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	**Internship**						
2.2 Course coordinator	**-**						
2.3 Seminar coordinator	**Assoc.Prof.PhD. Simona Motogna**						
2.4. Year of study	**2**	2.5 Semester	**4**	2.6. Type of evaluation	**C**	2.7 Type of discipline	**Compulsory**

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

3.1 Hours per week		Of which: 3.2 course		3.3 seminar/laboratory	
3.4 Total hours in the curriculum	90	Of which: 3.5 course	-	3.6 seminar/laboratory	90
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					10
Additional documentation (in libraries, on electronic platforms, field documentation)					10
Preparation for seminars/labs, homework, papers, portfolios and essays					
Tutorship					4
Evaluations					6
Other activities:					

3.7 Total individual study hours	30
3.8 Total hours per semester	120
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	• Special technical actiuvities are required: programming, testing, 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, responsabilities of didactical and scientifical 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 requirements 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 prouct/programm in teams, writting project documentation. Under the supervision of a specialize 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, lodical data model, computation design, phisical ddata 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.Mureş

2. M. Frentiu, I. Lazăr, S. Motogna, V. Prejmerean, Elaborarea algoritmilor, Ed. Presa Universitara, Clujeana, Cluj-Napoca, 1998,

3. B. Parv, Analiza si proiectarea sistemelor,Universitatea Babes-Bolyai, Centrul de Formare Continua si Învatamânt la Distanta, Facultatea de Matematica si Informatica, Cluj-Napoca, ed. a III-a, 2003.

3. Tambulea, 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 Curriculla Recommendations for Computer Science studies;

- Offers an overall perspective of Computer Science domains, and an 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		Presentation	50%
		Documentations	50%
10.6 Minimum performance standards			
The evaluation takes into consideration trasking and grading of the weekly activities, with respecting the project deadlines. The student will make a final presentation of the project			

Date ..... Signature of course coordinator ..... Signature of seminar coordinator Assoc.Prof.PhD. SIMONA MOTOGNA

Date of approval .....

Signature of the head of department .....