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	**Computer Science**
1.5 Study cycle	**Bachelor**
1.6 Study programme / Qualification	**Computer Science**

2. Information regarding the discipline

2.1 Name of the discipline (en) (ro)			**Internship**				
2.2 Course coordinator			-				
2.3 Laboratory coordinator			**Assoc. Prof. Bocicor Maria Iuliana**				
2.4. Year of study	**3**	2.5 Semester	**5**	2.6. Type of evaluation	**E**	2.7 Type of discipline	**compulsory**
2.8 Code of the discipline		**MLE7001**					

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

3.1 Hours per week	**1**	Of which: 3.2 course		3.3 seminar/laboratory	**1**
3.4 Total hours in the curriculum	**14**	Of which: 3.5 course		3.6 seminar/laboratory	**14**
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					**35**
Additional documentation (in libraries, on electronic platforms, field documentation)					**35**
Preparation for seminars/labs, homework, papers, portfolios and essays					**30**
Tutorship					**30**
Evaluations					**6**

3.7 Total individual study hours	**136**
3.8 Total hours per semester	**150**
3.9 Number of ECTS credits	6

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	Special technical activities are required: programming, testing,

activities	analysis and design.

6. Specific competencies acquired

Professional competencies	C2.1 Identification of appropiate methodologies for software development C2.3 Use of methodologies, specification mechanism and development frameworks for developing software applications C2.5 Development of dedicated software projects
Transversal competencies	**CT1** Apply rules to: organized and efficient work, responsibilities of didactical and scientific activities and creative capitalization of own potential, while respecting principles and rules for professional ethics **CT2** Efficient progress of group activities and development of communications skills and collaboration **CT3** Use efficient methods and techniques for learning, knowledge gaining, and research and develop capabilities for capitalization of knowledge, accomodation to society equirements and communication in English

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

7.1 General objective of the discipline	• Gaining abilities to execute a product/program in teams, writing project decomentation, under the supervision of a specialized • internship tutor and academic staff.
7.2 Specific objective of the discipline	• Execute a product/program in teamwork • Write necessary documentations • Public project presentation

8. Content

8.1 Course	Teaching methods	Remarks
8.2 Seminar / laboratory	Teaching methods	Remarks
1. Theme presentation (problem statement) to be solved and establish team roles	Exposure, description, explanation	
2. Develop detailed specifications of the project	Dialog lecture, discussions, team debate	
3. Project analysis: entities and relations identification, use scenarios, data flow diagrams	Dialog lecture, discussions, team debate	
4. Design: conceptual data model, logical data model, computation design, physical data model, user interface, application architecture.	Questioning, discovery	
5. Implementation and testing	Case study, cooperation	
6. Integration testing : documentations	Questioning	
7. Project presentation in front of the evaluators	Evaluation	

Bibliography

1. M. Frentiu, I. Lazăr, Bazele Programării: Proiectarea Algoritmilor, 2000, Ed. Univ. Petru

Maior, Tg.Mureș
2. M. Frentiu, I. Lazăr, S. Motogna, V. Prejmerean, Elaborarea algoritmilor, Ed. Presa Universitară, Clujeana, Cluj-Napoca, 1998,
3. B. Pârv, Analiza și proiectarea sistemelor, Universitatea Babeș-Bolyai, Centrul de Formare Continua si Învatamânt la Distanță, Facultatea de Matematică și Informatică, Cluj-Napoca, ed. a III-a, 2003.
4. Țâmbulea, L., Baze de date, Litografiat Cluj-Napoca 2001

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 Computer Science Studies.
- Offers an overall perspective of Computer Science domains, and a general expertise for the student.
- Offers basic knowledge about teamwork and integration in a software company.

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		The internship tutor from the internship institution evaluates the student's performance.	100%
10.6 Minimum performance standards			
➢ It is necessary to obtain the minimum grade 5 (120 hours of internship).			

Date	Signature of course coordinator	Signature of seminar coordinator
26.04.2023		Assoc. Prof. Bocicor Maria Iuliana

Date of approval	Signature of the head of department
.....	Prof. PhD Dioșan Laura