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	**Data Analysis and Modelling**

2. Information regarding the discipline

2.1 Name of the discipline	**Elaboration of the Dissertation Thesis / Elaborarea lucrării de disertație / Magiszteri dolgozat elkészítése**						
2.2 Course coordinator	**Prof. dr. Lehel CSATO**						
2.3 Seminar coordinator	**Prof. dr. Lehel CSATO**						
2.4. Year of study	**2**	2.5 Semester	**4**	2.6. Type of evaluation	**VP**	2.7 Type of discipline	**Compulsory**
2.8. Code	**MME3402**						

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

3.1 Hours per week	2	Of which: 3.2 course	0	3.3 project	2
3.4 Total hours in the curriculum	24	Of which: 3.5 course	0	3.6 project	24
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					22
Additional documentation (in libraries, on electronic platforms, field documentation)					27
Preparation for seminars/labs, homework, papers, portfolios and essays					17
Tutorship					6
Evaluations					4
Other activities:					-

3.7 Total individual study hours	76
3.8 Total hours per semester	100
3.9 Number of ECTS credits	4

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 and formalization of problems and issues requiring advanced computer science understanding • Use of specific theoretical methods in problems solving at various levels • Analysis, design, and implementation of advanced software systems • Proficient use of methodologies and tools specific to programming languages and software systems
Transversal competencies	• General communication skills; • Concise and precise description – both oral and written – of research results.

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

7.1 General objective of the discipline	This research activity represents the individual work the student performs with the purpose to finalize his/her dissertation thesis.
7.2 Specific objective of the discipline	At the completion of this course, the student should: - have documentation abilities on the dissertation; - be able to design the table of contents of the dissertation; - know how to write a technical document (dissertation) in many iterations.

8. Content

8.1 Course	Teaching methods	Remarks
- none		
8.2 Seminar / laboratory	Teaching methods	Remarks
1. Establishing the thesis title/topic - due week 2	Conversation, debate, case studies	
2. Bibliographical documentation - due week 4	Conversation, debate, case studies	
3. Table of contents: version 1.0 - due week 5	Conversation, debate, case studies	
4. Relevance of the bibliographical sources and their assignment to the designed structure - due week 7	Conversation, debate, case studies	
5. Detecting possible original contribution; discussion and decision on experimental modeling – due week 8	Conversation, debate, case studies	
6. Processing of selected documents and writing the paper – first draft of the thesis – due week 10	Conversation, debate, case studies	
7. Final form of the thesis – due week 12	Evaluation	

Bibliography
- to be decided by student based on his/her research topic,

- software projects available for testing,

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 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	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. The weights are as follows:	Portfolio, research report. Assessment by dissertation coordinator	
	1. title (10%)		10%
	2. bibliographical documentation (10%)		10%
	3. table of contents v1.0 (10%)		10%
	4. assigning sources to structure (20%)		20%
	5. original contribution + experimental (10%)		10%
	6. final version of the thesis (40%)		40%
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
2020.04.18.	Prof dr. Lehel CSATÓ	Prof dr. Lehel CSATÓ

Date of approval	Signature of the head of department
2020.04.20.	Conf. Dr. Szilárd ANDRÁS