Lehrform (teaching format) / SWS (hours per week): 4K

Kreditpunkte (credit points): 6

Turnus (frequency): usually, each summer term

Inhaltliche Voraussetzungen (content-related prior knowledge/skills): Foundations in Human-Computer-Interaction

Sprache (language): English

Lehrende (teaching staff): N.N.

<table>
<thead>
<tr>
<th>Studiengang (degree program)</th>
<th>Module</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatik (Master)</td>
<td>IMA, IMA-DMI, IMA-VMC</td>
<td>ab 1.Sem.</td>
</tr>
<tr>
<td>Digital Media (Master)</td>
<td>DMM-MI</td>
<td>ab 1.Sem.</td>
</tr>
<tr>
<td>AI and Intelligent Systems (Master)</td>
<td>AI-M-CER</td>
<td>from 2nd sem.</td>
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<tr>
<td>Management Information Systems (Master)</td>
<td>MIS-INF2</td>
<td>ab 1.Sem.</td>
</tr>
<tr>
<td>Digital Media &amp; Society (Master)</td>
<td>B.1</td>
<td>ab 1.Sem.</td>
</tr>
<tr>
<td>Zertifikatsstudium DiMePäd</td>
<td>DM in Lernumgebungen</td>
<td>ab 1.Sem.</td>
</tr>
<tr>
<td>Informatik (Bachelor)</td>
<td>(nur Freie Wahl)</td>
<td></td>
</tr>
</tbody>
</table>

Lernergebnisse / Learning Outcome:

- Knowledge of interaction design beyond WIMP
- Knowledge of research methods in Human-Computer Interaction
- Ability to conceptualize and develop beyond-WIMP interfaces
- Ability to plan and conduct evaluations of beyond-WIMP interfaces
- Professional and communicative competence

Inhalte / Contents:

“From GUI to NUI”:

After having achieved a general overview of the area of Human-Computer Interaction (HCI), learn more on the fundamentals of human-computer interaction and especially post-desktop interfaces and ubiquitous interaction. Work together in small teams on a semester-long project. Each week, in the labs, present and discuss work with peers. Develop your own concept of a NUI and document it in a research paper. The course will start with a brief re-cap on design principles (Fitts’ law, Norman: affordances, mappings, constraints, seven stages of action) and processes (Design Process, Evaluation & Statistical Testing) in HCI. You will read and present literature about methods in HCI. The main focus will be on the properties and characteristics of so called post-desktop or natural user interfaces (NUI), including but not limited to:

- Tangible Interfaces
- Gestural Interfaces
- Interaction in AR / VR / MR
- Wearable Interfaces
Haptic Interaction
Physiological Interaction

Hinweise (remarks): The table lists only the primary / most specific modules to which this course is assigned.