

Vak: Design Methodology

credits: 2

Vakcode ELVH19ADM
Naam Design Methodology
Studiejaar 2020-2021
ECTS credits 2
Taal Engels
Coördinator B.D. Williams

Werkvormen Hoorcollege
Opdracht
Practicum / Training
Toetsen Design Methodology - Vaardigheidstoets

Leeruitkomsten

The student:

- can identify which Human Factor elements to address in order to design a suitable interface for a particular application;
- can apply generic Human Factor research & analysis methods at a basic / beginners level;
- can create operational and specific functional requirements based on the results of the Human Factor analysis methods and customer requirements;
- translates all findings of the study into functional main requirements, functional sub-requirements and eventually, where detailed design decisions are made, non-functional sub-requirements, using the tools taught. All requirements are checkable, full-sentenced, unambiguous, testable and well-referenced when needed;
- can create feasible product concepts via a design process incorporating creative, selective, and reflective iterations;
- compares the design against the list of requirements; Identifying critical requirements (CTQ variables and specification limits) and consequences for the designed product, using the tools taught.

Inhoud

This study unit is related to User oriented design.

Here you will learn and understand how to design a usable interface that is based on the user and the context. That will be done by looking at the following areas:

- User Awareness (Cognitive ergonomics)
- Context Awareness (Context Sensitive System Interactions)

Globally the following subjects will be discussed during the lectures in this study unit:

- awareness of the importance of usability;
- user centred interaction design methods;
- product Specification and Integration/validation V-process;
- user requirements as part of Business requirements specification;
- deriving product interaction requirements and visual interface design;
- usability testing (User requirements verification);
- context awareness.

Opgenomen in opleiding(en)

Elektrotechniek Major Sensor Technology

School(s)

Instituut voor Engineering