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	**Master**
1.6 Study programme / Qualification	**Software Engineering**

2. Information regarding the discipline

2.1 Name of the discipline	**Research Project in Software Engineering**						
2.2 Course coordinator	**Assoc.Prof.PhD. Simona Motogna**						
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	3	Of which: 3.2 course	0	3.3 seminar/laboratory	3 pr
3.4 Total hours in the curriculum	36	Of which: 3.5 course	0	3.6 seminar/laboratory	36

Time allotment:	hours
Learning using manual, course support, bibliography, course notes	20
Additional documentation (in libraries, on electronic platforms, field documentation)	20
Preparation for seminars/labs, homework, papers, portfolios and essays	50
Tutorship	14
Evaluations	10
Other activities:	-

3.7 Total individual study hours	114
3.8 Total hours per semester	150
3.9 Number of ECTS credits	6

4. Prerequisites (if necessary)

4.1. curriculum	• Computer Science Research Methodology
4.2. competencies	•

5. Conditions (if necessary)

5.1. for the course	• -
5.2. for the seminar /lab activities	• None

6. Specific competencies acquired

Professional competencies	• Analysis, design, and implementation of software systems • Proficient use of methodologies and tools specific to programming languages and software systems
Transversal competencies	• Professional communication skills; concise and precise description, both oral and written, of professional results

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

7.1 General objective of the discipline	The research project activity represents the individual work the student performs with the purpose to realize a scientific report on a given topic.
7.2 Specific objective of the discipline	At the completion of this course, the student should: - have documentation abilities on an established topic - be able to design the table of contents of research project - know how to write a technical document (research paper) in many iterations

8. Content

8.1 Course	Teaching methods	Remarks
8.2 Seminar / laboratory	Teaching methods	Remarks
1. Establishing the research title/topic	Conversation, debate, case studies	
2. Bibliographical documentation	Conversation, debate, case studies	
3. Table of contents: version 1.0	Conversation, debate, case studies	
4. Relevance of the bibliographical sources and their assignment to the designed structure	Conversation, debate, case studies	
5. Detecting possible original contribution; discussion and decision on practical part and experimental part	Conversation, debate, case studies	
6. Translation of selected documents and writing the paper – first draft of the report	Conversation, debate, case studies	
7. Final form of the report	Evaluation	

Bibliography

- to be decided by student based on his/her research topic
- Internet resources on software projects and on the particular topics of the projects

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 Software Engineering studies;
- The course exists at the major universities in Romania offering similar study programs;
- Graduating a master program assumes experience in developing a research project

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 ability to write a research report and present the obtained results	Each of the activities has a due date and a corresponding mark, on a 10-point scale. A penalty of 1pt per week are considered for delays. Portofolio: 3 research reports • Report 1: deliver date: week 4 • Report 2: deliver date: week 6 • Report 3: deliver date: week 10 Presentation	 10% 20% 50% 20%
10.6 Minimum performance standards			
➢ At least grade 5 (from a scale of 1 to 10)			

Date Signature of course coordinator Signature of seminar coordinator

..... Assoc.Prof.PhD. Simona MOTOGNA Assoc.Prof.PhD. Simona MOTOGNA

Date of approval Signature of the head of department

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