SYLLABUS

1. Information regarding the programme

| 1.1 Higher education | Babeş Bolyai University |
|-----------------------|---|
| institution | |
| 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 / | Computer Science |
| Qualification | |

2. Information regarding the discipline

| 2.1 Name of the discipline (en) | | | Eth | nical and Legal Is | sues in (| Computer Science | |
|---------------------------------|---|--------------|-----|--------------------|-----------|------------------|----------|
| (ro) | | | | | | | |
| 2.2 Course coordinator | | | As | soc.Prof.PhD. Sir | mona Mo | togna | |
| 2.3 Seminar coordinator | | - | - | | | | |
| 2.4. Year of study | 3 | 2.5 Semester | 5 | 2.6. Type of | C | 2.7 Type of | Optional |
| | | | | evaluation | | discipline | |
| 2.8 Code of the MLE5079 | | | | <u>.</u> | | | |
| discipline | | | | | | | |

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 | |
| 3.4 Total hours in the curriculum | 24 | Of which: 3.5 course | 24 | 3.6 | - |
| | | | | seminar/laboratory | |
| Time allotment: | | | | | hours |
| Learning using manual, course support, bibliography, course notes | | | | | 10 |
| Additional documentation (in libraries, on electronic platforms, field documentation) | | | | | 18 |
| Preparation for seminars/labs, homework, papers, portfolios and essays | | | | | 18 |
| Tutorship | | | | | 10 |
| Evaluations | | | | | 20 |
| Other activities: | | | | - | |

| 3.7 Total individual study hours | 76 |
|----------------------------------|-----|
| 3.8 Total hours per semester | 100 |
| 3.9 Number of ECTS credits | 4 |

4. Prerequisites (if necessary)

| 4.1. curriculum | • |
|-----------------|---|
|-----------------|---|

| 4.2. competencies | • |
|-------------------|---|
| 1 | |

5. Conditions (if necessary)

| 5.1. for the course | • |
|---------------------------|---|
| 5.2. for the seminar /lab | • |
| activities | |

6. Specific competencies acquired

| o. Specin | ic competencies acquired |
|----------------------------------|---|
| Professional competencies | C3.2 Identify and explain the basic computer science models corresponding to application domain C3.4 Data and model analysis |
| Transversal competencies | CT1 Apply rules to: organized and efficient work, responsabilities of didactical and scientifical 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 empatic communication, relational and collaboration abilities CT3 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 | Be able to understand and apply the regulations, law and ethical practices in Computer Science Detect intelectual property violations |
|--|--|
| | Analyze risks and alternative decisions regarding ethical aspects of Computer Science |
| 7.2 Specific objective of the discipline | 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 legal and ethical issues in | Exposure: description, | |
| Computer Science | debate | |
| 2. Professional ethics | Exposure: description, | |
| | debate, case studies, | |
| | examples, dialogue | |
| 3. Intellectual Property | Exposure: description, | |
| | debate, case studies, | |

| | examples, dialogue |
|--|---|
| 4. Licences, open access, free source | Exposure: description, debate, case studies, examples, dialogue |
| 5. Risks and liabilities in software products | Exposure: description, debate, case studies, examples, dialogue |
| 6. Ethical and legal issues related to privacy | Exposure: description, debate, case studies, examples, dialogue |
| 7. Internet Regulations | Exposure: description, debate, case studies, examples, dialogue |
| 8. Free speech and content control in cyberspace | Exposure: description, debate, case studies, examples, dialogue |
| 9. Ethical Issues Involving Computer Security: Hacking, Hacktivism, and Counterhacking | Exposure: description, debate, case studies, examples, dialogue |
| 10. The Ethics of Cyber Conflict | Exposure: description, debate, case studies, examples, dialogue |
| 11. Mechanism for Ethical Risk Assessment | Exposure: description, debate, case studies, examples, dialogue |
| 12. Social Media | Exposure: description, debate, case studies, examples, dialogue |
| 13. Challenges in Ethics: Artificial Intelligence, Health Systems | Exposure: description, debate, case studies, examples, dialogue |
| 14. Ethical aspects of research in Computer Science | Exposure: description, debate, case studies, examples, dialogue |
| Bibliography | |

Bibliography

George Reynolds- Ethics in Information Technology, Cengage, 4th ed, 2011 William John Brinkman, Alton F. Sanders - ETHICS IN A COMPUTING CULTURE, 2012, available online at http://www.cengagebrain.co.nz/content/9781133990932.pdf ACM & IEEE digital library

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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 Curriculla 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 | know the basic principle of the domain;apply the course concepts | Continous evaluation at debates and dialogues | 50% | | |
| | - problem solving | | | | |
| | - apply ethical principles | Oral or written presentation in the class or in the local community | 50% | | |
| 10.6 Minimum performance standards | | | | | |
| At least grade 5 (from a scale of 1 to 10) at both evaluation forms | | | | | |

| Date | Signature of course coordinator | Signature of seminar coordinator |
|------------------|-------------------------------------|----------------------------------|
| | Assoc.Prof.PhD. Simona MOTOGNA | |
| Date of approval | Signature of the head of department | |
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