## **SYLLABUS**

## 1. Data about the program of study

1.1 Institution	The Technical University of Cluj-Napoca
1.2 Faculty	Faculty of Automation and Computer Science
1.3 Department	Computer Science
1.4 Field of study	Computer Science and Information Technology
1.5 Cycle of study	Bachelor of Science
1.6 Program of study/Qualification	Computer science/ Engineer
1.7 Form of education	Full time
1.8 Subject code	59.

#### 2. Data about the subject

2.1 Subject name			Graduation project defense			
2.2 Course responsible/le	cture	•	Diploma project supervisor			
2.3 Teachers in charge of laboratory/ project	semir	ars/	As decided by the supervisor			
2.4 Year of study	IV	2.5 Sem	ester		2.6 Type of assessment (E - exam, C - colloquium, V - verification)	E
DF – funda		fundamen	amentală, DD – în domeniu, DS – de specialitate, DC – complementară			DS
2.7 Subject category	DI – I	DI – Impusă, DOp – opțională, DFac – facultativă			ă, DFac – facultativă	DI

#### 3. Estimated total time

3.1 Number of hours per week	-	of which:	Course	Seminars	Laboratory	Project
3.2 Number of hours per		of which:	Course	Seminars	Laboratory	Droject
semester	-	of which:	Course	Seminars	Laboratory	Project
3.3 Individual study:						
(a) Manual, lecture materia	al and r	notes, bibli	ography			
(b) Supplementary study ir	hthe lib	rary, onlir	e and in th	e field		
(c) Preparation for seminal	·s/laboi	ratory wor	ks, homew	ork, reports, port	folios, essays	
(d) Tutoring						
(e) Exams and tests						
(f) Other activities:						
3.4 Total hours of individual stud	y (suma	a (3.3(a)3	3.3(f)))			
3.5 Total hours per semester (3.2						
3.6 Number of credit points				10		

## 4. Pre-requisites (where appropriate)

4.1 Curriculum	Graduating all previous disciplines from the curricula
4.2 Competence	

## 5. Requirements (where appropriate)

5.1. For the course	
5.2. For the applications	

## 6. Specific competence

6.1 Professional competences	Graduates will have the following specific skills:
	<ul> <li>modeling and designing software and hardware sub-systems, making the best decisions regarding the costs-results trade-off concerning the design decisions</li> </ul>
	<ul> <li>implementing a hardware or software system</li> </ul>
	<ul> <li>analyzing the way a computing system meets the criteria for which it was designed and proposing improvements and future developments.</li> </ul>
	designed and proposing improvements and future developments
	• demonstrating the knowledge and understanding of important concepts,

	<ul> <li>principles and theories of computer science and engineering</li> <li>identifying and analyzing specific problems and elaborating strategies for solving them</li> <li>assuring the quality of products and services in the field of information technology</li> <li>using the information technology tools</li> </ul>
6.2 Cross competences	N/A

#### 7. Discipline objective (as results from the key competences gained)

7.1 General objective	Defense of Diploma Thesis
7.2 Specific objectives	

#### 8. Contents

8.1 Lectures	Hours	Teaching methods	Notes
Bibliography			
	•		
8.2 Applications – Seminars/Laboratory/Project	Hours	Teaching methods	Notes
<ul> <li>study of the bibliography in order to see how actual and necessary the project is</li> <li>comparative analysis of the existing products and systems</li> <li>comparative analysis of the potential methodologies and/or technologies</li> <li>preparation of the project specifications</li> <li>implementation and deployment of the hardware or software system</li> <li>product testing and validation</li> <li>product documenting</li> <li>assessment of results, possible further developments, original aspects, advantages and limits of solution</li> </ul>			
Bibliography			
For the diploma thesis preparation, the references are those record obtained by studying the bibliography. For fundamental and specific knowledge assessment, the bibliograph each of the undergraduate courses.			

<sup>\*</sup>Se vor preciza, după caz: tematica seminariilor, lucrările de laborator, tematica și etapele proiectului.

# 9. Bridging course contents with the expectations of the representatives of the community, professional associations and employers in the field

#### 10. Evaluation

Activity type	Assessment criteria	Assessment methods	Weight in the final grade
Course			
Seminar			
Laboratory			
Project		Separate marks - for the diploma presentation and defending (P) - for the assessment of fundamental and specific knowledge (K)	100%
Exam average mai	d of performance: ·k: M = (P + K) / 2 ne credits: P ≥ 5,00 ; K ≥ 5,00	); M ≥ 6,00	

Date of filling in:	Titulari	Titlu Prenume NUME	Semnătura
	Course	Diploma project supervisor	
	Applications		
Date of approval in	the department	Head of department Prof.dr.ing. Rodica Potolea	
Date of approval in	the Faculty Council	Dean Prof.dr.ing. Liviu Miclea	