

Module description of Module 21: Programming Exercises

Module title	Programming Exercises
Module number	M21
Study programme	Computer Science
Applicability of the module to other study programmes	Applicable to other Computer Science Bachelor programmes
Duration of the module	1 semester
Status of the module	Compulsory module
Recommended semester during the study programme	4
Credit points (Cp) of the module	5
Prerequisites for module participation	1. Passed (partial) examination „Einführung in die Programmierung mit C“ (M4). 2. Passed examination for module „Databases“ (M14).
Prerequisites for module examination	None
Module examination	Written project report (8 weeks) and oral presentation (min. 15 min, max. 20 min)
Intended learning outcomes /acquired competences of the module	<p>Students are able to implement a realistic application covering aspects of distributed systems and a RDBMS. To this end, they work in project teams and apply techniques from software engineering. Students can apply basic IT-project management skills.</p> <p>In addition to this, the students acquire the following extracurricular skills: project work, self organization, English</p>
Contents of the module	<p>Consolidation of software development and engineering using suitable tools. By working in a team, students get exposed to modern project management techniques.</p> <p>For further details, please see "Unit Description" below.</p>
Teaching methods of the module	Project
Total workload	150 h (25% extracurricular skills)
Language of the module	English
Frequency of the module	Annually

Unit description Module 21.1 Project Programming Exercises

Name of the unit	Project Programming Exercises
Code	
Corresponding module	Programming Exercises
Lecturer	Prof. Dr. Rainer Buhr, Prof. Dr. Dieter Hackenbracht, Prof. Dr. Justus Klingemann, Prof. Dr. Andreas Orth, Prof. Dr. Christian Rich, Prof. Dr. Jörg Schäfer, Prof. Dr. Matthias Schubert
Contents of the unit	Know-how acquired in programming, software engineering, databases and distributed systems is used and applied to a realistic problem. This involves in particular requirements of engineering, analysis, design, implementation and testing of a working application.
Teaching methods	Project
Contact hours per week	4
Total workload of the unit (h)	150
Total time of contact hours (h)	60 (40 included in class-room exercises)
Total time of examination incl. preparation (h)	0
Total time of practical training (h)	100
Total time of self-study (h)	30
Language of the unit	English
Recommended reading	Current and specific literature information will be announced by the lecturer in the beginning of the semester.
Type and form of assessment	Successful implementation of task including presentation.
Grading of the assessment	Differentiated
Further information	