SYLLABUS

1. Information regarding the programme

1.1 Higher education	Babeş Bolyai University
institution	
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 /	Computer Science
Qualification	

2. Information regarding the discipline

2.1 Name of the	dis	scipline	Int	ernship			
2.2 Course coor	din	ator		-			
2.3 Seminar coo	ordi	nator		Assoc.Prof.PhD. S	imon	a Motogna	
2.4. Year of	2	2.5	4	2.6. Type of	C	2.7 Type of	Compulsory
study		Semester		evaluation		discipline	-

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

3. I otal estimated time (nours/series	ici o	i diddetie detivities)			
3.1 Hours per week		Of which: 3.2 course		3.3	
				seminar/laboratory	
3.4 Total hours in the curriculum	14	Of which: 3.5 course	-	3.6	14
				seminar/laboratory	
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					30
Additional documentation (in libraries, on electronic platforms, field documentation)					30
Preparation for seminars/labs, homework, papers, portfolios and essays					10
Tutorship					10
Evaluations					6
Other activities:					

3.7 Total individual study hours	86
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	 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, accommodation 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 product/program in teams, writing project documentation. Under the supervision of a specialize internship tutor and academic staff
7.2 Specific objective of the	- execute a product/program in teamwork
discipline	-write necessary documentations
	-public project presentation

8. Content

8.1 Course	Teaching methods	Remarks
8.2 Seminar / laboratory	Teaching methods	Remarks
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. Mureș
- 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 Curricula 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 tasking 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 soc.Prof.PhD. SIMONA MOTOGNA
Date of approval	Signature of	of the head of department