SYLLABUS

Computer Ethics and Academic Integrity

University year 2025-2026

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**
1.7. Form of education	**Full time**

2. Information regarding the discipline

2.1. Name of the discipline	**Computer Ethics and Academic Integrity**					Discipline code	**MME4002**
2.2. Course coordinator				**Prof. PhD. Simona Motogna**			
2.3. Seminar coordinator				**Prof. PhD. Simona Motogna**			
2.4. Year of study	1	2.5. Semester	1	2.6. Type of evaluation	C	2.7. Discipline regime	Mandatory

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

3.1. Hours per week	**4**	of which: 3.2 course	**2**	3.3 seminar/laboratory/project	**1 sem + 1 project**
3.4. Total hours in the curriculum	56	of which: 3.5 course	28	3.6 seminar/laboratory/project	**28**

Time allotment for individual study (ID) and self-study activities (SA)	**hours**
Learning using manual, course support, bibliography, course notes (SA)	10
Additional documentation (in libraries, on electronic platforms, field documentation)	12
Preparation for seminars/labs, homework, papers, portfolios and essays	12
Tutorship	4
Evaluations	6
Other activities:	-
3.7. Total individual study hours	**44**
3.8. Total hours per semester	**100**
3.9. Number of ECTS credits	**4**

4.Prerequisites (if necessary)

4.1. curriculum	
4.2. competencies	

5. Conditions (if necessary)

5.1. for the course	Room with projector
5.2. for the seminar /lab activities	Students should use laptops/computers for their presentations

6.1. Specific competencies acquired [1]

Professional/essential competencies	• use of software tools in an interdisciplinary context • use of artificial intelligence concepts and techniques to solve real-world problems
Transversal competencies	• application of organized and efficient work rules, of responsible attitudes towards the didactic-scientific field, to bring creative value to own potential, with respect for professional ethics principles and norms • efficient development of organized activities in an interdisciplinary group and the development of empathetic abilities for interpersonal communications, to relate to and cooperate with various groups • • use of efficient methods and techniques to learn, inform, research and develop the abilities to bring value to knowledge, to adapt at the requirements of a dynamical society and to communicate efficiently in Romanian language and in an international language

6.2. Learning outcomes

Knowledge	- The graduate has the knowledge to select and use appropriate instructional procedures to facilitate the process of knowledge assimilation. - The graduate has the necessary knowledge for literature review. - The graduate has the necessary knowledge to process and verify data and information.
Skills	- The graduate is able to write a scientific/technical report. - The graduate is able to present and explain methods, algorithms, paradigms and techniques used in various branches of computer science.
Responsibility and autonomy:	- The graduate has the ability to observe and obtain information from various sources. - The graduate has the ability to understand and communicate information effectively.

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

7.1 General objective of the discipline	• Be able to understand and apply the regulations, law and ethical practices in Data Science • Detect intelectual property violations • Analyze risks and alternative decisions regarding ethical aspects of Data Science
7.2 Specific objective of the discipline	• Be able to use ethical analysis methodologies • Critical abilities in identifying violation of domain's law

[1] One can choose either competences or learning outcomes, or both. If only one option is chosen, the row related to the other option will be deleted, and the kept one will be numbered 6.

8. Content

8.1 Course	Teaching methods	Remarks
1. Introduction to legal and ethical issues in Computer Science. Professional ethics	Exposure: description, debate	
2. Intellectual Property	Exposure: description, debate, case studies, examples, dialogue	
3. Licences, open access, free source	Exposure: description,	
	debate, case studies, examples, dialogue	
4. Risks and liabilities in software products	Exposure: description, debate, case studies, examples, dialogue	
5. Ethical and legal issues related to privacy	Exposure: description, debate, case studies, examples, dialogue	
6. Internet Regulations	Exposure: description, debate, case studies, examples, dialogue	
7. Free speech and content control in cyberspace	Exposure: description, debate, case studies, examples, dialogue	
8. Ethical Issues Involving Computer Security: Hacking, Hacktivism, and Counterhacking	Exposure: description, debate, case studies, examples, dialogue	
9. Challenges in Ethics: Artificial Intelligence	Exposure: description, debate, case studies, examples, dialogue	
10. Ethical issues for data access, use, and collection	Exposure: description, debate, case studies, examples, dialogue	
11. Ethical aspects of research in Computer Science	Exposure: description, debate, case studies, examples, dialogue	
12. Invited lecture – TBD	Exposure: description, debate, case studies, examples, dialogue	
13. Students report presentations	Exposure: description, debate, case studies, examples, dialogue	
14. Students report presentations	Exposure: description, debate, case studies, examples, dialogue	

Bibliography
1. George Reynolds- Ethics in Information Technology, Cengage, 4th ed, 2011
2. William John Brinkman, Alton F. Sanders - ETHICS IN A COMPUTING CULTURE, 2012, available online at http://www.cengagebrain.co.nz/content/9781133990932.pdf
3. ACM/IEEE-Computer Society. Software Engineering Code ofEthics and Professional Practice. Version 5.2. http://www.acm.org/about/se-code
4. Council for Big Data, Ethics & Society. http://bdes.datasociety.net/
5. Data & Society. https://datasociety.net/
6. Collmann, Jeff and Matai, Sorin Adam, Eds., (2016) Ethical Reasoning in Big Data: A Exploratory Analysis, Springer, 192 pages.
7. Mittelstadt, Brent and Floridi, Luciano, Eds. (2016) The Ethics ofBiomedical Big Data, Springer, 480 pages.
8. Lane, Julia, et al., Eds., (2014) Privacy, Big Data, and the Public Good: Frameworks for Engagement, Cambridge University Press, 339 pages.

8.2 Seminar / laboratory	Teaching methods	Remarks
1. Debate between teams of students on topics from course: ethics of profession, intellectual property	Debate, case studies, dialogue	
2. Debate between teams of students on topics from course: bias and fairness, confidentiality and privacy	Debate, case studies, dialogue	
3. Ethical issues related to sustainability	Debate, case studies, dialogue, examples	
4. Debate „Technology is not neutral and responsability lies on the developers”	Debate, case studies, dialogue, examples	
5. Workshop on anonymization	Debate, case studies, dialogue, examples	
6. Ethical implications of ChatGPT	Debate, case studies, dialogue, examples	
7. Ethical issues related to DEI (Diversity, Equity, Inclusion)	Debate, case studies, dialogue, examples	

Bibliography
1. George Reynolds- Ethics in Information Technology, Cengage, 4th ed, 2011
2. William John Brinkman, Alton F. Sanders - ETHICS IN A COMPUTING CULTURE, 2012, available online at http://www.cengagebrain.co.nz/content/9781133990932.pdf
3. ACM/IEEE-Computer Society. Software Engineering Code ofEthics and Professional Practice. Version 5.2. http://www.acm.org/about/se-code
4. Council for Big Data, Ethics & Society. http://bdes.datasociety.net/
5. Data & Society. https://datasociety.net/
6. Collmann, Jeff and Matai, Sorin Adam, Eds., (2016) Ethical Reasoning in Big Data: A Exploratory Analysis, Springer, 192 pages.
7. Mittelstadt, Brent and Floridi, Luciano, Eds. (2016) The Ethics ofBiomedical Big Data, Springer, 480 pages.
8. Lane, Julia, et al., Eds., (2014) Privacy, Big Data, and the Public Good: Frameworks for Engagement, Cambridge University Press, 339 pages.

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 exists in the studying program of all major universities abroad;
- The content of the course is providing basic ethical conduct stated by ACM and IEEE, and legal regulations of EU and Romania
- The course is recommended for EIT Digital Master Schools

9. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the grade (%)
10.4 Course	Course activity during semester	Debates, case studies Report	20%
	At the end of semester	Report presentation	30%
10.5 Seminar/lab activities	Seminar activity	Debates, case studies	50%
10.6 Minimum performance standards			
➢ At least an average grade of 5 ➢ To be able to identify data infringements cases and to propose counter-measures ➢ To be able to formulate arguments regarding ethical issues related to data			

11. Labels ODD (Sustainable Development Goals)[2]

Not applicable.

Date:	Signature of course coordinator	Signature of seminar coordinator
12.04.2025	Prof. PhD. Simona Motogna	Prof. PhD. Simona Motogna

Date of approval:
...

Signature of the head of department

Assoc.prof.phd. Adrian STERCA

[2] Keep only the labels that, according to the *Procedure for applying ODD labels in the academic process*, suit the discipline and delete the others, including the general one for *Sustainable Development* – if not applicable. If no label describes the discipline, delete them all and write „*Not applicable.*".