

Dear colleagues,

We cordially invite you to participate in our survey examining existing practices in the **teaching of ethics in computer science programmes**.

This survey is run within a new project "**Ethics4EU**", led by TU Dublin School of Computer Science in partnership with Informatics Europe, Mälardalen University, Télécom SudParis and the European Digital E-learning Network. The goal of the whole project is to develop new curricula, best practices and learning resources for ethics for computer science students. And to do so, we firstly need to understand how ethics is actually taught in accredited computer science and computer science related programmes across Europe, what are the learning outcomes of ethics modules, the teaching and learning methods used, what is the background of staff who teach ethics and how ethics is assessed for computer science students.



Your answers to these questions will help us to prepare a report in which we summarize the existing practices and outline possible approaches for developing a future curriculum of ethics in computer science programmes. The report will be publicly available and shared with all survey participants.

We would be grateful if you could fill in this questionnaire on behalf of your institution by **February 23**. It will take only 15-20 minutes of your time. Thank you for your contribution!

Best regards,
Ethics4EU team.

About Your Institution

In this survey

- INSTITUTION refers to a University, University College, Technical University, Institute of Technology, Polytechnic University and other types of higher education institutions;
- PROGRAMME refers to a complete collection of subjects a student had to study before achieving a qualification, e.g. a BSc in Computer Science;
- MODULE refers to a single topic that a student studies over one or two semesters, e.g. Databases, Computer Networks, etc.

1. What is your role within your institution? (*choose all that apply*)

- ☐ Lecturer
- ☐ Professor
- ☐ Course Leader
- ☐ Head of Department
- ☐ Head of School
- ☐ Other:

2. What country is your institution primarily based in? (*choose only one answer*)

- | | |
|--|--------------------------------------|
| ☐ Albania | ☐ Portugal |
| ☐ Andorra | ☐ Romania |
| ☐ Armenia | ☐ Russia |
| ☐ Austria | ☐ San Marino |
| ☐ Azerbaijan | ☐ Serbia |
| ☐ Belarus | ☐ Slovakia |
| ☐ Belgium | ☐ Slovenia |
| ☐ Bosnia and Herzegovina | ☐ Spain |
| ☐ Bulgaria | ☐ Sweden |
| ☐ Croatia | ☐ Switzerland |
| ☐ Cyprus | ☐ Turkey |
| ☐ Czech Republic | ☐ Ukraine |
| ☐ Denmark | ☐ United Kingdom |
| ☐ Estonia | |
| ☐ Finland | |
| ☐ France | |
| ☐ Georgia | |
| ☐ Germany | |
| ☐ Greece | |
| ☐ Hungary | |
| ☐ Iceland | |
| ☐ Ireland | |
| ☐ Italy | |
| ☐ Kazakhstan | |
| ☐ Kosovo | |
| ☐ Latvia | |
| ☐ Liechtenstein | |
| ☐ Lithuania | |
| ☐ Luxembourg | |
| ☐ Malta | |
| ☐ Moldova | |
| ☐ Monaco | |
| ☐ Montenegro | |
| ☐ Netherlands | |
| ☐ North Macedonia | |
| ☐ Norway | |
| ☐ Poland | |

3. Does your institution teach all subjects or focus on technical ones? (*choose only one answer*)

- ☐ Teach all subjects
- ☐ Focus on technical ones

4. Approximately how many students in total attend your institution? (*choose only one answer*)

- ☐ 1-1000
- ☐ 1001-5000
- ☐ 5001-10000
- ☐ 10001-25000
- ☐ 25001-50000
- ☐ 50000+

5. Approximately how many students are studying on computer science or computer science related courses (e.g. Informatics, Information Systems, Analytics, Computing for Business, Computer Engineering, etc.)? (*choose only one answer*)

- ☐ 1-100
- ☐ 101-500
- ☐ 501-1001
- ☐ 1001-2500
- ☐ 2501-5000
- ☐ 5000+

6. At which level of education does your institution teach computer science and/or computer science related programmes? (*choose all that apply*)

- ☐ Bachelor
- ☐ Master
- ☐ PhD

7. Does your institution teach ethics as part of any computer science and/or computer science related programmes? (*choose only one answer*)

- ☐ Yes
- ☐ No

PROGRAMME refers to a complete collection of subjects a student had to study before achieving a qualification, e.g. a BSc in Computer Science.

Your institution is not currently Teaching Ethics as part of your Computer Science programmes

Only answer this section if your answer was 'NO' at question '7. Does your institution teach ethics as part of any computer science and/or computer science related programmes?'

1. How important do you think it is that ethics is taught in a computer science and/or computer science related programme? (1=not at all important, 5=very important)

- ☐ 1
☐ 2
☐ 3
☐ 4
☐ 5

PROGRAMME refers to a complete collection of subjects a student had to study before achieving a qualification, e.g. a BSc in Computer Science.

2. Please explain in a sentence or two why you answered the previous question the way you did.

Please write your answer here:

3. Rate which of the following as reasons why ethics isn't taught.

	1 (disagree)	2	3	4	5 (agree)
Ethics isn't that important	☐	☐	☐	☐	☐
We have a lack of staff expertise	☐	☐	☐	☐	☐
We have a lack of staff availability	☐	☐	☐	☐	☐
What have a lack of time (there's too many other things to teach)	☐	☐	☐	☐	☐
The content we teach is too far away from ethics	☐	☐	☐	☐	☐

If none of the reasons above fits, specify your reason why ethics isn't taught in computer science and/or computer science related programmes in your institution.

Please write your answer here:

4. Are there plans to teach ethics in computer science and/or computer science related programmes?

- ☐ Yes
☐ No
☐ Don't know

Make a comment on your choice here:

Your institution is currently Teaching Ethics as part of your Computer Science programmes

Only answer this section if your answer was 'YES' at question '7. Does your institution teach ethics as part of any computer science and/or computer science related programmes?'

1. How important do you think it is that ethics is taught in a computer science and/or computer science related programme? (1=not at all important, 5=very important)

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5

PROGRAMME refers to a complete collection of subjects a student had to study before achieving a qualification, e.g. a BSc in Computer Science.

2. Do you think your institution/department is teaching enough ethics in computer science and/or computer science related programmes? (choose only one answer)

- ☐ Yes
- ☐ To a certain extent
- ☐ No

3. At which level of education is ethics taught as part of your computer science and/or computer science related programmes? (choose all that apply)

- ☐ Bachelor
- ☐ Master
- ☐ PhD

4. How is ethics taught? (choose only one answer)

- ☐ As a stand-alone module
- ☐ Threaded throughout several modules
- ☐ A combination of both above approaches

MODULE refers to a single topic that a student studies over one or two semesters, e.g. Databases, Computer Networks, etc.

5. Which background has the person or people who teach ethics in your computer science and/or computer science related programmes? (choose all that apply)

- ☐ Computer Science
- ☐ Ethics
- ☐ Philosophy
- ☐ Sociology
- ☐ Legal studies
- ☐ Other:
-

6. Which of the following teaching methods are used to teach ethics in your computer science and/or computer science related programmes?

	1 (never)	2	3	4	5 (regularly)
Lectures	☐	☐	☐	☐	☐
Case Studies	☐	☐	☐	☐	☐
Debates	☐	☐	☐	☐	☐
Role-playing	☐	☐	☐	☐	☐
eLearning or Blended Learning	☐	☐	☐	☐	☐
Project-Based or Problem-Based Learning	☐	☐	☐	☐	☐
Work-Based Learning	☐	☐	☐	☐	☐
Guest Lecturers (academic)	☐	☐	☐	☐	☐
Guest Lecturers (industry)	☐	☐	☐	☐	☐
Guest Lecturers (government bodies)	☐	☐	☐	☐	☐
Guest Lecturers (professional bodies)	☐	☐	☐	☐	☐
Others	☐	☐	☐	☐	☐

Please specify the other teaching methods:

7. How many teaching hours per semester is devoted to ethics topics in your computer science and/or computer science related programmes? (choose only one answer)

- ☐ 0-1 hours
- ☐ 2-5 hours
- ☐ 6-10 hours
- ☐ 11-20 hours
- ☐ 20+ hours
- ☐ Don't know

8. Which of the following topics are taught in your computer science and/or computer science related programmes?

	1 (never)	2	3	4	5 (regularly)
Ethics Theory	☐	☐	☐	☐	☐
Ethical Issues	☐	☐	☐	☐	☐
Argumentation	☐	☐	☐	☐	☐
Code of Ethics (Professional bodies), e.g. IEEE, ACM	☐	☐	☐	☐	☐
Code of Ethics (National bodies)	☐	☐	☐	☐	☐
Code of Ethics (IT companies)	☐	☐	☐	☐	☐
Others	☐	☐	☐	☐	☐

Please specify the other topics:

9. How is ethics assessed in these programmes? (choose all that apply)

- ☐ Exams
- ☐ Essays
- ☐ Quizzes
- ☐ Rubrics
- ☐ Presentations
- ☐ Portfolios
- ☐ Others:

10. Does your institution teach ethics as part of any of the computing topics outlined below? (These classifications are based on criteria by ACM - Association for Computing Machinery)

	Yes	No	Don't know
Computer Architecture, Pervasive Computing, Ubiquitous Computing	☐	☐	☐
Computer Systems, Parallel/Distributed Systems, Sensor Networks, Embedded Systems, Cyber-Physical Systems	☐	☐	☐
Software Engineering, Operating Systems, Computer Languages	☐	☐	☐
Theoretical Computer Science, Formal Methods, and Quantum Computing	☐	☐	☐
Cryptology, Security, Privacy, Quantum Crypto	☐	☐	☐
Algorithms, Distributed, Parallel and Network Algorithms, Algorithmic Game Theory	☐	☐	☐
Artificial Intelligence, Intelligent Systems, Multi Agent Systems	☐	☐	☐
Computer Graphics, Computer Vision, Multimedia, Computer Games	☐	☐	☐
Human Computer Interaction and Interface, Visualisation and Natural Language Processing	☐	☐	☐
Web and Information Systems, Database Systems, Information Retrieval and Digital Libraries, Data Fusion	☐	☐	☐
Machine Learning, Statistical Data Processing and Applications Using Signal Processing	☐	☐	☐
Scientific Computing, Simulation and Modelling Tools	☐	☐	☐
Bioinformatics, Biocomputing, and DNA and Molecular Computation	☐	☐	☐

Finishing Off

1. Your Institution name

2. Your name / email address (*optional*)

3. Any further comments regarding ethics in computer science or computer science related programmes

Thank you for your time!

We will keep you updated about the survey results.