Hochschule München University of Applied Sciences

Courses in English
Course Description

Department	09 Engineering and Management
Course title	**Design Thinking and Human-Centerd-Design**
Hours per week (SWS)	4
Number of ECTS credits	4
Course objective	General understanding of the human-centered mindset, process, method and tools: • Setting up a project• Identify a relevant problem and define a starting point • Conduct user research• Extract relevant information from different data sources • Reframe the initial problem statement if needed • Generate ideas based on research and data points • Use prototypes to communicate and test those ideas • Use test results to iterate the initial solution further • Present and pitch final solution towards decision makers / other stakeholders • Reflect on approach and learnings
Prerequisites	Product Management and/or Marketing
Recommended reading	Tim Brown (2008): Design ThinkingJeanne Liedtka and Tim Ogilvie (2011): Designing for Growth: A Design Thinking Tool Kit for Managers https://www.ideo.com/question/how-can-we-use-ai-to-make-things-better-for-humans
Teaching methods	Seminaristic class. Group size: max. 30 students
Assessment methods	Project
Language of instruction	English
Name of lecturer	Jennifer Heier (Siemens AG) Lucas Bock (Siemens AG) Dr. Bettina Maisch (Siemens AG)
Email	
Link	
Course content	Project briefing: How might we develop a delightful, effective and efficient digital companion as a support in an industrial/business environment? Project preparation: We will identify relevant problem/need of an existing (digital) solution or process in an already given business or industry context. This problem will be described in detail (what, why, how, what kind of stakeholders are involved?). Project application: Students groups of 3 persons will apply the methods and tools introduced in the seminar along a self-selected project topic. Module 1 (Fr & Sa): Problem Space • General Intro Human-Centered-Design Principles / Examples from Industry • Intro Understand & Observe (problem space) Module 2 (Fr & Sa): Solution Space • Intro Synthesize, Ideate (solution space) • Intro Prototype & Test Module 3 (Fr & Sa): Implementation Space • Test Results & Iterate / Intro: Pitching • Final presentation and critical review of results and decision taken / Reflect of the HCD process and its application
Remarks	Workload: Presence time: 60 hours Self-studiespreparation of lectures and examt: 60 hours