

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	Elaboration of the Dissertation Thesis						
2.2 Course coordinator	Prof.PhD. Simona Motogna						
2.3 Seminar coordinator	Prof.PhD. Simona Motogna						
2.4. Year of study	2	2.5 Semester	4	2.6. Type of evaluation	VP	2.7 Type of discipline	Compulsory

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

3.1 Hours per week	5	Of which: 3.2 course	0	3.3 project	5
3.4 Total hours in the curriculum	60	Of which: 3.5 course	0	3.6 project	60
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					8
Additional documentation (in libraries, on electronic platforms, field documentation)					8
Preparation for seminars/labs, homework, papers, portfolios and essays					12
Tutorship					8
Evaluations					4
Other activities:					-
3.7 Total individual study hours	40				
3.8 Total hours per semester	100				
3.9 Number of ECTS credits	4				

4. Prerequisites (if necessary)

4.1. curriculum	<ul style="list-style-type: none"> • Computer Science Research Methodology
4.2. competencies	<ul style="list-style-type: none"> •

5. Conditions (if necessary)

5.1. for the course	<ul style="list-style-type: none"> • -
5.2. for the seminar /lab activities	<ul style="list-style-type: none"> • None

6. Specific competencies acquired

Professional competencies	<ul style="list-style-type: none"> • Analysis, design, and implementation of software systems • Analysis, design, and implementation of software systems • Proficient use of methodologies and tools specific to programming languages and software systems
Transversal competencies	<ul style="list-style-type: none"> • 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 course represents the individual work the student performs with the purpose to prepare the Master Degree thesis on a given topic.
7.2 Specific objective of the discipline	At the completion of this course, the student should: <ul style="list-style-type: none"> - have documentation abilities on an established topic - be able to design the table of contents of a thesis <ul style="list-style-type: none"> - know how to write a technical document (research paper) in several iterations

8. Content

8.1 Course	Teaching methods	Remarks
8.2 Project	Teaching methods	Remarks
Bibliography Mora, M. (Ed.). (2012). <i>Research methodologies, innovations and philosophies in software systems engineering and information systems</i> . IGI Global. M. Frențiu, I.A.Rus, Metodologia Cercetării Științifice în Informatică, Ed. Presa Universitară Clujeană, 2014. - 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

<ul style="list-style-type: none"> • The course respects the IEEE and ACM Curricula 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
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10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the grade (%)
10.4 Course			
10.5 Project activities	Each of the activities has a due date and a corresponding mark, on a 10-point scale. A	Portofolio, research report	

	penalty of 1pt per week are considered for delays. The weights are as follows: 1. title (10%) 2. documentation (20%) 3. contents v1.0 (10%) 4. assigning sources to structure (20%) 5. final version of the paper (40%)		
			10% 20% 10% 20% 40%

10.6 Minimum performance standards

- At least grade 5 (from a scale of 1 to 10)
- Basic knowledge in writing a thesis

Date Signature of course coordinator

27.04.2024 Prof.PhD. Simona MOTOGNA

Signature of seminar coordinator

Prof.PhD. Simona MOTOGNA

Date of approval

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Signature of the head of department

Assoc.Prof.dr. Adrian Sterca