



# Software Engineering

0. Course Organization | Thomas Thüm | October 7, 2021

# About Me

- My name is Thomas  
(avoid Prof./Mr. Thüm please)
- Programming since 1998
- Contributing to FeatureIDE since 2007
- 2004–2010: studied Computer Science  
(minor subject Mathematics)
- 2010–2015: PhD student in Magdeburg
- 2015–2019: PostDoc in Braunschweig
- Since 2020: Professor for the Construction  
and Analysis of Secure Software Systems



# Institute of Software Engineering and Programming Languages

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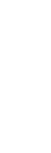
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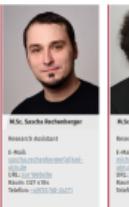
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# Bachelor Courses of Our Institute

Key	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> (Pro-)Seminar	<input checked="" type="checkbox"/> Project	<input checked="" type="checkbox"/> Thesis		
Lecturer	<input checked="" type="checkbox"/> Tichy	<input checked="" type="checkbox"/> Frühwirth	<input checked="" type="checkbox"/> Thüm	<input checked="" type="checkbox"/> Raschke	<input checked="" type="checkbox"/> Juhnke	<input checked="" type="checkbox"/> misc
	Winter Term	Summer Term	infrequent	always		
Master & Bachelor	Functional Programming <small>RASCHKE</small>	Constraint Programming <small>FRÜHWIRTH</small>	Rule-based and Constraint Programming			
	Management of Software Projects <small>HOUDEK</small>					
	Rule-based and Constraint Programming <small>FRÜHWIRTH</small>					
	Web Engineering <small>TICHY</small>					
Bachelor	Software Engineering I+II <small>THÜM</small>		Research Trends in Software Engineering	Bachelor Thesis		
	Software Project <small>THÜM</small>		Logic-based Programming Languages			
	Introduction to Computer Science	Programming Paradigms <small>RASCHKE</small>	Software Engineering			
			Anwendungsprojekt VMA			
			Anwendungsprojekt MDSD			

# Master Courses of Our Institute

Key	<input checked="" type="checkbox"/> Lecture	<input checked="" type="checkbox"/> (Pro-)Seminar	<input checked="" type="checkbox"/> Project	<input checked="" type="checkbox"/> Thesis
Lecturer	<input checked="" type="checkbox"/> Tichy	<input checked="" type="checkbox"/> Frühwirth	<input checked="" type="checkbox"/> Thüm	<input checked="" type="checkbox"/> Raschke
	Winter Term	Summer Term	infrequent	always
Master	Compiler Construction Thüm	Parallel Programming (in german) RASCHKE	Hot Software Engineering Topics in Research and Practice Model-Driven Software Engineering TICHY	Master Thesis SE-Projekt A SE-Projekt B
	Empirische Forschungsmethoden der Informatik (in german) JUHNKE	Software-Produktlinien (in german) THÜM	Software Quality Assurance TICHY	
	Principles of Program Analysis FRÜHWIRTH		Application of modern principles of software engineering in software development Individual Project Rule-based and Constraint Programming Research Trends in Software Engineering	

# Current Courses of Our Institute

## Bachelor

- Software Engineering I+II  
(Softwaretechnik I+II)
- Software Project  
(Softwaregrundprojekt)
- Proseminar on Logic-Based Programming Languages  
(Logikbasierte Programmiersprachen)
- Seminar on Rule-Based and Constraint Programming  
(Regelbasierte und Constraint-Programmierung )
- Numerous Projects

## Master

- Compiler Construction  
(Compilerbau)
- Empirical Research Methods in Computer Science  
(Empirische Forschungsmethoden der Informatik)
- Functional Programming  
(Funktionale Programmierung)
- Management of Software Projects  
(Management von Softwareprojekten)
- Hot Software Engineering Topics in Research and Practice  
(Aktuelle Themen der Softwaretechnik aus Forschung und Praxis)
- Web Engineering
- Rule-Based Programming  
(Regelbasierte Programmierung)

# Software Engineering I + II

## The Facts

- German title: Softwaretechnik I + II
- Abbreviation: SE (aka. SWT)
- Credits: 6 ECTS (60h+120h=180h)
- Semester hours: 4
- Requirements (contentual):  
Interactive Systems Programming  
[\(Programmierung von Systemen\)](#)
- Courses of studies:
  - ▶ B.Sc.: Informatik, Medieninformatik,  
Software Engineering,  
Informationssystemtechnik
  - ▶ M.Ed.: Informatik Lehramt
  - ▶ ...

## Course Organization

- Weekly lecture over winter and summer term
- Written exam at the end of the summer term
- No formal exercises, but small tasks within the lecture
- In parallel: Software Project  
[\(Softwaregrundprojekt\)](#)

HI THERE! WE'RE THE  
VIRUSES THAT CAUSE  
THE COMMON COLD.  
THIS HANDWASHING...  
IT STOPS WHEN THIS  
IS ALL OVER, RIGHT?



IT'S JUST, IT'S  
MAKING THINGS  
REALLY HARD  
FOR US, TOO.  
MAYBE WE  
COULD MAKE  
A DEAL?



WE WON'T KILL YOU!  
WE JUST WANT TO GET  
BACK IN YOUR THROAT  
AND MAKE YOU FEEL  
GROSS NOW AND THEN.

SHOW US  
SOME  
MERCY?



NO.



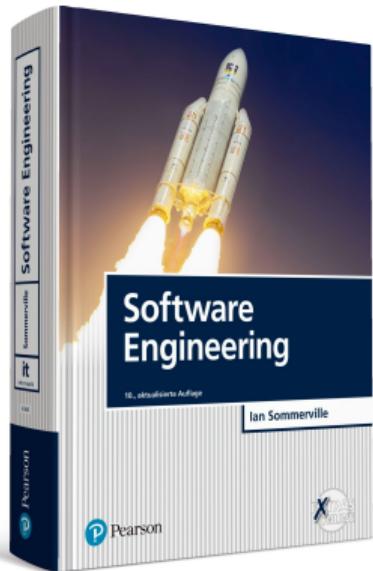
# Corona-Update

## Online-Format in Winter Term

- no physical lecture
- videos available in Moodle and on Youtube
- extensive use of Moodle:  
small tasks, your questions, your answers
- use tutorial groups of software project for  
questions
- watch videos together!
- do interactive parts together!



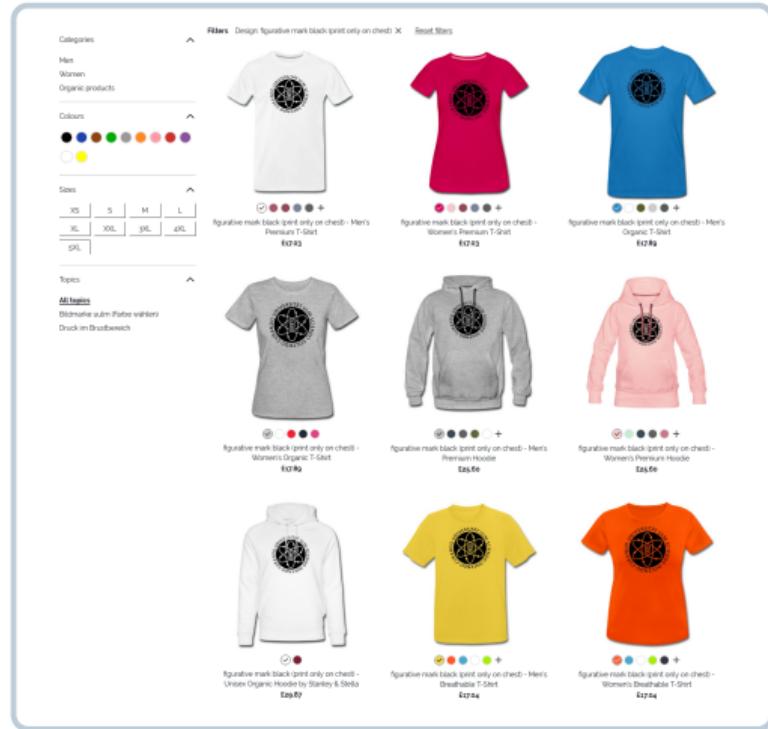
# Literature



[Sommerville]

- Ian Sommerville.  
Software Engineering, 10.  
Edition, Pearson, 2018.
  - ▶ German, English,  
and earlier versions
  - ▶ Videos by Ian  
Sommerville and  
others available  
online
- More literature  
announced in each lecture

# Bug Bounty Program



## Bug Bounty Program

- Lecture created from scratch in 2020/2021
- Expect inconsistencies and errors
- Please report problems in Moodle:  
<https://moodle.uni-ulm.de/mod/moodleoverflow/view.php?id=420071>
- Bug Bounty: significant contributions honored
- Most active students in Moodle also honored

# Questions?

## How to Find Answers

1. Check information in Moodle:  
<https://moodle.uni-ulm.de/course/view.php?id=26062>
2. Check already answered questions in Moodle overflow
3. Ask your own questions and answer questions of fellow students
4. Meet me in my consultation hour:  
Wednesday 1–2pm in Zoom <https://uni-ulm.zoom.us/my/thomas.thuem>
5. Contact me via [thomas.thuem@uni-ulm.de](mailto:thomas.thuem@uni-ulm.de)

## Foren



Organisatorische Fragen



Interaktive Aufgaben und inhaltliche Fragen



Feedback und Bug Bounty

