TECHNISCHE HOCHSCHULE LÜBECK

Module: Mobile Applications

Level	Master	**Short Name**	MobA
Responsible Lecturers	Matthies, Denys, Prof. Dr.		
Department, Facility	Electrical Engineering and Computer Science		
Course of Studies	Applied Information Technology, Master		
Compulsory/elective	Compulsory elective	**ECTS Credit Points**	5
Semester of Studies	2	**Semester Hours per Week**	4
Length (semesters)	1	**Workload (hours)**	150
Frequency	WiSe	**Presence Hours**	60
Teaching Language	German/English	**Self-Study Hours**	90

The following section is filled only if there is **exactly one** module-concluding exam.

Exam Type	Project Work	**Exam Language**	German/English
Exam Length (minutes)		**Exam Grading System**	One-third Grades
Learning Outcomes	After successfully completing the course, students: - know typical application scenarios and requirements for mobile applications - can apply different approaches to developing mobile applications - are capable of evaluating different approaches for developing mobile applications for given a context - know trends and current topics in mobile applications and are able to apply this knowledge to a wide range of projects - are able to implement interaction concepts for mobile applications taking into account human factors and user-centered application development - got to know and applied basic usability & UX evaluation techniques and Gestalt Laws for mobile applications - improved their analytical, teamwork and presentation skills		
Participation Prerequisites			

The previous section is filled only if there is **exactly one** module-concluding exam.

Consideration of Gender and Diversity Issues	✔ Use of gender-neutral language (THL standard) ✔ Target group specific adjustment of didactic methods ✔ Making subject diversity visible (female researchers, cultures etc.)
Applicability	The module can be used within the Master of Computer Science/Software Engineering for Distributed Systems
Remarks	

21.02.2024

Module Course: Mobile Applications (Lecture)

(of Module: Mobile Applications)

Course Type	Lecture	**Form of Learning**	Presence
Mandatory Attendance	no	**ECTS Credit Points**	2
Participation Limit		**Semester Hours per Week**	2
Group Size		**Workload (hours)**	60
Teaching Language	English	**Presence Hours**	30
Study Achievements ("Studienleistung", SL)		**Self-Study Hours**	30
SL Length (minutes)		**SL Grading System**	

The following section is filled only if there is a course-specific exam.

Exam Type		**Exam Language**	
Exam Length (minutes)		**Exam Grading System**	
Learning Outcomes			
Participation Prerequisites			

The previous section is filled only if there is a course-specific exam.

Contents	- Application scenarios for mobile applications - Requirements of mobile applications - Native mobile applications - Mobile web applications - Hybrid mobile applications - User-Centered Design fundamentals - Usability heuristics & user experience guidelines - Gestalt Laws related to mobile applications - Wire-frame prototyping - Current trends and topics in mobile applications with strong focus on Mobile Human-Computer Interaction
Literature	- Mostefaoui, G., Tariq, F (2018) Mobile Apps Engineering: Design, Development, Security, and Testing, Chapman and Hall. - Love, S. (2005). Understanding mobile human-computer interaction. Elsevier.
Remarks	

Module Course: Mobile Applications (Practical Training)

(of Module: Mobile Applications)

Course Type	Practical Training	**Form of Learning**	Presence
Mandatory Attendance	yes	**ECTS Credit Points**	3
Participation Limit		**Semester Hours per Week**	2
Group Size	12	**Workload (hours)**	90
Teaching Language	German/English	**Presence Hours**	30
Study Achievements ("Studienleistung", SL)	Practical Training	**Self-Study Hours**	60
SL Length (minutes)		**SL Grading System**	Pass

The following section is filled only if there is a course-specific exam.

Exam Type		**Exam Language**	
Exam Length (minutes)		**Exam Grading System**	
Learning Outcomes			
Participation Prerequisites			

The previous section is filled only if there is a course-specific exam.

Contents	The practical course serves to apply the teaching content presented in the lecture and to deepen a specific current topic from the field of mobile applications.
Literature	See lecture
Remarks	