Course: Products and Services Design — credits: 5

Course code	SEVM19PSD
Name	Products and Services Design
Study year	2026-2027
ECTS credits	5
Language	English
Coordinator	J. Kleine Deters
Modes of delivery	Lecture Project-based learning
Assessments	Products and Services Design - Assignment

Learning outcomes

At the end of this module the student:
Demonstrates their ability and understanding by delivering:

- a design debrief: a methodical and systematical analyses of a case/assignment, context and/or market and stakeholders.
- a methodical approach for a design of a product or service, from case to concept.
- a systematic description of the case as a Cyber Physical Human System.
- a relevant, useful, verifiable, list of hierarchically structured requirements.
- purposeful and convincingly presented pitch(es) and posters.

Content

The course covers the following topics:
Engineering is about discovering and formulating rules and consequently designing according to those rules. In the end it is always about meeting expectations: of clients, of markets, of other -connected- systems.
Smart-System Engineers design Cyber-Physical-Human system (CPHS). The “H” puts the human in the loop and that is where expectations are always present but often implicit: hidden, unknown, unrecognized, subjective.
Every engineering project starts with agreeing upon a list of requirements. Unambiguous, highly specific, and verifiable requirements enable clear communication between you and your stakeholders. Only clear communication will lead to successful solutions.
You as Smart System Engineer should be able to clearly answer, and communicate, the three questions:
Why is there a need to create a solution?
How will we get from need to concept?
What valid tangible solutions meet the why?
In this course you will go through the process of defining the why, how and what for your project and purposefully communicating those to stakeholders and peers.

Included in programme(s)

Smart Systems Engineering

School(s)

Engineering, Life Sciences & ICT

share your talent. move the world.

Although every effort has been taken to ensure the accuracy of the information in the ECTS Course Catalogue, we cannot guarantee that the content and the information contained in it is always up-to-date, complete or true. Accordingly, no rights can be derived from the contents of the catalogue.