SYLLABUS

Ethics and academic integrity (in computer Science)

University year 2025-2026

1. Information regarding the programme

1.1. Higher education institution	Babeş – Bolyai University
1.2. Faculty	Computer Science
1.3. Department	Department of Compuer Science
1.4. Field of study	Computer Science
1.5. Study cycle	Licence
1.6. Study programme/Qualification	Computer Science
1.7. Form of education	Full time

2. Information regarding the discipline

2.1. Name of the discipline	**Ethics and academic integrity in computer science**		Discipline code	**MLE5159**
2.2. Course coordinator		Lector univ. dr. Alexandru Roja		
2.3. Seminar coordinator		Lector univ. dr. Alexandru Roja		

2.4. Year of study	3	2.5. Semester	6	2.6. Type of evaluation	E/C /V	2.7. Discipline regime	Optional

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

3.1. Hours per week	**2**	of which: 3.2 course	**2**	3.3 seminar/laboratory/project	**0**
3.4. Total hours in the curriculum	24	of which: 3.5 course	24	3.6 seminar/laboratory/project	**0**

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)	10
Preparation for seminars/labs, homework, papers, portfolios and essays (mai mare sau egal cu nr. total ore prevăzut în calendarul disciplinei pentru temele de control)	10
Tutorship	0
Evaluations	9
Other activities: [de ex.: comunicare bidirecțională cu titularul de disciplină / tutorele]	10

3.7. Total individual study hours	**49**
3.8. Total hours per semester	**75**
3.9. Number of ECTS credits	**3**

4. Prerequisites (if necessary)

4.1. curriculum	Not mandatory.
4.2. competencies	Not mandatory.

5. Conditions (if necessary)

5.1. for the course	Course room with videoprojector.
5.2. for the seminar /lab activities	Not mandatory.

6.1. Specific competencies acquired [1]

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[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.

Professional/essential competencies	• using computer and information tools in an interdisciplinary context • using artificial intelligence concepts and techniques to solve real-world problems
Transversal competencies	• applying the rules of organized and efficient work, of responsible attitudes towards the didactic-scientific field, for the creative valorization of one's own potential, in compliance with the principles and norms of professional ethics • using efficient methods and techniques of learning, information, research and development of the capacities to valorize knowledge, to adapt to the requirements of a dynamic society and to communicate in Romanian and in an internationally circulated language

6.2. Learning outcomes

Knowledge	The graduate has the necessary knowledge to review specialized literature.
Skills	The graduate has the ability to observe and obtain information from various sources. The graduate is able to define/identify/understand research problems in the field of computer science.
Responsibility and autonomy:	The student has the ability to work independently to develop subject-specific assignments.

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

7.1 General objective of the discipline	• Understanding the regulations in the field, the laws and ethical practices, as well as the rules of their application in the field of Computer Science. • Understanding the most important ethical dilemmas in the field of Computer Science. • Analyzing the risks and alternatives regarding the ethical aspects and dilemmas in the field of Computer Science.
7.2 Specific objective of the discipline	• Ability to use and apply ethics-specific methodologies and tools. • Critical skills for identifying violations of legislation in the field.

8. Content

8.1 Course	Teaching methods	Remarks
1. Introduction to ethics.	The lecture, the heuristic conversation, the	2 hours

		problematization.	
2.	The nature of ethics. Applied ethics and deontological ethics.	The lecture, the heuristic conversation, the problematization.	2 hours
3.	Ethics of consequencies.	The lecture, the heuristic conversation, the problematization.	2 hours
4.	Morality from a deontological perspective.	The lecture, the heuristic conversation, the problematization.	2 hours
5.	Business ethics and labor relations.	The lecture, the heuristic conversation, the problematization.	2 hours
6.	Whistle – Blowing between morality and legislation.	The lecture, the heuristic conversation, the problematization.	2 hours
7.	Main ethical dilemmas of the digital economy and society (freedom vs determinism).	The lecture, the heuristic conversation, the problematization.	2 hours
8.	The main ethical dilemmas of Big Tech.	The lecture, the heuristic conversation, the problematization.	2 hours
9.	Ethics of disruptive technologies and innovations.	The lecture, the heuristic conversation, the problematization.	2 hours
10.	Ethical dilemmas of data-centric business models.	The lecture, the heuristic conversation, the problematization.	2 hours
11.	Ethical dilemmas of Artificial Intelligence.	The lecture, the heuristic conversation, the problematization.	2 hours
12.	Ethical dilemmas of Intellectual propriety.	The lecture, the heuristic conversation, the problematization.	2 hours

Bibliography
1.Anderson M., Leigh S. (2011), Machine ethics, Cambridge University Press
2.Awari G., Warjurkar S. (2022), Ethics in information technology. A practical guide, CRC Press
3.Blundell B. (2020), Ethics in computing, science, and engineering. A student`s guide to doing things right, Springer
4.Boddington P. (2017), Towards a code of ethics for artificial intelligence, Springer
5.Coeckelbergh M. (2020), AI Ethics, MIT Press
6.Furey H., Hill S., Bhatia S. (2022), Beyond the code. A philosophical guide to engineering ethics, Routledge
7.Henschke A. (2017), Ethics in an age of surveillance. Personal information and virtual identities, Cambridge University Press
8.Hrynkow C. (2020), Spiritualities, ethics and implications of human enhancement and artificial intelligence, Vernon Press
9.Karrar A., Dahbur K. (2021), Computing ethics, Nova Science Publishers
10.Padallan J. (2020), Information and computer ethics, ARCLER Press
11.Peterson M. (2020), Ethics for engineers, Oxford University Press
12.Quinn M. (2020), Ethics for the information age, Pearson
13.Ratti E., Stapleford T., (2021), Science, technology and virtues, Oxford University Press
14.Reynolds G. (2012), Ethics in information technology 4th edition, Cengage Learning
15.Shanon V. (2022), Oxfort Handbook of philosophy of technology, Oxford University Press
16.Skula S., Jossy G., Kapil T., Joseph V. (2022), Data ethics and challenges, Springer
17.Thiroux J., Krasemann K. (2015), Ethics. Theory and practice. 11th edition, Pearson

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 complies with the curriculum requirements and recommendations of IEEE and ACM for the field of Computer Science

• This course is available in the study programs of major universities

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of final grade
10.4 Course	Assimilation and appropriation of the information received during the course. Own reasoning, critical and creative thinking on the topics of the course.	Continuous assessment within the debates and dialogues within the course.	50%
	Application of ethical principles and professional deontology in the field of Computer Science.	Presentation of the final project.	50%
10.5 Seminar/laboratory			
10.6 Minimum standard of performance			

- Obtaining a minimum grade of 5 for both evaluation stages.

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

Not applicable.

Date:
8 April 2025

Signature of course coordinator

Lector univ. dr. Alexandru Roja

Signature of seminar coordinator

Lector univ. dr. Alexandru Roja

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[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.*".

Date of approval: Signature of the head of department

                                                 Assoc.prof.phd. Adrian STERCA