

1. GENERAL

SCHOOL	ENGINEERING		
DEPARTMENT	PRODUCT AND SYSTEMS DESIGN ENGINEERING		
LEVEL OF STUDIES	UNDER GRADUATE		
COURSE CODE	4107	SEMESTER	9th
COURSE TITLE	PROJECT IN INTERACTIVE SYSTEMS DESIGN		
INDEPENDENT TEACHING ACTIVITIES <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>	WEEKLY TEACHING HOURS	CREDITS	
Lectures			
Laboratory	4	6	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	skills development		
PREREQUISITE COURSES:			
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK/ENGLISH		
COURSE DELIVERED TO ERASMUS STUDENTS	YES		
MODULE WEB PAGE (URL)	https://eclass.uowm.gr/courses/		

2. LEARNING OUTCOMES

Learning outcomes
<p>The aim of the course is to complete the knowledge and skills that students have acquired from the core courses and the direction of Interactive Systems Design by implementing an authentic and original project. The topics are open and may include projects and systems related to education, entertainment, skills training, culture, etc.</p> <p>Upon successful completion of the course, the student should be able to:</p> <ul style="list-style-type: none"> • Apply the theoretical principles and knowledge of interactive systems design that has been taught. • Analyze the requirements of different systems that should be implemented depending on their implementation framework. • Develops operational templates based on software components (mobile or web applications as well as libraries or software platforms) and / or widely used interconnected hardware platforms (Arduino, Raspberry Pi) on the Internet of Things and interaction technologies. • Evaluates the functionality of the applications that will be developed. • Utilizes acquired learning skills to develop new skills. • Communicates design and operational principles in the form of documentation.
General Skills

Combined application of knowledge and skills for the production of integrated interactive systems.
 Understanding the turnover for the production of functional interactive applications.
 Teamwork experience and communication skills

3. COURSE CONTENTS

- Use of methodologies and tools for development and research.
- Requirements analysis and field research.
- Systems design.
- Interoperability of software and hardware systems.
- Development of operational standards and their evaluation.
- Documentation writing.

4. TEACHING METHODS - ASSESSMENT

MODE OF DELIVERY	1. LABORATORY In laboratory facilities, face to face.										
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	<ul style="list-style-type: none"> ● Use of appropriate software ● Video and slide presentations. ● Support of teaching process via the electronic platform e-class 										
TEACHING METHODS	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><i>Activity</i></th> <th style="text-align: center;"><i>Semester workload</i></th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Projects</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Non-directed study</td> <td style="text-align: center;">50</td> </tr> <tr> <td>Course total</td> <td style="text-align: center;">150</td> </tr> </tbody> </table>	<i>Activity</i>	<i>Semester workload</i>	Lectures	50	Projects	50	Non-directed study	50	Course total	150
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Projects	50										
Non-directed study	50										
Course total	150										
ASSESSMENT METHODS	Presentation and evaluation of projects										

5. ATTACHED

The bibliography of all relevant courses is used as well as the documentation of the software and hardware components used.