

## Physical Computing

Introduction to Electronic and Physical Computing. Physical computing describes the application of embodiment theory to interactive systems, as well as a creative method of working with electronics. By diving into this field, we gain a greater understanding of the nature of technology, while enabling us to realise functional prototypes and gain new creative methods.

### Angebot für

Bisheriges Studienmodell > Design > Bachelor Design > Interaction Design > 3. Semester

Nummer und Typ	BDE-VIAD-V-3020.04.20H.001 / Moduldurchführung
Modul	Physical Computing
Veranstalter	Departement Design
Leitung	Luke Franzke Florian Bruggisser
Zeit	Di 6. Oktober 2020 bis Fr 30. Oktober 2020 16 Tage
ECTS	4 Credits
Voraussetzungen	Basic programming skills (semester I and II BA Interaction Design). Patience. Interest in technology from an intellectual and technical perspective.
Lehrform	Seminar with lecture, topic-specific exercises and self-study.
Zielgruppen	Pflichtmodul für Interaction Design, 3. Semester
Lernziele / Kompetenzen	Understanding the characteristics of interaction with digital and physical objects and the technologies behind them. Conception, planning and implementation of solutions to interaction design problems. Knowledge in electronics, microcontroller programming, sensors and actuators.
Bibliographie / Literatur	Wiki: <a href="http://wiki.iad.zhdk.ch">http://wiki.iad.zhdk.ch</a> Arduino Cookbook, Michael Margolis, O'Reilly Media, ISBN-13: 978-0596802479 Getting Started in Electronics, Forrest M. Mims III, Master Publishing, Inc., ISBN-13: 978-0945053286 MAKE: Electronics: Learning Through Discovery, Charles Platt, Make, ISBN-13: 978-0596153748 Getting Started with Arduino, Massimo Banzi, Make, ISBN-13: 978-0596155513 Physical Computing: Sensing and Controlling the Physical World with Computers Dan O'Sullivan and Tom Igoe, Course Technology PTR, ISBN-13: 978-1592003464 Arduino: <a href="http://www.arduino.cc">www.arduino.cc</a> Processing: <a href="http://www.processing.org">www.processing.org</a>
Leistungsnachweis / Testanforderung	min. 80% attendance and min 80% submitted exercises
Termine	06.10.2020- 30.10.2020
Dauer	16 Tage
Bewertungsform	Noten von A - F