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)	Specialization Internship / Practică de specialitate					
2.2 Course coordinator						
2.3 Internship coordinator	Assoc. Prof. Dr. Eng. Călin-Octavian Micloşină					
2.4. Year of study	**III**	2.5 Semester	**6**	2.6. Type of evaluation	**C**	2.7 Type of discipline	**Compulsory DS**
2.8 Code of the discipline	MLE5188					

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

Profes sion al comp etenc ies	· 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.
Tran svers al comp etenc ies	· 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, design and integrate computer systems, within a specialized company or research team.
7.2 Specific objective of the discipline	· 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
-		
Bibliography		
-		
8.2 Internship	Teaching methods	Remarks

1. The technical training of work safety at the economic / RDI entity where the internship is carried out.	Observation, problematization, experiment, group consultation.	6 hours
2. Activity description of the economic / RDI entity. Elements specific to computers and information technology.		6 hours
3. Design / development / implementation / use of technologies / programming environments at the economic entity / RDI.		72 hours
4. Completion of the internship report (notebook).		6 hours
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	70 %
	Content and presentation of the internship report	Report presentation	30 %
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

23.05.2022

Date of approval   Signature of the head of department

Prof. dr. Laura Dioşan

24.05.2022