

## STUDY PROGRAM INTERACTIVE MEDIA (Bachelor of Arts)

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### Module Human and Machine

#### Teaching Subject: Physical Interfaces

Credit points: 8  
Contact hours: 6

#### Modul contents

Students test their basic knowledge of conceptual, design and technical aspects on physical interfaces and hybrid artefacts. Established concepts are transferred into scenarios and made tangible through prototypes in order to evaluate potential areas of application in the respective context. The ability to critically analyse one's own designs is trained, as is the ability to engage in discourse in topic-specific fields.

Topics: Hybrid artefacts, physical and multisensory interfaces, human-machine collaboration and communication, Internet of Things, embodied interaction, sensory substitution and augmentation, code and material, prototyping, narration and design fiction

The course takes place within a subject area to be defined by the lecturer. Students are given the opportunity to independently determine their own thematic focus.

#### Learning/qualification objectives:

##### *Knowledge:*

- Knowledge of relevant technological developments and theories in the interaction design of physical interfaces and hybrid artefacts
- Basic knowledge of the design of multisensory interfaces for human-machine communication and collaboration
- Experience in scenario building and various prototyping method strategies: Fast & paper prototyping, Wizard of Oz, high fidelity prototyping

##### *Skills:*

- Independent designs can be transformed into concrete scenarios.
- Relevant technologies can be used prototypically in iterative design processes.
- Results can be presented and staged.

##### *Competences:*

- Potential areas of application can be evaluated and be evaluated and reflected upon in the respective context.

- The effects of technological developments on people and the environment can be made tangible through artefacts.
- Development of argumentative and discursive skills for learning/qualification for the transdisciplinary dialogue with related disciplines.