Zurich University
of Applied Sciences

School of
Engineering

t.INMI1 - Informatik für Maschinentechik-Informatik 1

Person responsible for the course:	René Klopfer, klre
Credits:	4
Valid for:	2011/2012
Last saved:	08.08.2011 08:56

Learning objectives:

The students

- have an overview of classical and modern development processes
- learn the basics of OOA and OOD and are able to proceed autonomously a simple SW project starting from specification up to an executable and tested software product and document it in UML
- use thereby basic design patterns meaningfully
- design a challenging user-interface (GUI with SWING)
- design a systematic documentation parallel to the development process

Course content:

Lecture:

Methodology of design:

- Basics of software engineering
- OO analysis and OO design, UML diagrams
- Overview of unified process and classical SE procedures
- Elementary design patterns

User-interfaces

- Design methodology for GUI in consideration of style guides and ergonomic aspects
- Introduction and deepened knowledge in SWING

Practice:

- Project: OO analysis, OO design, UML diagrams
- Project: Creation of components of a user-interface
- Crash course: Creation of a challenging user-interface (e.g. access to a database)

Previous knowledge:

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Teaching method:

Type of lesson:	Number of lessons per week:
Lecture	14x2L
Tutorial/Practicum	
Group teaching	14x2L
Block instruction	
Seminar	

Assessment:

According to the table or as specified in writing by the lecture at the beginning of the semester!

Number	Type	Weighting
1	End of term exam	
1	Exam during the semester	
1	practicum report(s)	

Language of instruction:

Deutsch

Instruction material:

3-86063-594-8 Software Requirements Karl E. Wiegers Microsoft Press 2 2005

3-89842-585-1 Visual Basic 2005 Andreas Kühnel Galileo Computing 2 2006

Comments:

1 SWL as crash course between the terms