

## Course report Faculty of Technology and Society

This course report is based on student feedback and submitted course evaluations, exam results and the teacher's idea for further development. The course report is published on the course website and Canvas-site.

<b>Course name</b>	AI and Data Management for IoT
<b>Course code</b>	DA642E
<b>Semester</b>	VT26
<b>Number of registered students</b>	23
<b>Course coordinator</b>	Najmeh Abiri

<input type="checkbox"/>	Course report is published on Canvas-site
<input type="checkbox"/>	Course report is published on course webpage

### Compulsory course evaluation

Number of responses to the compulsory course evaluation	6
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The compulsory course evaluation has been conducted through:

<input checked="" type="checkbox"/>	Standard template via Reflex
<input type="checkbox"/>	Extended standard template with <i>own questions</i> via Reflex
<input type="checkbox"/>	Own evaluation method by the course coordinator
Not applicable.	

### Additional evaluations that were conducted during the course

<input type="checkbox"/>	Separate survey
<input type="checkbox"/>	Oral evaluation in class
<input type="checkbox"/>	Oral evaluation in smaller groups
<input type="checkbox"/>	Other evaluation method

### Comments on the course evaluations

The compulsory course evaluation received 6 responses out of 23 students, so the results should be interpreted with caution. Overall, students reported good achievement of most learning outcomes, especially those related to AI methods and machine learning for IoT/sensor data. The ethical and legal aspects received the lowest rating and should be strengthened. Students generally valued the lectures, labs and project, especially the hands-on components. The main criticism concerned the seminars, which were perceived as partly overlapping and less clearly connected to learning. Students also noted that several activities were concentrated near

the end of the course. Future course development should therefore focus on clarifying the purpose of the seminars and spreading assessment-related activities more evenly.

### Examination results

Examination results are as expected

Examination results are not as expected

The examination results were weaker than expected. Although the written exam followed the course slides closely and focused on material covered during the course, the outcome of the exam was not very good. One likely contributing factor, also reflected in the course evaluation, is that several assessment-related activities were concentrated in the final weeks of the course. Students had to prepare seminars, complete lab evaluation, work on the project and prepare for the written exam within a short period, which may have reduced the time available for exam preparation. For the next course instance, the timing of seminars, lab assessment, project presentation and exam preparation should therefore be spread more evenly.

### Recommendations and priorities for the course development

For the next course instance, the main priority should be to reduce the concentration of workload in the final weeks by moving at least one seminar or assessment activity earlier and separating exam preparation from project-presentation deadlines as much as possible.

The seminar component should be revised so that its purpose is clearer and less repetitive. One option is to merge or redesign the topic and paper seminars and connect them more explicitly to the project and examination.

The ethical and legal aspects of AI and data processing in IoT should be made more visible in teaching and assessment, since this learning outcome received the lowest self-reported achievement. A case-based activity on GDPR, privacy, bias and deployment risks in IoT systems could be added.

The labs and project should be retained as central parts of the course, as these were perceived as valuable for applying AI and data-management concepts in practice.