

Physical Computing

Introduction to electronics and physical computing: playful learning and application of basic physical computing techniques.

Angebot für

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

Nummer und Typ	BDE-VIAD-V-3020.03.19H.001 / Moduldurchführung
Modul	Physical Computing
Veranstalter	Departement Design
Leitung	Luke Franzke Florian Bruggisser
Zeit	Di 17. September 2019 bis Di 5. November 2019 16 Tage
ECTS	5 Credits
Voraussetzungen	Basic programming skills. 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 physical objects and the technologies behind them. Conception, planning and implementation of case-specific solutions to interaction design problems. Knowledge in electronics, microcontroller programming, sensors and actuators.
Inhalte	We are increasingly surrounded by electronic objects, from the coffee machine to the smartphone. As interaction designers, we are responsible for the creative and meaning design of such devices. In this course, we will acquire basic knowledge of electronics, programming and the design of interactive objects, together with an intellectual and practical examination of their possibilities.
Bibliographie / Literatur	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 und Tom Igoe, Course Technology PTR, ISBN-13: 978-1592003464 Wiki: http://wiki.iad.zhdk.ch/EE Arduino: www.arduino.cc Processing: www.processing.org
Leistungsnachweis / Testatanforderung	min. 80% attendance and min 80% submitted exercises
Termine	17.09.2019 - 05.11.2018
Dauer	16 Tage

Bewertungsform

Noten von A - F