SYLLABUS

1. Information regarding the programme

1.1 Higher education institution	**Babeş-Bolyai University**
1.2 Faculty	**Faculty of Mathematics and Computer Science**
1.3 Department	**Department of Computer Science**
1.4 Field of study	**Computers and Information Technology**
1.5 Study cycle	**Bachelor**
1.6 Study programme / Qualification	**Information Engineering**

2. Information regarding the discipline

2.1 Name of the discipline (en) (ro)			**Elaboration of the diploma project** **Elaborarea proiectului de diplomă**				
2.2 Course coordinator			**Prof. dr. Camelia Chira**				
2.3 Seminar coordinator			**Prof. dr. Camelia Chira**				
2.4. Year of study	**4**	2.5 Semester	**8**	2.6. Type of evaluation	**E**	2.7 Type of discipline	**Compulsory DS**
2.8 Code of the discipline		MLE5184					

3. Total estimated time (hours/semester of didactic activities)

3.1 Hours per week	4	Of which: 3.2 course	0	3.3 seminar/laboratory	1 LP 3 P
3.4 Total hours in the curriculum	56	Of which: 3.5 course	0	3.6 seminar/laboratory	56
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					-
Additional documentation (in libraries, on electronic platforms, field documentation)					44
Preparation for seminars/labs, homework, papers, portfolios and essays					-
Tutorship					-
Evaluations					-
Other activities:					

3.7 Total individual study hours	44
3.8 Total hours per semester	100
3.9 Number of ECTS credits	4

4. Prerequisites (if necessary)

4.1. curriculum	•
4.2. competencies	•

5. Conditions (if necessary)

5.1. for the course	-
5.2. for the seminar /lab activities	-

6. Specific competencies acquired

Professional competencies	C3.1 Identifying classes of problems and solving methods that are specific to computing systems C3.2 Using interdisciplinary knowledge, solution patterns and tools, making experiments and interpreting their results C3.3 Applying solution patterns using specific engineering tools and mehods C3.4 Comparatively and experimentaly evaluation of the alternative solutions for performance optimization C3.5 Developing and implementing information system solutions for concrete problems C4.1 Identifying and describing technologies, programming environments and various concepts that are specific to programming engineering C4.2 Explaining the role, interaction and operation patterns of software system components C4.3 Developying specifications and designing information systems using specific methods and tools C4.4 Managing the life cycle of hardware, software and communications systems based on performance evaluation C4.5 Developing, implementing and integrating software solutions
Transversal competencies	CT1 Honorable, responsible, ethical behavior, in the spirit of the law, to ensure the professional reputation CT3 Demonstrating initiative and pro-active behavior for updating professional, economical and organizational culture knowledge

7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	• Support, guide and monitor the individual work of the student carried out for the diploma project
7.2 Specific objective of the discipline	• Elaboration of necessary documentation for the diploma project • Defining the content and structure of the diploma project • Elaboration of the technical and scientific documentation in several iterations • Use of research methodologies specific to small dimension projects

8. Content

8.1 Course	Teaching methods	Remarks
8.2 Laboratory	Teaching methods	Remarks
1. Establish the topic of the diploma project Documentation for assignment A1: title of the project, name of scientific coordinator, brief description of the domain, 3 bibliographical references A1 is due for submission in Lab 2.	• Conversation • Explanation • Debate • Study case	
2. Establish the content and structure of the thesis Evaluate A1 Documentation for assignment A2: chapter list and thesis structure, presentation of project objectives and work plan A2 is due for submission in Lab 3.		
3. Elaboration of the theoretical chapters Evaluate A2 Documentation for assignment A2: one theoretical chapter, establish state-of-the-art, correct use of tables and figures A3 is due for submission in Lab 4.		
4. Elaboration of requirements and specifications Evaluate A3 Documentation for assignment A4: first part of a practical chapter, analysis and requirements specification for the project, demonstration of one functionality A4 is due for submission in Lab 5.		
5. Development of practical chapters Evaluate A4 Documentation for assignment A5: one practical chapter (phases of design/implementation/testing), project demonstration A5 is due for submission in Lab 6.		
6. Elaboration of abstract , introduction and presentation Evaluate A5 Documentation for assignment A6: abstract, introduction, project presentation A6 is due for submission in Lab 7.		
7. Evaluate A6 Final evaluation		
Bibliography - Decided by student depending on the topic - Online resources relevant in the development of projects in specific ITC domains		
8.3 Project	Teaching methods	Remarks
1. Establish the topic of the diploma project	• Conversation • Explanation • Debate • Study case	
2. Establish the content and structure of the thesis		
3. Elaboration of the theoretical chapters.		
4. Elaboration of requirements and		

specifications		
5. Development of practical chapters		
6. Elaboration of abstract , introduction and presentation		
7. Preparation of the presentation.		

9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

- The course respects the IEEE and ACM Curricula Recommendations for information engineering
- The course exists in the studying program of all major universities in Romania which offer similar studies

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the grade (%)
10.4 Course			
10.5 Seminar/lab activities	Grade given by the tutor is the average of grades for assignments A1-A6	Portofolio and project	50%
	Grade given by the scientific coordinator	Project, reports	50%
10.6Minimum performance standards			
• Each student has to submit all assignments specified A1-A6 (penalties will be given for delays in submitting an assignment). • Final grade is the average of the grades given by the tutor and the scientific coordinator, and has to be minimum 5.			

Date	Signature of course coordinator	Signature of seminar coordinator
9.05.2022	Prof. dr. Camelia Chira	Prof. dr. Camelia Chira

Date of approval

Signature of the head of department

Prof. dr. Laura Dioşan

24.05.2022