

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	SCHOOL OF ENGINEERING		
<b>ACADEMIC UNIT</b>	Department of Informatics and Computer Engineering		
<b>LEVEL OF STUDIES</b>	Undergraduate		
<b>COURSE CODE</b>	<b>ICE-7111</b>	<b>SEMESTER</b>	<b>9th</b>
<b>COURSE TITLE</b>	Management Information Systems		
<b>INDEPENDENT TEACHING ACTIVITIES</b> if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits		<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>
Lectures		2	
Practice Exercises		2	
Laboratories		2	
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		4	5
<b>COURSE TYPE</b> general background, special background, specialised general knowledge, skills development	Special Background		
<b>PREREQUISITE COURSES:</b>			
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	No		
<b>COURSE WEBSITE (URL)</b>	<a href="https://eclass.uniwa.gr/courses/CS144/">https://eclass.uniwa.gr/courses/CS144/</a>		

### (2) LEARNING OUTCOMES

#### Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described. Consult Appendix A

- Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area
- Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B
- Guidelines for writing Learning Outcomes

It is the deepening to the newest established Information Systems and especially to the newest established Information Systems for Business Administration and Organizations Administration. At the same time, it provides knowledge on the organization and operation of the respective organizations and businesses (interdisciplinarity). The application of the aforementioned concepts and knowledge is examined with reference to established categories of management information systems (such as Registry of Commitments, Electronic Prescribing, Personnel Leave Management, Land Registry Management).

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

- Designs Information Systems development projects (originality in the development and/or implementation of ideas)
- Supervises major projects for the development of information systems for business administration and organizations administration of all scales
- Prepares the feasibility study (handles complex issues and makes judgments about the necessity or not) for an information system
- Delivers the conclusions in writing and clearly, substantiating them with all the available information collected during the feasibility study (organization chart of the company, proposals

- of users involved, recordings of interviews- meetings, etc.)
- Solves problems that pre-existing systems (non-computerized or computerized) may not solve
  - Specifies the functional and non-functional requirements of a system as well as how to use it
  - Models the various aspects of a system (structure, behavior, interaction, situations, integrity limitations, architecture, etc.)
  - Designs the architecture of an information system using Structured Analysis techniques (data flow diagrams, entity-relationship diagrams) and/or object-oriented techniques
  - Designs the Database and the Interface of an information system

### General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	Project planning and management
Adapting to new situations	Respect for difference and multiculturalism
Decision-making	Respect for the natural environment
Working independently	Showing social, professional and ethical responsibility and sensitivity to gender issues
Team work	Criticism and self-criticism
Working in an international environment	Production of free, creative and inductive thinking
Working in an interdisciplinary environment	.....
Production of new research ideas	Others...
	.....

- Decision-making
- Working independently
- Team work
- Working in an interdisciplinary environment
- Production of free, creative and inductive thinking
- Project planning and management

### (3) SYLLABUS

1. Enterprise and Management Information System
2. Organization and Management Information System
3. Well Established Management Information System
4. Representation of the existing system's organization (the current situation)
5. Functional requirements
6. Scheduling, Project Management and Supervision
7. Technical representation of the MIS for the Registry of Commitments
8. Technical representation of the MIS for the Electronic Prescription
9. Technical representation of the MIS for the **Personnel Leave Management**
10. Technical representation of the MIS for the Land Registry Management
11. Shifting from conceptual models to relational databases

**(4) TEACHING and LEARNING METHODS - EVALUATION**

<b>DELIVERY</b> Face-to-face, Distance learning, etc.	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>  Use of ICT in teaching, laboratory education, communication with students	Software for designing DFDs and ERDs. Specialized systems design software. Support of the learning process through the University's e-learning platform.	
<b>TEACHING METHODS</b>  The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.  The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS	<b>Activity</b>	<b>Semester workload</b>
	Lectures	26
	Practice exercises	13
	Laboratory practice	13
	Laboratory Project for a case study Information System	40
	Independent personal study	33
	Course total	<b>125</b>
<b>STUDENT PERFORMANCE EVALUATION</b>  Description of the evaluation procedure  Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other  Specifically-defined evaluation criteria are given, and if and where they are accessible to students.	<p>I. Written final exams (60%) that includes:</p> <ul style="list-style-type: none"> <li>- Multiple choice questionnaires</li> <li>- Short-answer questions</li> <li>- problem solving (design of Management Information Systems)</li> </ul> <p>II. Written work (design and composition of Information Systems) (40%)</p>	

**(5) ATTACHED BIBLIOGRAPHY**

- Suggested bibliography:

1. Νικήτα Ν. Καρανικόλα, Καθιερωμένα Πληροφοριακά Συστήματα Επιχειρήσεων: Τεχνική Αποτύπωση, Εκδόσεις Νέων Τεχνολογιών, Αθήνα, 2012.
2. Κιουντούζης Ε., Μεθοδολογίες Ανάλυσης και Σχεδιασμού Πληροφοριακών Συστημάτων, Εκδόσεις Ε. Μπένου, Αθήνα 1997.
3. Δημητριάδης Α., Διοίκηση – Διαχείριση Πληροφοριακών Συστημάτων, Εκδόσεις Νέων Τεχνολογιών, Αθήνα, 2007.
4. Δημητριάδης Αντ., Διοίκηση – Διαχείριση Έργου (ProjectManagement), Εκδόσεις Νέων Τεχνολογιών, Αθήνα 2009.
5. Δημητριάδης Αντ., Διοίκηση – Διαχείριση Πληροφοριακών Έργων (I.T. ProjectManagement), Εκδόσεις Νέων Τεχνολογιών, Αθήνα 2008.
6. Δημητριάδης Αντ., Κοίλια Χρ., Κώστα Αθ., Λογιστικά Πληροφοριακά Συστήματα: Από τη

Θεωρία στην Πράξη, Εκδόσεις Νέων Τεχνολογιών, Αθήνα, 2009.

7. Γιαννακόπουλος Δ., Παπουτσής Ι., Διοικητικά Πληροφοριακά Συστήματα, Αθήνα, 2003.
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9. Avison D., Fitzgerald G., Information Systems Development: Methodologies, Techniques and Tools, 3rd ed., McGraw-Hill Education, UK, 2003.
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11. Laudon K., Laudon J., Πληροφοριακά Συστήματα Διοίκησης, 6η έκδοση, Κλειδάριθμος, 2006.
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14. Dennis, Wixom, Roth, Systems Analysis and Design, 3rd ed., John Wiley & Sons, 2005.
15. Hoffer J.A., George J.F., Valacich J.S., Modern Systems Analysis & Design, 4th ed., Prentice Hall, 2005.
16. Hossein B., Modern Information Systems for Managers, Academic Press, 1997.
17. Graham C., Cobham D., Business Information Systems: Analysis, Design and Practice, 4th ed., Pitman Publishing, 2001.
18. Date C.J., An Introduction to Data Base Systems, 7th ed., Addison Wesley, 1999.
19. McLeod R. Jr, Management Information Systems, 8th ed., Prentice Hall, 2001.
20. Connolly T.M., Begg C.E., Database Systems: A Practical Approach to Design, Implementation and Management, 4th ed., Pearson Education, 2004.
21. Viescans J.L., Running Microsoft Access 2000, Microsoft Press, 1999.
22. Ward J., Griffiths P., Strategic Planning for Information Systems, 3rd ed., John Wiley & Sons, 2002.

- Related academic journals: