Vak: Project Internet of Things — credits: 10

Vakcode	ELVH19IPRJ
Naam	Project Internet of Things
Studiejaar	2022-2023
ECTS credits	10
Taal	Engels
Coördinator	P.J. Kamphuis
Werkvormen	Projectonderwijs
Toetsen	Internet of Things - Opdracht

Leeruitkomsten

The student can:
- write an Analysis Phase (What should be done);
- write a Design Phase (How should the project be done);
- build/make the project in the Implementation Phase;
- test the project in an Evaluation Phase ;
- define ethics and explain their relevance for engineering;
- describe and discuss relevant codes of conduct for engineers;
- list the main ethical issues raised by the IoT and the characteristics of the IoT that are of relevance in an ethical dimension;
- explain the impacts of modern technologies on privacy;
- describe ethical frameworks for decision-making and explain how they can be applied in engineering settings;
- think critically and provide argumentation relating to ethical issues in engineering and/or technological settings;
- explain both sides of an ethical issue and lead a discussion on that topic.

Inhoud

Analysis phase:
- Context, Objective, Problem statement, Stakeholders, user requirements, planning)

Design phase:
- Alternatives, how the problem statement can be answered
- Motivation of the best suitable alternative
- Functional diagram
- Technical requirements

Implementation Phase:
- Make/ build of the product/system

Evaluation Phase:
- Make test plans per technical requirement
- Check whether each technical requirement is met

Ethics and privacy:

The student:
- Defines ethics, explain their relevance for engineering and engineering codes of conduct.
- Discusses the ethical dimension of the IoT and how this technology can impact privacy.
- Describes ethical frameworks for decision-making and their application in engineering.
- Explains both sides of an ethical issue and lead a discussion on that topic.

Opgenomen in opleiding(en)

Minor Internet of Things
Exchange Internet of Things (autumn)

School(s)

Instituut voor Engineering

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