbook:** None

**Course Learning Outcomes By completion of the course, the students should be able to:**

- CLO\_1 Recognize the value of work, time, and teamwork; and practice professional attitudes.
- CLO\_2 Apply technical report writing skills and oral/ visual presentations skills.

**Topics Covered During the Course [CLO] [STUDENT OUTCOME] [Duration in Weeks]:**

Topic	CLO	Student Outcomes	Weeks
T1: Enhancement of Student Engineering Skills Experience and Providing Exposure to Real Life Engineering Professional Practices before Graduation	1	f	22
T2: Application of Communication Skills	2	g	6.0

**Course Schedule:**

- Lecture: None
- Tutorials: None

**Course Contribution to professional Component:**

- Engineering science: 0%
- Engineering design: 0%

**Course Relationship to Student Outcomes:**

MENG 400 (Coop Work Program)											
Student Outcomes	a	b	c	d	e	f	g	h	i	j	k
Highest Attainable Level of Learning*						<b>K (F)</b>	<b>K (F)</b>				

K: Key outcome, F: Formative assessment, S: Summative assessment, X: Related outcome (at low level, Introduced or Reinforced levels) but not assessed.

## CRITERION 3. STUDENT OUTCOMES

### ***A. Student Outcomes***

The Mechanical Engineering (Thermal Engineering and Desalination Technology) Program (MEP program) faculty have adopted the engineering criteria (a)-(k) Student Outcomes.

- 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.
- d) an ability to function on multi-disciplinary 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) a recognition of the need for broad education necessary to understand the impact of engineering solutions in a global 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.

As described in the Criterion 2 section, both these outcomes and the program educational objectives are available to the general public and documented at:

<http://meng.kau.edu.sa/Pages-OutcomesE.aspx>

as well as in the undergraduate Bulletin of the Faculty of Engineering at:

<http://engineering.kau.edu.sa/Pages-BulletinE-2014.aspx>

They are also posted on the bulletin boards in and around the premises of the Department of Mechanical Engineering.

### ***B. Relationship of Student Outcomes to Program Educational Objectives***

Table 3-1 maps the Student Outcomes onto the MEP Program Educational Objectives. Attainment of the engineering criteria student outcomes will ensure that MEP program graduates are prepared to attain the program educational objectives. Each of the student outcomes mentioned in this Criterion has been defined by a limited number of high level Key Performance Indicators (KPIs) which are communicated to the students, integrated into the curriculum and measured in a consistent and reliable manner. The KPIs for the eleven student outcomes are given in Table 3-2.