

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

2. Data about the subject

2.1 Subject name	Project elaboration methodology				Subject code	52
2.2 Course responsible / lecturer	Prof. dr. eng. Lemnaru Camelia - Camelia.Lemnaru@cs.utcluj.ro					
2.3 Teachers in charge of seminars / Laboratory / project	-					
2.4 Year of study	IV	2.5 Semester	8	2.6 Type of assessment (E - exam, C - colloquium, V – verification)	C	
2.7 Subject category	Formative category: DF – fundamental, DS – speciality, DC – complementary					DS
	Optionality: DOB – mandatory, DOP – optional (alternative), DFA – optional (free choice)					DOB

3. Estimated total time

3.1 Number of hours per week	2	of which:	Course	2	Seminars	-	Laboratory	-	Project	-
3.2 Number of hours per semester	28	of which:	Course	28	Seminars	-	Laboratory	-	Project	-
3.3 Individual study:										
(a) Manual, lecture material and notes, bibliography										20
(b) Supplementary study in the library, online and in the field										28
(c) Preparation for seminars/laboratory works, homework, reports, portfolios, essays										20
(d) Tutoring										-
(e) Exams and tests										4
(f) Other activities:										-
3.4 Total hours of individual study (suma (3.3(a)...3.3(f)))					72					
3.5 Total hours per semester (3.2+3.4)					100					
3.6 Number of credit points					4					

4. Pre-requisites (where appropriate)

4.1 Curriculum	-
4.2 Competence	-

5. Requirements (where appropriate)

5.1. For the course	
5.2. For the applications	

6. Specific competence

6.1 Professional competences	C5 - Designing, managing the lifetime cycle, integrating and ensuring the integrity of hardware, software and communication systems • C5.1 - Specifying the relevant criteria regarding the lifetime cycle, quality, security and the computing system's interaction with the environment and the human operator • C5.2 - Using interdisciplinary knowledge for adapting the computing system to the specific requirements of the application field • C5.3 - Using fundamental principles and methods for ensuring the security, the safety and ease of exploitation of the computing systems • C5.4 - Proper utilization of the quality, safety and security standards in the field of information processing • C5.5 - Creating a project including the problem's identification and analysis, its design and development, also proving an understanding of the basic quality requirements
6.2 Cross competences	N/A

7. Expected Learning Outcomes

Knowledge	Describe, identify, and summarize elementary concepts and methods related to project elaboration methodology most specifically to: • project proposal • project development, monitoring and control • project reporting and presentation
Skills	Perform literature search, critical evaluation, and use of related work Write project proposals, literature reviews, and technical documentation Integrate reports and prior research effectively Present the project development process and its results in a clear and meaningful manner
Responsibilities and autonomy	Demonstrates autonomy in applying knowledge and methods specific to the field of Computer Science, assumes responsibility for the quality of proposed technical solutions, and ensures compliance with professional, legal, and ethical standards.

8. Discipline objective (as results from the *key competences gained*)

8.1 General objective	1. Ability to write a project proposal 2. Ability to search literature and critical evaluation 3. Ability to use related work and technical reports 4. Ability to write literature reviews 4. Ability to write project documentation 5. Ability for oral presentation
8.2 Specific objectives	

9. Contents

9.1 Lectures	Hours	Teaching methods	Notes
Introduction - Computing project types	2	Using modern teaching methods and internet acces.	
Choosing the project	2		
Preparing a project proposal	2		
Research and research process	2		
Research methods	2		
Literature search and review	2		
The report	2		
Structuring the report	2		

Writing the report	2		
Citing and reference management	2		
Reference styles	2		
Presenting and discussions on outstanding projects	2		
Oral presentation	2		
The talk and the defense	2		
Bibliography 1. Dawson, C.W. - Projects in Computing and Information Systems, Addison Wesley 2005 2. B. Olsson, M. Berndtsson, B. Lundell - Running Research-Oriented Final Year Projects for CS and IS Students, ACM SIGSE 2003 3. V. Bouki - Undergraduate Computer Science Projects in UK: What is the point?, Proc. of Informatics Education Europe II Conference, IEEE 2007			
9.2 Applications - Seminars / Laboratory / Project	Hours	Teaching methods	Notes
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Bibliography -			

**Se vor preciza, după caz: tematica seminarilor, lucrările de laborator, tematica și etapele proiectului.*

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

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11. Evaluation

Activity type	Assessment criteria	Assessment methods	Weight in the final grade
Course	-	Oral	100%
Seminar	-	-	-
Laboratory	-	-	-
Project	-	-	-
Minimum standard of performance: Grade calculus: 100% final exam Conditions for participating in the final exam: Attendance of lectures $\geq 50\%$ Conditions for promotion: final exam ≥ 5			

Date of filling in: 29.04.2026	Responsible	Title, First name Last name	Signature
	Course	Prof. dr. eng. Camelia LEMNARU	
	Applications	-	

Date of approval in the department	Head of department, Prof.dr.eng. Rodica Potolea
Date of approval in the Faculty Council	Dean, Prof.dr.eng. Vlad Mureșan