Modulbeschreibung zum Modul 14.3

Module title	Internet of Things
Module number	14.3
Study program	M.Sc. Program High Integrity Systems
Module code	
Units	Seminar
Level	M.Sc.
Applicability	
Duration	1
Status	Elective Subject
Recommended semester	3rd semester
Credits	5
General recommended prerequisites	none
Recommended prerequisites	
Requirements for module examination	none
Examination type	Paper written according to international scientific journal standards and oral presentation (30 minutes) according to international scientific conference standards. The grade is calculated by the arithmetic mean of the marks for the written report and oral presentation
Education goals/ capabilities	Upon completion of this course, the student is able to: • understand the basic technologies for the Internet of Things, • asses emerging technologies concerning their suitability, • get acquainted quickly with new technologies, and • develop new application fields. Training for non-specialist competencies (25% of the total workload): Students learn • to search for, read, summarize and cite scientific literature on a large scale; • to read and interpret national and international standards; • to write a report as a scientific paper; • to give a scientific talk.

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Module units	Seminar
Unit teaching modes	Seminar
Total workload (h)	150
Language	English
Module frequency	Annual
Module coordination	Prof. Dr. Matthias Wagner
Hints	

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Unitbeschreibung zum Modul 14.3

Unit name	Internet of Things - Seminar
Code	
Module name	Internet of Things
Lecturers	Prof. Dr. Jörg Schäfer, Prof. Dr. Matthias Deegener, Prof. Dr. Matthias Wagner
Contents	The course will cover selected subjects from the following areas. The depth of coverage might vary. • Technological foundation of the Internet of Things • HW Basics • Field-Bus systems • Wireless sensor networks • Middleware and integration into the Internet • Example(s) of relevant algorithms • HMI • Application examples
Teaching mode	Seminar
Weekly hours	2
Total workload (h)	150
Attendance (h)	36
Exam incl. exam preparation	
Practical part	
Self study	114
Language	English
Literature	
Module examination	Paper written according to international scientific journal standards and oral presentation (30 minutes) according to international scientific conference standards. The grade is calculated by the arithmetic mean of the marks for the written report and oral presentation
Module examination assessment	Graded according to published grading scheme

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