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	Cyber Security

2. Information regarding the discipline

2.1 Name of the discipline (en) (ro)	Thematic Project with Innovation Challenge Proiect tematic inovativ					
2.2 Course coordinator	Assoc. Prof. PhD. Sterca Adrian					
2.3 Seminar coordinator	Assoc. Prof. PhD. Sterca Adrian					
2.4. Year of study **1**	2.5 Semester **2**	2.6. Type of evaluation	**C**	2.7 Type of discipline	**Compulsory**	
2.8 Code of the discipline	MME8205					

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
3.4 Total hours in the curriculum	42	Of which: 3.5 course	0	3.6 seminar/laboratory	42

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	23
Tutorship	15
Evaluations	-
Other activities:	-

3.7 Total individual study hours	58
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	-

6. Specific competencies acquired

Professional competencies	Analysis and formalization of complex problems Use of cybersecurity knowledge in problems solving Analysis, design, and implementation of software systems in the field of cybersecurity
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	This project represents the individual work the student performs with the purpose to realize a technical report on a given research topic. This project is associated to the internship project: the project is the scientific and experimental documentation
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 the research report - know how to write a technical document (research report) in many iterations

8. Content

8.1 Course	Teaching methods	Remarks
8.2 Seminar / laboratory	Teaching methods	Remarks
1. Establishing the topic of the project 2. Bibliographical documentation 3. Table of contents: version 1.0 4. Software project implementation 5. Implementation and experimental evaluation 6. Processing of selected documents and writing the paper – first draft of the report	Conversation, debate, case studies	

7. Final form of the project report	Evaluation	
Bibliography - to be decided by student based on his/her research topic - Internet resources, books, scientific papers		

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;
- 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	Project evaluation	The project is evaluated based on technical complexity and originality	100%
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
01.06.2022	Assoc. Prof. PhD. Sterca Adrian	Assoc. Prof. PhD. Sterca Adrian

Date of approval   Signature of the head of department

....   Prof. PhD. Dioșan Laura