

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	Bachelor
1.6 Study programme / Qualification	Informatică română

2. Information regarding the discipline

2.1 Name of the discipline (en) (ro)	Academic ethics and integrity (in Computer Science)						
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	C	2.7 Type of discipline	Optional
2.8 Code of the discipline	MLE 5159						

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

3.1 Hours per week	2	Of which: 3.2 Course 2
3.4 Total hours in the curriculum	24	Of which: 3.5 Course 24
Time allocation:	hours	
Learning using manuals, courses, support materials, bibliography, course notes	10	
Additional documentation (in libraries, on electronic platforms, field documentation)	10	
Preparation for seminars/labs, homework, papers, portfolios and essay	10	
Tutorship		
Evaluation	9	
Other activities: Project preparation	10	
3.7 Total individual study hours	39	
3.8 Total hours per semester	85	
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	<ul style="list-style-type: none">• course room with video projector
5.2 for the seminar / lab activities	<ul style="list-style-type: none">• course room with video projector

6. Specific competencies acquired

Professional competencies	<ul style="list-style-type: none"> • C3.2 Identify and explain the basic computer science models corresponding to application domain • C3.4 Data and model analysis
Transversal competences	<ul style="list-style-type: none"> • CT1 Apply rules to: organized and efficient work, responsibilities of didactical and scientific activities and creative capitalization of own potential, while respecting principles and rules for professional ethics • CT2 Efficient organization of activities in an inter-disciplinary group and development of empathic communication, relational and collaboration abilities • Use efficient methods and techniques for learning, knowledge gaining, and research and develop capabilities for capitalization of knowledge, accommodation to society requirements and communication in English

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

7.1 General objective of the discipline	<ul style="list-style-type: none"> • Be able to understand and apply the regulations, law and ethical practices in Computer Science • Understand the most important ethical dilemmas in the field of Computer Science • Analyze risks and alternatives regarding ethical aspects of Computer Science
7.2 Specific objectives of the discipline	<ul style="list-style-type: none"> • Be able to use ethical analysis methodologies • Critical abilities in identifying violation of domain`s law

8. Content

8.1 Course	Teaching methods	Remarks
1. Introduction to Computer Science ethics	Exposure, conversation, debate, problematization, case study.	2 hours
2. The nature of ethics. Applied ethics and deontological ethics.	Exposure, conversation, debate, problematization, case study.	2 hours
3. Ethics of consequences	Exposure, conversation, debate, problematization, case study.	2 hours
4. Morality from deontological perspective	Exposure, conversation, debate, problematization, case study.	2 hours

5. Ethics of corporate and work relations	Exposure, conversation, debate, problematization, case study.	2 hours
6. Whistle – Blowing, corporate rules, morality and legislation	Exposure, conversation, debate, problematization, case study.	2 hours
7. Main issues and ethical dilemmas in Digital Economy and Society (liberty versus determinism)	Exposure, conversation, debate, problematization, case study.	2 hours
8. Big Tech strategic ethical dilemmas	Exposure, conversation, debate, problematization, case study.	2 hours
9. Ethics of disruptive technologies and innovation	Exposure, conversation, debate, problematization, case study.	2 hours
10. Ethical dilemmas of Digital Platforms and Data – Centric Economy and Society	Exposure, conversation, debate, problematization, case study.	2 hours
11. Ethical dilemmas of Artificial Intelligence	Exposure, conversation, debate, problematization, case study.	2 hours
12. Intellectual property ethics	Exposure, conversation, debate, problematization, case study.	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), Oxford 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 respects the IEEE and ACM Curricula recommendations for Computer Science studies;
- 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

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Share in the grade (%)
10.4 Course	Assimilation of the information received at the course. Own reasoning , critical and creative thinking on course topics. Own reasoning,	Continuous evaluation at debates and dialogues.	50%
	Apply ethical principles	Oral and written presentation at the course.	50%
10.6 Minimum performance standards			
<ul style="list-style-type: none"> • At least grade 5 (from a scale of 1 to 10) at both evaluation forms. 			

Date

22.04.2024

Signature of course coordinator

Lector univ. dr. Alexandru Roja

Signature of seminar coordinator

Lector univ. dr. Alexandru Roja

Date of approval

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Head of department signature

Conf. univ. dr. Adrian Sterca