

Module: Software Engineering II

Level	Bachelor	Short Name	SWEII
Responsible Lecturers	Lenka Kleinau		
Department, Facility	Electrical Engineering and Computer Science		
Course of Studies	Information Technology, Bachelor		
Compulsory/elective	Compulsory	ECTS Credit Points	5
Semester of Studies	6	Semester Hours per Week	4
Length (semesters)	1	Workload (hours)	150
Frequency	SuSe	Presence Hours	60
Teaching Language	English	Self-Study Hours	90

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

Exam Type	Portfolio Exam	Exam Language	English
Exam Length (minutes)		Exam Grading System	One-third Grades
Learning Outcomes	The students learn how to design, structure, develop and test a software system.		
Participation Prerequisites	Software Engineering I, Java Programming, Database Systems		

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

Consideration of Gender and Diversity Issues	<ul style="list-style-type: none"> ✓ Use of gender-neutral language (THL standard) ✗ Target group specific adjustment of didactic methods ✗ Making subject diversity visible (female researchers, cultures etc.)
Applicability	Software Engineering I, Java Programming
Remarks	

Module Course: Software Engineering II (Lecture)

(of Module: Software Engineering II)

Course Type	Lecture	Form of Learning	Presence
Mandatory Attendance	no	ECTS Credit Points	3
Participation Limit		Semester Hours per Week	3
Group Size		Workload (hours)	90
Teaching Language	English	Presence Hours	45
Study Achievements ("Studienleistung", SL)		Self-Study Hours	45
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	Usability Engineering Design Patterns Agile SW development Refactoring SW Testing - Black Box Tests - White Box Tests - JUnit
Literature	<ul style="list-style-type: none"> Bernd Bruegge & Allen H. Dutoit, Object-Oriented Software Engineering Using UML, Patterns and Java, 3rd ed., Pearson 2010 Ian Sommerville, Software Engineering, 10th ed., Pearson 2016
Remarks	

Module Course: Software Engineering II (Exercise)

(of Module: Software Engineering II)

Course Type	Exercise	Form of Learning	Presence
Mandatory Attendance	yes	ECTS Credit Points	2
Participation Limit		Semester Hours per Week	1
Group Size		Workload (hours)	60
Teaching Language	English	Presence Hours	15
Study Achievements ("Studienleistung", SL)		Self-Study Hours	45
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	The students practice developing a software for a given scenario, going through a whole software development process with main focus on usability and test.
Literature	Same as lecture
Remarks	