

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
COLLEGE OF COMPUTER SCIENCES & ENGINEERING
COMPUTER ENGINEERING DEPARTMENT

COE 390 Seminar
Syllabus - Term 072

Catalog Description

The purpose of this course is to help improve students` ability for presenting their technical work. It also teaches students about the nature of engineering as a profession, codes of professional conducts, ethics & responsibility, and the role of engineering societies and organizations world-wide. Case studies of conflict between engineering professional ethical values and external demands. The course features students` participation in discussion held by COE faculty members and invited guests. Each student is required to deliver a short talk toward the end of the semester.

Prerequisite: Junior Standing

Instructor Dr. Aiman El-Maleh

Office Room 22/318 **Phone:** 2811 **Email:** aimane@kfupm.edu.sa

Office Hours SMW 11:00-12:00 PM, and by appointment

Course Objectives

1. To teach students the nature of engineering as a profession.
2. To teach students the ethical and professional responsibility of engineering in the society.
3. To improve students` technical and professional communication skills.

Course Learning Outcomes

1. Knowledge of contemporary issues.
2. Ability to make effective presentation.
3. Knowledge of professional and ethical responsibility.
4. Understanding the impact of engineering solutions in a global and societal context.
5. Ability to engage in life-long learning.

Textbook(s) and/or other Required Material

There is no assigned text book for this class, but here are the recommended references:

1. Bowyer, Kevin W. *Ethics and Computing*. IEEE Computer Society Press, 1996.
2. Johnson, D. G. *Computer Ethics*. Prentice Hall, Englewood Cliffs, NJ, 1994.
3. Kizza, Joseph M. *Ethical and Social Issues in the Information Age*. Springer, 1997.

4. Gary Kroehnert *Basic Presentation Skills*, McGraw-Hill, 1999.
5. Nido R. Qubein *How to Be a Great Communicator: In Person, on Paper, and on the Podium*, John Wiley & Sons, 1996.
6. <http://www.businessballs.com/presentation.htm>
7. <http://ethics.csc.ncsu.edu/>

Grading Policy

Students' class attendance and participation in class	15%
Attendance and critique of two seminars	10%
Attendance of invited talks by guest speakers	15%
Written paper on computing ethics	10%
Student's 1 st presentation	10%
Student's 2 nd presentation	40%

Attendance: attendance is required by all students. Official excuse for an authorized absence must be presented to the instructor no later than one week following the absence. More than 3 unexcused absences lead to a "DN" grade.

Computing Ethics Paper & Presentation

Each student is required to select a topic related to computing ethics and write a summary paper and make a presentation of the selected topic. The summary paper should follow the given paper template. Each student will be given 15 minutes to present his paper. Computing ethics topics that need to be covered include:

- **Intellectual Property:** copyright laws, patenting laws, software piracy, and related topics.
- **Privacy and Anonymity:** email privacy, privacy on the web, encryption, and related topics.
- **Computer Abuse and Crime:** hacking, worms, viruses, trojan horses, spamming, and related topics.
- **Commerce:** anticompetitive practices, antitrust law, online auctions, fraud, trade, cyber squatting, payment, web ads, and related topics.
- **Speech issues:** freedom, misinformation, netiquette, blogs, chain letters, and related topics.
- **Social-Justice issues:** environmental, equity, noise, workplace, depersonalization, and related topics.
- **Rules of practice for Engineers:** competency, objectivity, truthfulness, faithfulness, protection of the public health, safety, and welfare, and related topics.
- **Professional obligations for Engineers:** highest standards of honesty and integrity, respect of confidentiality, service to the public interest, and related topics.

Second Presentation

Every student is to select a recent technical topic in the field of computer engineering and prepare a professional presentation applying effective presentation techniques learned in class. Each presentation will be given 15 minutes.

All presentations must be the student's original work.

Article Selection for the 2nd presentation

Each student is required to select three articles, among which the instructor will choose one for presentation in the class. Articles should be related to computer engineering and should be 4 pages or more. Recent (within the last three years) issues of the following publications may be used. Other sources may not be used except with the explicit approval of the instructor.

- IEEE Spectrum
- IEEE Computer Magazine
- Communications of the ACM
- IEEE Network Magazine
- Scientific American ACM, IEEE, SIAM, AT&T, BT, Intel, or IBM journal articles.

COE 390 Planned Activities

Week	Date	Activity
1	Feb. 18, 2007	Organizational meeting.
2	Feb. 25, 2007	Presentation: How to prepare & present a seminar.
3	Mar. 3, 2007	Presentation: How to prepare & present a seminar (cont.). Presentation: Computing ethics.
	Mar. 3, 2007	<i>Selecting Computing related Ethics topic for the 1st presentation.</i>
4	Mar. 10, 2007	Presentation: Computing ethics (cont.).
5	Mar. 17, 2007	Paper submission & Students' 1 st presentation.
6	Mar. 24, 2007	Paper submission & Students' 1 st presentation.
7	Mar. 31, 2007	Paper submission & Students' 1 st presentation.
8	Apr. 7, 2007	Paper submission & Students' 1 st presentation.
8	Apr.7, 2007	<i>Selecting technical topic for 2nd presentation (3 articles submitted).</i>
9	Apr. 21, 2007	Guest presentation (1): Contemporary issues
9	Apr.21, 2007	<i>Technical article assigned by instructor</i>
10	Apr. 28, 2007	Guest presentation (2): Contemporary issues
10	Apr.28, 2007	<i>Submitting 1st seminar attendance form.</i>
11	May 5, 2007	Guest presentation (3): Impact of engineering solutions in a global and social context.
12	May 12, 2007	Students' 2 nd presentation.
13	May 19, 2007	Students' 2 nd presentation.
14	May 26, 2007	Students' 2 nd presentation.
14	May 26, 2007	<i>Submitting 2nd seminar attendance form.</i>
15	June 2, 2007	Students' 2 nd presentation.