Bachelor	Foundation	Yes	1	Yes		3
Degree Programme	Department	Module Area: Specialised Courses	Mandatory	Semester	across Departments	Credits

Prerequisites

Module : Unit

Basics of Digital Media 1
(Basic Course)

Content

Inclusive spaces are opened up to acquire digital literacy and fluency by overcoming stereotypes, prejudices and discrimination: digital reading, digital writing and digital design. This includes binary coding, e.g. text, images and video and own experiments. Coding is introduced as a central competence in the field of digital media for art and design and students are given the opportunity to conduct their first experiments based on trigonometry with basic programming concepts. An introduction to generative design and physical computing complements this.
The design of inclusive spaces includes the deconstruction of social norms and attributions, inclusive representation and a critically diverse history of technology, which also contains milestones beyond the Eurocentric view and "white male gaze".
Digital-analog transformations (CNC milling machine, knitting machine or 3D robot arm) are presented as starting points for a wide range of media and techniques.
A self-observation experiment accompanying the first week of the course invites students to reflect on their own use of digital media.

Qualification Goals

Positive experiences with own digital competence beyond social norms
Basic understanding of binary coding
Basic ability to familiarize yourself with programming and write your own programs (not just use existing ones) for your own designs or prototypes
Knowledge of critical knowledge of digital media and technology history
Creative and reflective approach to digital media and interaction concepts
Experimental and research-based approach to a dynamically developing field in the context of social developments

Form of Examination

active participation in the course discourse, presentation

workload	Presence Time
90	**45**

Facilitator | Teacher

in addition to being an expert in digital media: should have basical experience and critical knowledge about intersectional forms of discrimination and the power dynamics that enable them

Rhythm | Alternatives

1st semester, usually winter term; it is required for advanced course digital media 2

Module : Unit
Basics of Digital Media 1 (Basic Course)

Methodology
Talking Groups – Talking Circle about their own positionality, social norms Group Discussions about critical knowledge in Tech Lectures about critical knowledge in Tech Embodiment Interventions for Technical Concepts (binary numbers, sorting algorithms, …) Representation of BIPoC, women, queer people, … Emotional involvement (Barnard) 4 levels of group cooperation

Examples
Deconstructing the myth of natural talent for coding by the statistics of female computer science students (West Germany vs East Germany; Iran, Jordan vs Germany, USA) **Integrating (positive) experiences from the analog world** to foster emotional involvement **Presenting the very diverse people from the Processing Foundation** with a specific focus on their Advocacy Program **Lively Byte**: a game where students play the bits of a byte by standing (representing 1) or squatting (representing 0): empowering regardless their positionality or prior knowledge and experiencing binary numbers/coding can be fun **Phytagoras' theorem** was not invented by him, but was already known 1000 years before Pythagoras in Babylonia, China and India. In Babylonia, strings with 12 equally spaced knots were used, because a triangle of 3 knots, 4 knots and 5 knots is always right-angled $3^2 + 4^2 = 5^2$. Were used for land surveying and in architecture.

Reader / Ressources
Josie Barnard: The Multimodal Writer. Creative Writing Across Genres and Media, London, 2019. Goutrié, Christine: Rassismus- und herrschaftskritische Faktographie. In: Zeitschrift für Medienwissenschaft. Jg. 14, Heft 26 (1/2022): X | Kein Lagebericht, 24–36. DOI: https://doi.org/10.25969/mediarep/18123. Online Toolbox (ARTIS deliverable D9.11, due Jan 2025) Advocacy Program of the Processing Foundation: https://processingfoundation.org/advocacy