Module name	**Advanced User Interfaces**
Module number	CMS-TRK-UI2
Senior Lecturer	Prof. Dr. Raimund Dachselt raimund.dachselt@tu-dresden.de
Qualification objectives	Students have knowledge of basic hardware technologies, tracking methods, interaction principles, implementation possibilities and application examples for natural user interfaces. They are able to work scientifically in a promising field of human-computer interaction. Students can engage critically with the latest and most influential articles in the topics covered.
Contents	The content of the module is the development of post-WIMP or natural user interfaces based on real world experience. The focus is on gestural and comprehensible application control, interactive surfaces and mixed reality environments. Other content includes technologies and interaction principles of different modes of operation, including multi-touch, free-hand stick, pen interaction and viewing in relation to international research.
Forms of teaching and learning	The module includes lectures for 2 SWS, seminars for 2 SWS and self-study. The language of the lectures and seminars will be English.
Eligibility for participation	The competences to be acquired in the CMS-TRK-UI1 User Interface Engineering module are assumed.
Usability	In the Computational Modeling and Simulation Masters Course, the module is an optional module in Track Visual Computing, Track Computational Life Science and Track Computational Engineering, to be selected in accordance with Annex 2 to the Specific Examination Regulations. The module cannot be chosen in the Master's Course Computational Modeling and Simulation if this or a module with substantially the same content from a Course with which the entry conditions under § 3 of the Studienordnung have been met has already been completed. The module provides the pre-requisites for the modules it designates under the pre-requisites for participation.
Conditions for the award of credits	Credits are awarded when the module test is passed. The module test consists of a 90-minute away day and a portfolio of 60 hours. Both audit services are relevant to success. The language of the test will be English.
Credits and marks	The module allows 5 credit points to be obtained. The module score is the weighted average of the scores for each audit work. Time off work is given a threefold weighting and the portfolio a twofold weighting.
Frequency of the	The module is offered every summer semester.

module	
Workload	The total workload is 150 hours.
Duration of the module	The module covers 1 semester.