

COURSE DESCRIPTION

GENERALLY

SCHOOL	POLYTECHNIC		
DEPARTMENT	COMPUTER ENGINEERING and INFORMATICS		
LEVEL OF EDUCATION	BACHELOR		
LESSON CODE	CEID_ NE4357	SEMESTER OF STUDIES	WINTER (7)
COURSE TITLE	APPLIED INFORMATION SYSTEMS I		
SELF TEACHING ACTIVITIES <i>in the case of credits being awarded in distinct parts of the course eg. Lectures, Laboratory Exercises, etc. If credit units are awarded uniformly for the whole course, indicate the weekly hours of teaching and the total number of credits</i>		WEEKS HOURS D. N. ASKALIAS	CREDIT UNITS
Lectures, Laboratory Exercises, Assistance		2(L), 1(LE), 2(A)	5
<i>Add rows if needed. The teaching organization and the teaching methods used are described in detail at 4.</i>			5
COURSE TYPE <i>Background, General Knowledge, Scientific Area, Skills Development</i>	Skills Development		
PREREQUISITE COURSES:	There are no prerequisite courses. Recommended prerequisite knowledge: Mathematical Databases and Networks		
TEACHING LANGUAGE and EXAMINATION:	HELLENIC . Exams for ERASMUS students are offered in English.		
THE COURSE IS OFFERED TO ERASMUSSTUDENTS	YES		
ELECTRONIC COURSE PAGE (URL)			

LEARNING RESULTS

Learning results

The learning outcomes of the course describe the specific knowledge, skills and competences of an appropriate level that students will acquire after successfully completing the course.

Refer to Appendix A.

- *Description of the level of learning outcomes for each cycle of study according to the European Higher Education Area Qualifications Framework*
- *Descriptive Indicators of Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning*

and Annex B.

- *Curriculum Vitae Summary Guide*

Learning outcomes of the course

At the end of this course the student will:

1. Be introduced to the world of basic operations (BPMN) of an organization and their modeling,
2. have been aware of the ways of restructuring processes (BPR) and their influence on choosing the architecture of the information system ,
3. have understood the principles of behavior and ways of achieving flexibility(agile) and active participation in the development of the system,
4. have been informed of IT developments and the requirements of the public and private sector by an engineer ,
5. have the ability to guide the changes brought about by technology developments .

Skills

At the end of the course, the student will have further developed the following skills:

1. ability to demonstrate knowledge and understanding of the main types of

- information systems,
- 2. ability to apply methodologically this knowledge to understand and solve practical problems ,
- 3. ability to demonstrate knowledge , understanding and analysis of an organization 's needs and requirements,
- 4. ability to work with others to solve problems .

General Capabilities

Considering the general competencies that the graduate must have acquired (as listed in the Diploma Supplement and listed below), which one (s) the course is intended for ?.

Search, analyze and synthesize data and information, using the necessary technologies

Adapt to new situations

Decision making

Autonomous work

Teamwork

Work in an international environment

Working in an interdisciplinary environment

Producing new research ideas

Project design and management

Respect for diversity and multiculturalism

Respect for the natural environment

Demonstration of social, professional and moral responsibility and sensitivity to gender issues

Exercise of criticism and self-criticism

Promote free, creative and inductive thinking

Search, analyze and synthesize data , information and knowledge using the necessary software systems

Making decisions with different time horizons and content

Independent study of empirical practices

Team work and social work

Design and management of information technology projects

Carried Xport dialogue and development of critical thinking

COURSE CONTENT

The course examines a number of issues related to the process of developing Information Systems (IS). Specifically, in the period prior to the design of a new system, where it is required:

1. The bottom-up and reverse study of the organization's activities for the purpose of the new technologies (IoT, ML, Data analytics , Big date etc.) restructuring of processes that will aim to reduce operating costs, increase efficiency and quality.
2. Consideration of issues related to the choice of the appropriate architectural system, ie the architecture that will utilize private or public cloud infrastructure, will have at its core either the product, the customer or the service-oriented architecture, while around the core of the system will be installed a variety of central, regional and satellite systems, such as data quality control and metadata,communication and data sharing, information security systems n. .
3. Mapping the space internally: production, sales and marketing systems, financial management, personnel management and integrated logistics. And external mapping, ie business resource and customer relationship management systems, knowledge management and decision support systems, by functionality, ie systems that support an organization's relationships with the outside environment: supervising governmental and other service entities such as insurers .
4. The examination of qualifications and competencies, the selection and assignment of tasks to the developer of the computer system, the organization of project teams from both the IT and the organization side as final user, in order to achieve flexibility, active participation, positive and constructive cooperation climate, etc.

TEACHING AND LEARNING METHODS - EVALUATION

delivery method <i>Face to Face, Distance Learning, etc.</i>	Face to face		
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES <i>Use of ICT in Teaching, in Laboratory Education, in Communication with Students</i>	Information and communication technologies are used to communicate with students. Used e_class, e_mail andforum		
TEACHING ORGANIZATION <i>Describe in detail the way and methods of</i>	<table border="1" style="width: 100%;"> <tr> <td style="text-align: center;">Activity</td> <td style="text-align: center;">Workload of Semester</td> </tr> </table>	Activity	Workload of Semester
Activity	Workload of Semester		

<p>teaching. Lectures, Seminars, Laboratory Exercise, Field Exercise, Study & Analysis of Bibliography, Tutorial, Practice (Placement), Clinical Exercise, Artistic Lab, Interactive Teaching, Educational Visits, Project Work, etc.;</p> <p>Enter the hours of student study each learning activity and the non-guided study hours that the total workload in half level corresponds to the standards of ECTS</p>	Lectures	2x14 = 28
	Assistance	1x14 = 14
	Laboratory practice	2 x 14 = 28
	Self-study and preparation	3 x 14 = 42
	Weekend study	2 x 14 = 28
	Preparing notes and examinations	3 x 10 = 30
	Organizing an educational trip	3 x 4 = 12
	TotalMatch	1 82
<p>ASSESSMENT OF STUDENTS Description of the evaluation process</p> <p>Assessment Language, Assessment Methods, Formulation or Conclusion, Multiple Choice Test, Short Response Questions, Test Questions, Problem Solving, Written Work, Reporting / Reporting, Oral Examination, Public Presentation, Laboratory Work, Clinical Patient Examination, Artistic Interpretation, Other</p> <p>Certainly identified evaluation criteria are stated and if they are accessible to students.</p>	<ul style="list-style-type: none"> • Final examination (2/3 of the total grade)including judgment questions • Progress (1/3 of the total grade) • The evaluation criteria are included in the lesson notes 	

RECOMMENDED - BIBLIOGRAPHY

- Suggested Bibliography:

Notes by the teacher

JosephPhillips , IT Project Management , Ed . M. Giourdas , Athens, 2007

-Summer scientific journals:

- ACM Transactions on Information Systems
- International Journal on Semantic Web and Information Systems
- European Journal of Information Systems
- Journal of Intelligent Information Systems
- Journal of Strategically Information Systems
- Management Information Systems Quarterly