University / Academy: Menoufia University

College / Institute: Faculty of Electronic Engineering

Department: Computer Science and Engineering

Course Specification

1- Course basic information:		
Course Code: CSE 464	**Course Title:** Information System Engineering	**Academic year: 2012/2013** **Level (4) – Semester : 1**
Faculty requirement	**Teaching hours: Lecture** 3 **Tutorial** 1 **Lab** -	

2- Aim of the course	_ To introduce the students to the fundamentals of Information system engineering. _ To learn the basic unit of the information with more detail. _ To learn the main concept and basic principles of Information system engineering. _ To learn provide students with necessary skills in designing efficient Information system**s.**
3- Intended Learning Outcomes:	
A- Knowledge and Understanding:	a1. Concepts and theories of mathematics and sciences, appropriate to the computer science. a8. Current engineering technologies as related to computer science and engineering. a18. Modern trends in information technology and its fundamental role in business enterprises.
B- Intellectual Skills	b2. Select appropriate solutions for engineering problems based on analytical thinking. b3. Think in a creative and innovative way in problem solving and design.

	b4. Combine, exchange, and assess different ideas, views, and knowledge from a range of sources. b5. Assess and evaluate the characteristics and performance of components, systems and processes. b9. Judge engineering decisions considering balanced costs, benefits, safety, quality, reliability, and environmental impact.
C- Professional Skills	c1. Apply knowledge of mathematics, science, information technology, design, business context and engineering practice integrally to solve engineering problems. c2. Professionally merge the engineering knowledge, understanding, and feedback to improve design, products and/or services. c6. Use a wide range of analytical tools, techniques, equipment, and software packages pertaining to the discipline and develop required computer programs. c11. Exchange knowledge and skills with engineering community and industry. c12. Prepare and present technical reports.
D- General Skills	d1. Collaborate effectively within multidisciplinary team. d3. Communicate effectively. d4. Demonstrate efficient IT capabilities. d7. Search for information and engage in life-long self learning computer science and engineering. d8. Acquire entrepreneurial skills.
4- Course Contents	- Introduction to Information system engineering. - Principles of software system development - Industrial/commercial context of software development. - Information and communication networks. - Advanced technology of the information system engineering.
5- Teaching and Learning Methods	- **Lectures** - **Tutorials**

	- **Labs and/or case studies** - **Research assignments**
6- Teaching and Learning Methods for disable students	**NA**
7- Student Assessment	
a- Assessment Methods	**- Weekly sheet exercises at class room** **- Quizzes** **- Labs and/or case study for more demonstration.** **- Midterm, and final exams**
b- Assessment Schedule	**- Exercise sheet/ Lab assignment : Weekly** **- Quizz-1: Week no 5** **- Mid-Term exam: Week no 8** **- Quizz-2: Week no 11** **- Lab exam: Week no 14** **- Final – term examination: Week no 15**
c- Weighting of Assessment	**- Class tutorial and quizzes : …5… %** **- Mid-term examination: …20… %** **- Case study and/or practical exam: …10… %** **- Final – term examination: …60… %** **- Other types of assessment: …5… %** **Total 100 %**
8- List of text books and references:	
a- Course notes	
b- Text books	Information Technology For Management 6th Edition, Turban, Leidner, McLean, Wetherbe, John Wiley & Sons, Inc., 2008.
c- Recommended books	Introduction to Information Technology, Efraim Turban, R. Kelly Rainer, and and Richard E. Potter, second edition, John Wiley & Sons, 2003.
d- Periodicals, Web sites ……etc	Then there are many smaller conferences and workshops, and expert system related research also gets presented at the main AI conferences also, Relevant journals. Generally useful sites for locating papers are DBLP and CiteSeer.

Course Contents - ILOs Matrix

Content Topics	Week	A- Knowledge & Understanding	B- Intellectual skills	C- Professional and practical skills	D- General and transferable skills
Introduction to Information system engineering.	1,2	a1.	b3. b4.	c1. c6.	d1. d3. d4.
Principles of software system development	3,4	a1. a18.	b2. b3.	c2.	d3. d4. d7.
Industrial/commercial context of software development.	5,6,7	a18.	b3. b9.	c6.	d4. d7. d8.
Information and communication networks.	8,9,10	a8.	b5.	c11.	d8.
Advanced technology of the information system engineering.	11,12, 13	a1. a8.	b3. b4. b5.	c12.	d3. d4. d8.

Course coordinator: **Head of Department:**

Dr. Osama S. Faragallah **Prof. Nawal Ahmed El-Fishawy**

Date: / /