

## E-Commerce Course Specifications

**Faculty:** Faculty of computer and informatics

**Department:** Information System

**Program(s) on which the course is given:** Bachelor Degree in Computer & Information Sciences

**Major or Minor element of program** : Information System

**Department offering the program** : Information System

**Department offering the course** : Information System

**Academic year / Level** : Fourth Year/B.Sc.

**Date of specification approval** : 25/9/2009

### A. Basic Information

**Title:** E-commerce **Code:** INF 487

**Lectures:** 3 hrs/week **Tutorial:** 1 hr/week **Practical:** 2 hrs/week

**Credit Hours:** --- **Total:** 6 hrs/week

### B. Professional Information

#### 1) Overall Aims of Course:

This course explores and discovers leading edge e-Commerce web development technologies. This course will provide an in-depth introduction to students seeking an understanding of electronic business in the private, public and not-for-profit sectors. The student will obtain an understanding of the Internet based technologies underpinning product and service delivery through a hands-on interactive application development project. Strategies for B2C, B2B and G2x implementation will be presented and student teams will be responsible for developing their own e-implementation vision and strategy in a real organization. Internet payment systems, security, ethics and privacy will also be covered. Topics for written assignments include server-side technologies, applications, database management systems, and solutions related to visual communication through electronic commerce. The course covers e-commerce concepts, types of e-commerce, e-commerce models, the technology used in e-commerce systems, and the Planning, design, implementation, and management of e-commerce systems.

## 2) Intended Learning Outcomes of Course (ILOs):

### a. knowledge and understanding

Students who complete the course will have the ability to:

- a1. Define and discuss major concepts, tools, techniques, and methods of electronic commerce, with a focus on the web.
- a2. Demonstrate recognition of key factors that influence the e-commerce market.
- a3. Describe the relationship between visual communication and e-commerce.
- a4. Demonstrate an understanding of business principles related to e-commerce.
- a5. Discuss and demonstrate an understanding of the major technologies (Data Mining- KDD) and applications at use in e-commerce.
- a6. Understand how payment systems work on the Internet
- a7. Discuss and demonstrate an understanding of the major database management systems (Data warehouse) at use in e-commerce.
- a8. Describe, compare, and contrast competing technologies and applications.

### b- Intellectual skills

Upon successful completion of the course, each student will be able to:

- Describe the different capabilities of the Internet and how each one can be used to redesign retailing practices. The technology revolution has provided retailers with tremendous opportunities for increasing the efficiency and effectiveness of doing business. The class will introduce the student to the many ways in which basic retailing functions can be enhanced through effective use of information technology and the Internet.
- Describe how the Internet works, what it can and cannot do well, retail site security, etc.
- Understand the social impact of e-commerce retailing
- Understand basic e-commerce definitions and terminology
- Be aware of the Internet history and the physical components making up the Internet
- Describe the basic technological components required for implementing e-commerce and e-government initiatives
- Create a simple website that includes dynamically generated web pages and simple forms for capturing data
- Understand and have been exposed to basic usability strategies and web site evaluation metrics
- Be knowledgeable of successful e-commerce business models
- Be aware of relevant complexities in successfully implementing e-commerce in commercial settings
- Be aware of considerations for implementing e-commerce in public and not-for-profit environments
- Have been introduced to various levels of security on the Internet and understand how these can be circumvented
- Have been exposed to common privacy policies for managing client information ethically
- Have taken part in a team project implementing an e-initiative in a real organization

### **C. professional and practical skills**

Knowledge of the concepts and the material studied in this course will provide the students with the capability to:

- c1. Learn the fundamental technologies behind Java-based e-commerce Web applications.
- c2. Apply your retail business and Internet skills by developing a personal e-commerce business
- c3. Plan, design, and prototype a significant e-commerce web project.
- c4. practice good design, based on the Sun e-commerce Application Blueprint
- c5. build an e-commerce application with Java Web-based technology
- c6. partition an application to separate the concerns of presentation, logic, and data
- c7. Completely decouple the presentation layer with JSP templates.

### **D. General and transferable skills**

Knowledge of the concepts and the material studied in this course will provide the students with the capability to:

- d1. Examine the aspects of E-commerce. Topics include internet development, EDS, security, network connectivity and privacy. Basic business practices using electronic commerce will also be covered.
- d2. Describe tools, skills, business concepts, and social issues that surround the emergence of electronic commerce.
- d3. Develop an understanding of the current practices and opportunities in EDI, electronic publishing, electronic shopping, electronic distribution, and electronic collaboration and database issues. Other issues include standards, security, authentication, privacy, intellectual property, acceptable use, legal liability, and economic analysis.

### **E. Attitude:**

- e1- Demonstrate an ethical behavior toward software copyrights.
- e2- Relationship Emphasis a successful with other students.
- e3- Learn how to make relation with other, and the limit of this relation.
- e4- Explain the nature of privacy and how it is protected by the Data Protection.
- e5- Know the culture of other peoples.



## 1) Contents:

Topic	No. of hours	Lecture	Tutorial/ Practical
Overview of Electronic Commerce	3	1	3
E-Marketplaces: Structures, Mechanisms, Economics, and Impacts Launching a Successful Online Business and EC Projects	3	1	3
Amazon.com, Kazaa, and Types of e-Commerce	3	1	3
Building E-commerce Applications and Infrastructure	6	2	3
Building an e-Commerce website	6	2	3
Retailing in Electronic Commerce: Products and Services Consumer Behavior, Market Research, and Advertisement	6	2	3
B2B E-Commerce: Selling and Buying in Private E-Markets	3	1	3
Mobile Computing and Commerce and Pervasive Computing	6	2	3
Security and Encryption in web development and commerce	6	2	3
Electronic Payment Systems	3	1	3
Dynamic Trading: E-Auctions, Bartering, and Negotiations	3	1	3
Social Networks and Industry Disruption in the Web 2.0 Environment	3	1	3