eBusiness Master Programs Overview

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Abstract

In the new Information Society of this new millennium the use of Information and Communication Technology (ICT) is essential for the individual's education and training. A major buzzword nowadays, e-business represents the new trend of the business. In order to become or to remain competitive as a business in the industry or in another field of activity, all the businesses have to become "e". The e-Business Master Program from ASE Bucharest is an interdisciplinary initiative aimed to bring new perspectives to graduated young people and also to other categories of persons interested to discover the challenges of the new net-economy.

1. The e-Business Master Program

The organizations dependencies are: Information, Communication and Technology. ICT means both opportunities and threats:

- sharpens the strengths of organizations
- sharpens weaknesses of organizations

Modern organizations require two kinds of perspectives:

- technological perspective
- managerial perspective

e-Business Master Program at Academy of Economic Studies Bucharest combines:

- Organization science: modern theory, methods and techniques of business
- Information and computing science

Also, e-Business Master Program at AES Bucharest is a interdisciplinary and interfaculty initiative

The eBusiness master students have the following professions:

economists

- engineers;
- programmers;
- consultants.

People involved in the educational activity in eBusiness Master Program are:

- professors from AES
- professors from other local universities
- researchers with university degrees
- associated professors
- PhD students
- auxiliary personnel
- managers from IT companies on the market

The exam admission is based on application files.

2. Objectives of e-Business Master Program

The objectives of the master program are:

- theoretical ones
- practical ones

Theoretical objectives are to teach the students the base elements needed for analysis, design and development of e-commerce applications, Web applications. Practical objectives are to work on real examples, extremely needed in practical stages.

Issues to be deepened for achieving the objectives:
- The e-business infrastructure and its perspectives;
- The links between e-business and the traditional economy;
- The ways of modeling the businesses and processes;
- The core of an Internet application from a software perspective;
- The ways of implementing e-commerce techniques;
- Business management: statistics, decision support systems, and evaluation;
- E-business and law.

The e-Business Master Program includes the following courses:
- Commercial Techniques;
- Information and Communication Technologies;
- E-Commerce;
- Statistics for Business Management;
- E-Marketing;
- Process and Business Models;
- Information Economy;
- E-Payment and the Security of Internet Applications;
- Integrated e-Business Systems;
- Law Issues on International Commerce;
- Decision Support Systems for e-Business;
- Business Evaluation.

3. Description of courses studied in the e-Business Master Program

Commercial Techniques course has as objectives:
- present the technical knowledge regarding the traditional commerce;
- present the ways of adapting them in the case of on-line stores;
- present the specific instruments of e-commerce;
- adapt the specific knowledge and implement it in the real economy;

The issues are:
- the concept and the role of the commercial technologies;
- how to design them;
- how to implement e-commerce stores;
- the marketing;
- the technology of supplying and selling goods or services;
- the cash-flow in e-commerce;
- mobile e-commerce;

Information and Communication Technologies course was designed to give information regarding the development of Web applications or documents. The course has two parts.

The first part presents issues regarding:
- networking (OSI model, TCP/IP architecture, web, ftp, e-mail, telnet, news, network administration);
- ways of creating static or dynamic Web pages (using HTML, JavaScript, CSS, ASP, PHP, JSP);

- modalities of linking Web pages to database sources;
- process of developing and publishing of a Web site.
 The second part presents issues regarding:
- XML standards and technologies;
- ebXML;
- the steps in developing e-business applications;
- Web Services (including SOAP, WSDL&UDDI or WSFL).

e-Commerce course is focused on the main knowledge required for the analysis, conception and development of e-commerce applications. The issues of this course are:
- the impact of e-commerce on society,
- digital economy,
- types of commercial transactions,
- business models,
- business evolution,
- the impact of e-commerce on the information system of a firm,
- software products,
- e-commerce in Romania,
- global trends
- ways of developing and implementing e-commerce applications.

E-Payment and the Security of Internet Applications course has as objectives to present the cryptographic methods that are used to insure the security of e-business applications, Internet protocols and services, e-payment and the electronic signature in EU and Romania.
 The main issues are:
- The cryptography and information security module:
  - the role of cryptography;
  - symmetric cryptographic algorithms (DES, AES);
  - cryptographic mechanisms (ECB, CBC, CFB, OFB, Triple DES), asymmetric cryptographic algorithms (RSA, DSA, Diffie-Hellman).
- The electronic signature and digital certificate module:
  - ways of certificating;
  - PKI components;
  - X 509 certificates, CRL, PKI procedures and policies.
- Other modules:
  - services and security protocols;
  - the security of electronic payment systems (intelligent cards, POS payment systems, SET protocol, CAFÉ protocol);
  - the jurisdiction of informatics technologies (international implementations of digital signature, ONU regulations on international commerce, EU regulations on international commerce, Romanian legal framework on digital signature).

Integrated e-Business Systems course presents the new trends of informatics integration of a large number of business types. Issues:
- Supply Chain Management (SCM) systems;
- Customer Relations Management (CRM) systems;
- Enterprise Resource Planning (ERP) systems;
- E-procurement systems;
- E-market systems (e-commerce).

4. New educational solutions

Open and Distance Learning (ODL) represents a key element for education and training. The e-Learning environments parts are:
- Content;
- Methodologies;
- Technologies;
- New pedagogical challenges.

Definitions of Open and Distance Learning:
- "interactive learning in which the learning content is available online and provides automatic feedback to the student's learning activities";
- "e-Learning covers a wide set of applications and processes, such as web-based learning, computer-based learning, virtual classrooms and digital collaboration. It includes the delivery of content via Internet, Intranet/Extranet (LAN/WAN), audio-and video-tape, satellite broadcast, interactive TV and CD-ROM.".

The concept of open source in education. In order to achieve the new e-learning ideas, "we need open access and sharing of educational materials to provide an alternative to increasing pressures of proprietary content providers" [Siem03].

European perspective. In the FP6 work-program (6th Framework Program of EU) [ISTW03] that covers the activities of the IST (Information Society Technology) thematic priority, in the Specific Program "Integrating and Strengthening the European Research Area" (for years 2003 and 2004) there are specified directions that support free and open source software.

Characteristics of the open source software and license:
- free distribution;
- free access to the program's source code;
- the freedom to distribute derivative works;
- non discrimination against any person, group or field;
- distribution outside of the original product.
- equal treatment for everyone who wishes to license the software.

In the list below there are presented some Open-Source Platforms for eLearning:
- Fle3 (Universitz of Art and Design Helsinki);
- Claroline (Universite Catolique Louvain);
- dotLrn (Massachusetts Institute of Technology, University of Heidelberg);
- Uni Open Platform (Campus Source initiative in North-Rhine-Westphalia);
- MimmerDesk;
- Ganesha;
- The Connexions Project (Rice Universitz, SUA);
- KEWL;
- Jones (Jones Advisory Group);
- Moodle;
- Open LMS (NTNU, Trondheim);
- O-LMS (University of Utah);
- Shadow netWorkspace (CTIE Missouri);
- Manhattan (Western New England College).

5. Conclusions

The paper presented the main aspects of eBusiness Master Program which is develop in Academy of Economic Studies in Bucharest. One of the goals of this course is to increase the master students' capabilities in eBusiness field.

There were presented the main characteristics of the program and the most important courses studied in the eBusiness Master Program.

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