

<b>Module title</b>		<b>Abbreviation</b>
3D User Interfaces		10-HCI-3DUI-152-m01
<b>Module coordinator</b>		<b>Module offered by</b>
holder of the Chair of Computer Science IX		Institute of Computer Science
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
<p>The module provides knowledge about the possibilities and specifics of 3D user interfaces in the areas of augmented reality, large screens, mobile devices, robotics and computer games. The lecture introduces high-quality 3D interaction techniques and discusses their advantages and disadvantages in specific application areas. Furthermore, design guidelines as well as the theory needed for their implementation will be taught. In the exercise, students work in groups of 2-3 participants to develop appropriate 3D interaction techniques for a virtual reality application. Presentations, exercises and discussions help the student groups to familiarize themselves with the required technologies and activities and to organize the project as a whole.</p>		
<b>Intended learning outcomes</b>		
<p>After participating in the module courses, students are able to develop 3D user interfaces independently. They know high-quality 3D interaction techniques and can explain important design guidelines. Students can apply available tools for typically occurring tasks and know their advantages and disadvantages. Furthermore, you can independently familiarize yourself with complex technical systems as well as independently develop problem-solving proposals, communicate these in a team and integrate them into a common prototype.</p>		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
V (2) + Ü (2) Module taught in: German and/or English		
<b>Method of assessment</b> (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
presentation of project results (approx. 30 minutes) Language of assessment: German and/or English creditable for bonus		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
150 h		
<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Human-Computer-Interaction (2015) Master's degree (1 major) Human-Computer-Interaction (2018) Master's degree (1 major) eXtended Artificial Intelligence (xtAI) (2020)		