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)	Domain Internship / Practică de specialitate					
2.2 Course coordinator						
2.3 Internship coordinator	Assoc. Prof. Dr. Avram Sandra					
2.4. Year of study **II**	2.5 Semester **4**	2.6. Type of evaluation	**C**	2.7 Type of discipline	Compulsor DD	
2.8 Code of the discipline	MLE5187					

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

3.1 Hours per week	30	Of which: 3.2 course		3.3 internship	30
3.4 Total hours in the curriculum	90	Of which: 3.5 course		3.6 internship	90
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					
Additional documentation (in libraries, on electronic platforms, field documentation)					
Preparation for seminars/labs, homework, papers, portfolios and essays					
Tutorship					
Evaluations					
Other activities:					10

3.7 Total individual study hours	10
3.8 Total hours per semester	100
3.9 Number of ECTS credits	4

4. Prerequisites (if necessary)

4.1. curriculum	· N/A
4.2. competencies	· N/A

5. Conditions (if necessary)

5.1. for the course	· N/A

5.2. for the internship activities	· Internship agreement with the specialized economic unit / RDI.

6. Specific competencies acquired

Professional competencies	· C2.1 Describing the structure and operation of hardware, software and communication components · C2.2 Explaining the role, interaction and operation of hardware, software and communication components · C3.2 Using interdisciplinary knowledge, solution patterns and tools, making experiments and interpreting their results; · 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. · CT2 Identifying, describing and conducting processes in the project management field, undertaking different team roles and clearly and concisely describing own profesional results, verbally or in writing. · 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	· Understanding and using of the tools, technologies and programming environments specific to computer science and engineering in order to solve problems and develop software projects, within a specialized company or research team.
7.2 Specific objective of the discipline	· Acquaintance of students with the specific methodologies used in design and implementation activities by involving students in software, hardware or communication projects. · Learning how to develop and implement IT solutions; · Acquiring the skills to design, develop and implement projects and programming environments. · Developing team work and communication skills.

8. Content

8.1 Course	Teaching methods	Remarks
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Bibliography		
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8.2 Internship	Teaching methods	Remarks

1. Theme presentation (problem statement) and definition of team roles	Observation, problematization, experiment, group consultation.	
2. Development of detailed specifications of the project, project analysis.		
3. Solution design.		
4. Implementation and testing.		
5. Completion of the internship report and project presentation		
Bibliography 1. ***: Hardware specific documentation; 2. ***: Software specific documentation.		

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 contents of the discipline were established with the main employers in the discussions prior to the substantiation of the study program.

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the grade (%)
10.4 Course			-
			-
10.5 Internship	Involvement and presence to the activities at the economic / RDI entity	The grade given by the internship tutor by the evaluation form	80 %
	Content and presentation of the internship report	The person, from the faculty, responsible for the internship activity grades the student's performance (based on the internship report).	20 %
10.6 Minimum performance standards			
☐ Fulfilling the obligations related to the internship activity; ☐ Completion of the internship report.			

Date   Signature of course coordinator   Signature of seminar coordinator

05.05.2022

Date of approval   Signature of the head of department

Prof. dr. Laura Dioşan

24.05.2022