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 Science for Industry and Society

2. Information regarding the discipline

2.1 Name of the discipline (en) (ro)			Project in Data Science				
2.2 Course coordinator			Prof. PhD. Dioșan Laura				
2.3 Seminar coordinator			Prof. PhD. Dioșan Laura				
2.4. Year of study	**2**	2.5 Semester	**4**	2.6. Type of evaluation	**C**	2.7 Type of discipline	**Compulsory**
2.8 Code of the discipline		MME8188					

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

3.1 Hours per week	1	Of which: 3.2 course	0	3.3 seminar/laboratory	1
3.4 Total hours in the curriculum	12	Of which: 3.5 course	0	3.6 seminar/laboratory	12

Time allotment:	hours
Learning using manual, course support, bibliography, course notes	24
Additional documentation (in libraries, on electronic platforms, field documentation)	24
Preparation for seminars/labs, homework, papers, portfolios and essays	60
Tutorship	24
Evaluations	6
Other activities:	-

3.7 Total individual study hours	138
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	-

6. Specific competencies acquired

Professional competencies	Analysis and formalization of problems requiring intelligent methods and models Use of computational intelligence methods in problems solving Analysis, design, and implementation of software systems for computational intelligence 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	This project represents the individual work the student performs with the purpose to realize a scientific report on a given research topic. This project is associated to the internship project: the research 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 research title/topic 2. Bibliographical documentation 3. Table of contents: version 1.0 4. Relevance of the bibliographical sources and their assignment to the designed structure 5. Detecting possible original contribution; discussion and decision on experimental modelling	Conversation, debate, case studies	

6. Processing of selected documents and writing the paper – first draft of the report		
7. Final form of the research 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 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 institution tutor assesses the performance of the interns. The faculty mentor assesses the activities (based on Activity Report)	80% 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
23 April 2023	Prof. PhD. Dioșan Laura	Prof. PhD. Dioșan Laura

Date of approval	Signature of the head of department
.....	Prof. PhD. Dioșan Laura