

## COURSE OUTLINE

### (1) GENERAL

SCHOOL	SCHOOL OF ENGINEERING		
ACADEMIC UNIT	DEPARTMENT OF FINANCIAL AND MANAGEMENT ENGINEERING		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	FE0102	SEMESTER	2
COURSE TITLE	INTRODUCTION TO INFORMATICS		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <i>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</i>		<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>
		3	4.5
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b> <i>general background, special background, specialised general knowledge, skills development</i>	General Background, Skills Development		
<b>PREREQUISITE COURSES:</b>			
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>			
<b>COURSE WEBSITE (URL)</b>	<a href="http://www.fme.aegean.gr/el/node/1473">http://www.fme.aegean.gr/el/node/1473</a>		

### (2) LEARNING OUTCOMES

<b>Learning outcomes</b> <i>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.</i> <i>Consult Appendix A</i> <ul style="list-style-type: none"> <li>• Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</li> <li>• Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</li> <li>• Guidelines for writing Learning Outcomes</li> </ul>
<p>The course is addressed to undergraduate students the basic theory in Informatics.</p> <p>Specifically:</p> <p>Programming using C: Control Structures, Iteration Structures</p> <p>Informatics theory: Memory Management, Central Processing Unit, Networks, Software</p> <p>Boolean Algebra: Functions, Circuits</p> <p>Hecadecimal, Octal, Binary, Decimal Numbers conversion</p>
<b>General Competences</b> <i>Taking into consideration the general competences that the degree-holder must acquire (as these</i>

<i>appear in the Diploma Supplement and appear below), at which of the following does the course aim?</i>	
<i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i>	<i>Project planning and management</i>
<i>Adapting to new situations</i>	<i>Respect for difference and multiculturalism</i>
<i>Decision-making</i>	<i>Respect for the natural environment</i>
<i>Working independently</i>	<i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i>
<i>Team work</i>	<i>Criticism and self-criticism</i>
<i>Working in an international environment</i>	<i>Production of free, creative and inductive thinking</i>
<i>Working in an interdisciplinary environment</i>	<i>.....</i>
<i>Production of new research ideas</i>	<i>Others...</i>
	<i>.....</i>

*Search for, analysis and synthesis of data and information, with the use of the necessary technology*  
*Adapting to new situations*  
*Working independently*  
*Team work*  
*Working in an international environment*  
*Criticism and self-criticism*  
*Production of free, creative and inductive thinking*

### (3) SYLLABUS

Introduction, Information Systems  
 Software (System Software, Application Software)  
 Computer Hardware, Computer Networks  
 Numeral System (Hexadecimal, Binary, Decimal Numbers Conversion)  
 Programming (Control Structures, Iteration Structures)  
 Informatics theory (Memory Management, Central Processing Unit)  
 Boolean Algebra

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

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	Composition and execution of programs and verification by the teacher	
<b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail.</i> <i>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.</i>  <i>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</i>	<b>Activity</b>	<b>Semester workload</b>
	Lab hours	39
	Homework	40
	Oral examinations	13
<b>STUDENT PERFORMANCE EVALUATION</b> <i>Description of the evaluation procedure</i>  <i>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</i>  <i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	Examination in written form at the end of the semester	
	Program evaluation in the laboratory	
	Homework evaluation at the e-class interface	

#### (5) ATTACHED BIBLIOGRAPHY

*- Suggested bibliography:*

Εισαγωγή στην επιστήμη των υπολογιστών, Behrouz Forouzan, Εκδόσεις Κλειδάριθμος ΕΠΕ

Η επιστήμη των υπολογιστών: Μια ολοκληρωμένη παρουσίαση, J. Glenn Brookshear, Εκδόσεις Κλειδάριθμος ΕΠΕ

Εισαγωγή στην πληροφορική, Evans Alan, Martin Kendall, Poatsy Mary Anne, Εκδόσεις Κριτική ΑΕ

*- Related academic journals:*