

Module 4 “Shaping the Digital World”

Supervisor	Tobias Berger, MBA
Inputs	Prof. Dr. Matthew Braham
Learning path	Workload: 6 ECTS / 180 hours Attendance: 48 hours (6 dates) in 8 weeks
Recommended semester	1st semester
Exam / grading	Project task, product development and implementation of a max. 5-minute film incl. written documentation

Contents

- Introduction to digital transformation (history, drivers, success factors)
- Fundamentals of data analysis (data as a success factor, challenges of big data, analysis methods, visualizations)
- Designing digital products and services (user stories, wireframes, agile methodologies, scrum, user-centered design)
- IT security (hackers and their targets, IT security risks, attack vectors, protection measures, security zone model, security by design)
- Ethics and culture of the digital society (challenges, opportunities and risks of digital technology in relation to elections, currency, privacy, wars, artificial intelligence)

Learning objectives

Students should become designers of digital change:

- Students should understand digital transformation and acquire methods for the active design of transformations of products, services and processes in companies and society
- Students should acquire digital core competencies that enable them to understand digital technologies and apply them effectively in practice
- Students should recognize the effects of digital technologies and digital change on ethics and society, learn to assess them and evaluate their effects