## Module Name Requirements Engineering

Type of Module Advanced Module					Module Code AM-RE					
Identification Number		Workload	Credit Points	Term	erm		red Every	Start		Duration
MSc-I-RE		270 Hours	9 CP	1. – 3.	Semester SuSe		e	Summer term only		1 Semester
1	a) Lecture 6			Conta	Contact Time 60 h 30 h		Private Study 120 h		Planned Group Size	
				30 h			60 h	No limits		limits

## 2 Module Objectives and Skills to be Acquired

The students...

- ... have an awareness of the importance, difficulties and possibilities of requirements engineering.
- ... have relevant knowledge of requirements elicitation, documentation, analysis and management and are able to apply appropriate techniques.
- ... know that successful requirements engineering requires careful planning, systematic approach and discipline.
- ... know which non-technical difficulties (e.g., time economy, communication and coordination problems, difficulties in working with others) can arise in the course of software creation and how to deal with them successfully.

## 3 Module Content

A good requirements specification is a crucial prerequisite for any successful software project. This lecture provides an introduction to processes, methods, and representation forms for specifying and managing requirements.

Topics include:

- Background and general overview
- Fundamental principles of requirements engineering
- Work products and documentation techniques (natural language and model-based)
- Requirements elicitation practices
- Validation of requirements
- Requirements engineering processes
- Requirements Management
- Tool Support

## 4 Teaching Methods

Lecture, Exercises

5	Prerequisites (for the Module)								
	Formally: None								
	Recommended: Basic module in computer science (programming course), advanced module in computer science II (software engineering), focus module in programming								
6	Type of Examination								
	Written Exam								
7	Credits Awarded								
	Passing the written examination. Regular participation in the exercises and the successful completion of exercises can be used as admission requirements for the examination and can be included in the examination performance on a pro-rata basis, provided that prior notice is given. Registration is required for participation in the final examination; one repeat examination is offered per rotation. Repeated participation in the lecture and exercises in preparation for a retake of the final exam is possible. The module is graded.								
8	Compatibility with other Curricula								
	Master of Science Informatik								
9	Proportion of Final Grade								
	9/114								
10	Module Coordinator								
	Prof. Dr. Andreas Vogelsang								
11	Further Information								