

YES

Dr. Michael Eichberg Software Technology Group Department of Computer Science Technische Universität Darmstadt Introduction to Software Engineering

# Organization



## Teaser



As long as there were no machines, programming was no problem at all; when we had a few weak computers, programming became a mild problem, and now we have gigantic computers, programming has become a gigantic problem.



E.W. Dijkstra The Humble Programmer Communications of the ACM, Vol. 15, Issue 10, 1972

# The Team



#### The Team



**Dr. Michael Eichberg** 





**Ralf Mitschke** 

**Johannes Lerch** 

#### Contact

WWW

http://www.stg.tu-darmstadt.de/teaching/courses/ws2011/eise\_ws2011

Forum

http://www.d120.de/forum/

→kanonische Einführungsveranstaltungen

→Einführung in Software Engineering

#### The Team

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#### **Dr. Michael Eichberg**

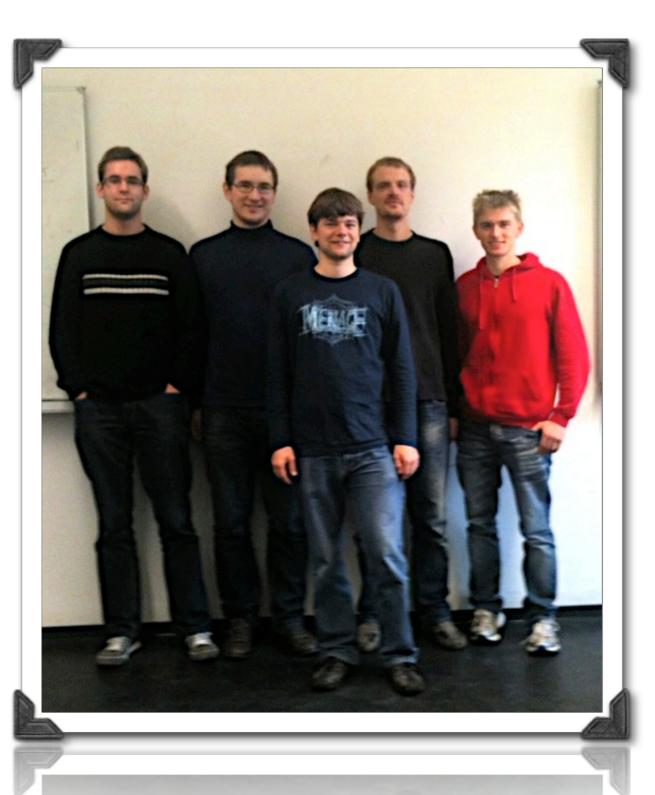
Office hour: Thursdays, 17:00-18:00 hours (S2 | 02 A206)



#### **Ralf Mitschke**

Office hour: Tuesdays, 15:00-16:00 hours (S2 | 02 A207)







# Organization



#### Lecture

- Thursdays 13:30-15:00 in S2 02 | C205 and C110
- The slides are in English (Key terms will be translated into German.)
- The slides will generally be available after the lecture (I will try hard to make a preliminary version available the day before the lecture.)
- The slides and exercises can be downloaded from: <u>https://cage.st.informatik.tu-darmstadt.de/eise/public</u> (SVN) (RBG account required)

- Every week, we will have an exercise, starting Thursday, Oct. 27th, ~15:00-15:45 in S2 02 | C205 and C110
- Team exercises (not-graded) are expected to be solved in teams of 3 to 4 students
- Graded exercises *need to be solved on your own*
- Register for the exercise using Webreg; sign-up for the exercise until Oct. 26th https://www.dekanat.informatik.tu-darmstadt.de/webreg/index.php
  WebReg is only used to sign-up for the exercise.
- Sign-up as a team; if you don't have a team, we will assign you to a team

## Written Exam

- The exam will be on February, 22nd 2012 10:00 12:00 (The room will be announced in due time. The exam will take 90min.)
- You need to register for the exam in TUCaN (There are no further prerequisites; "everyone" can attend the exam.)
- The exam will be an open book exam
- The exam will enable you to choose the tasks that you are particular good at

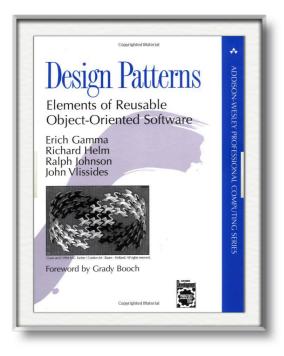
(I.e., it will not be possible to solve the entire exam in 90 minutes.)

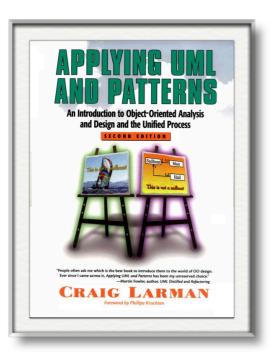
## "Additional Information"

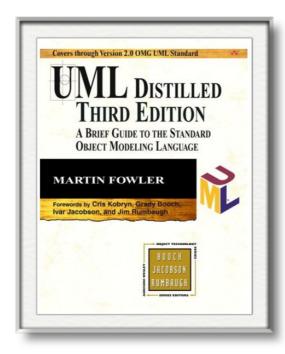
 The document stored in the SVN named "Weitere Informationen" contains information relevant for the written exam (e.g., the bonus system) and the lecture (All statements in the document are binding.)

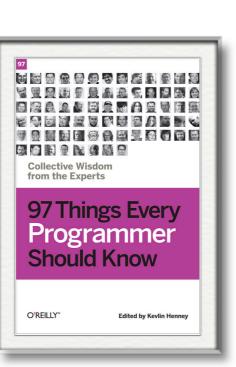


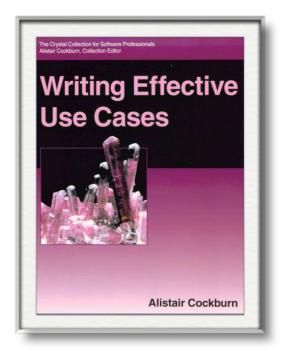
## Related Bibliography

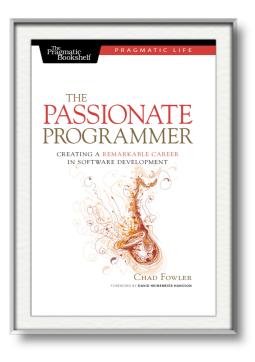












#### **Essential** Bibliography

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- Design Patterns Elements of Reusable Object-Oriented Software; Erich Gamma, Richard Helm, Ralph Johnson, John Vlissides; Addison-Wesley, 1995
- Applying UML and Patterns An Introduction to Objectoriented Analysis and Design; Craig Larman; Prentice Hall

#### A Recommended / Very Useful Podcast



External Talks / Events

#### Capgemini

Excursion / One-day Workshop December, 1st, 2011

• ACCSO - Working Title: "Beschleunigte Softwareentwicklung" January, 19th, 2012 Organization | 17

# The Lecture



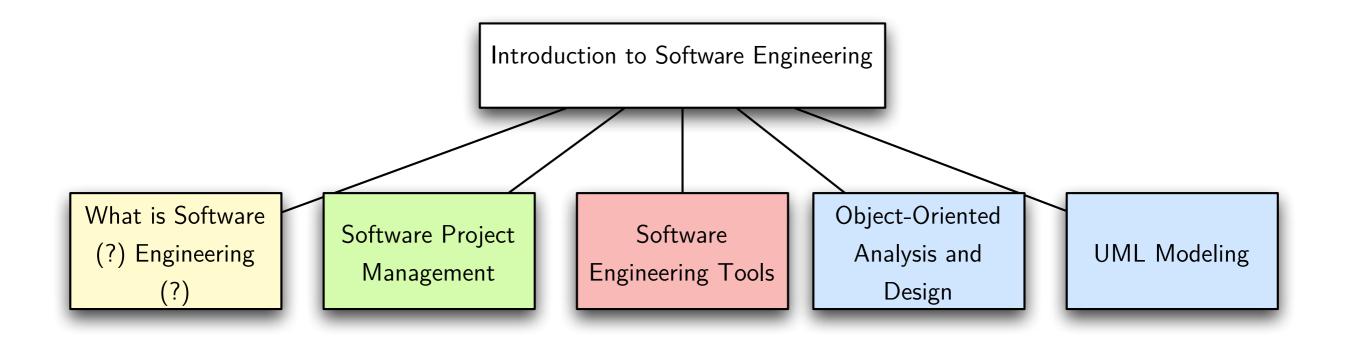
## Basic programming skills are required.

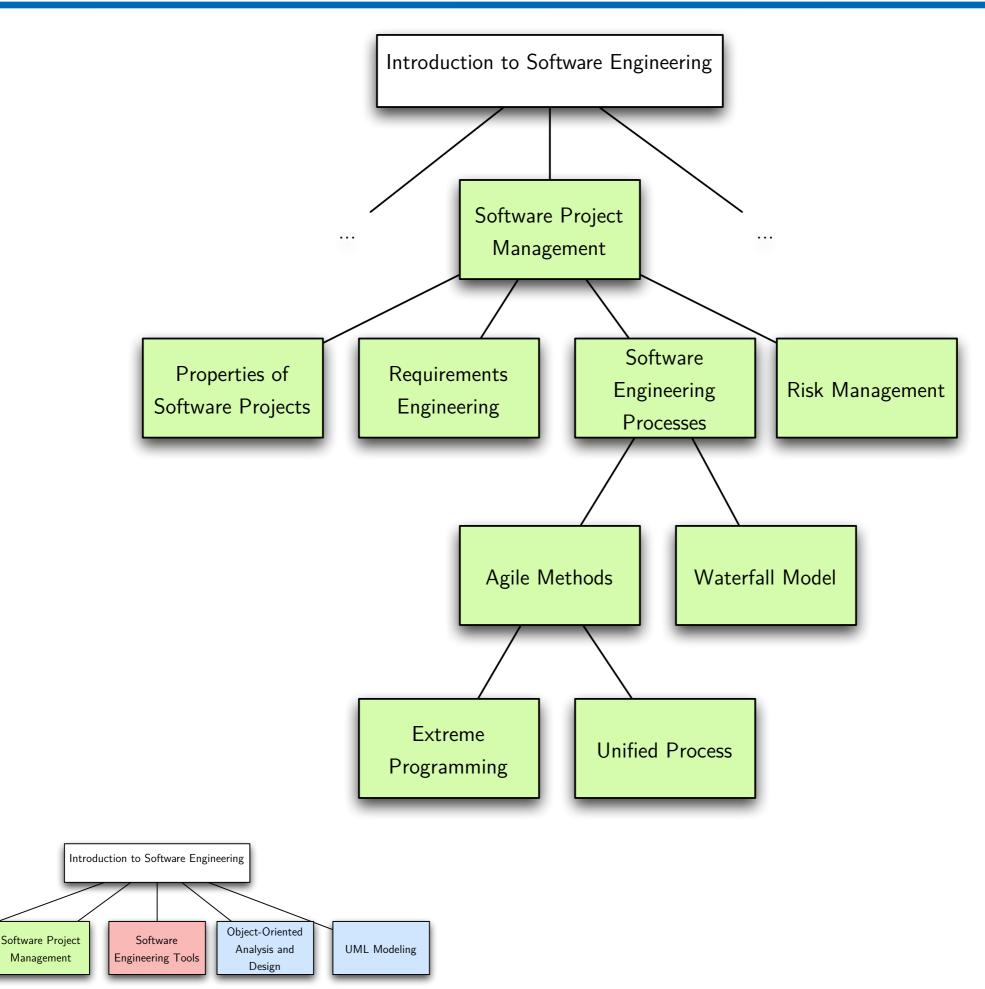
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- Basic knowledge of object-oriented programming concepts is necessary
  I.e., you should readily understand the following terms:
  - class, interface
  - object
  - inheritance
  - polymorphism
- Working knowledge of the Java programming language

- To get a brief overview of "all" areas of software engineering
- To understand agile software development processes
- To be able to perform object-oriented analysis and design
- To be able to read and create basic UML diagrams
- To get first hands-on experience and to learn to use basic software development tools

# The goal is to enable you to systematically carry out small(er) commercial or open-source software projects.

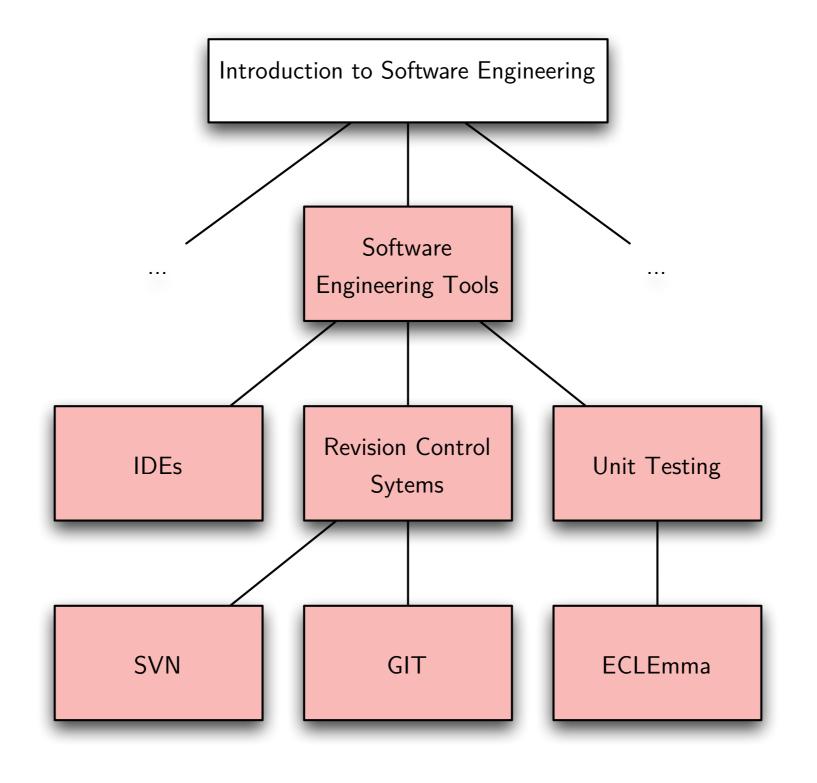


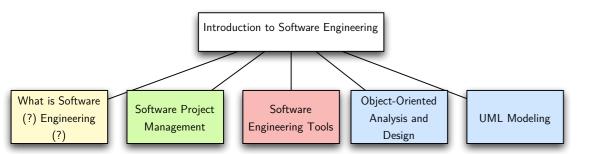


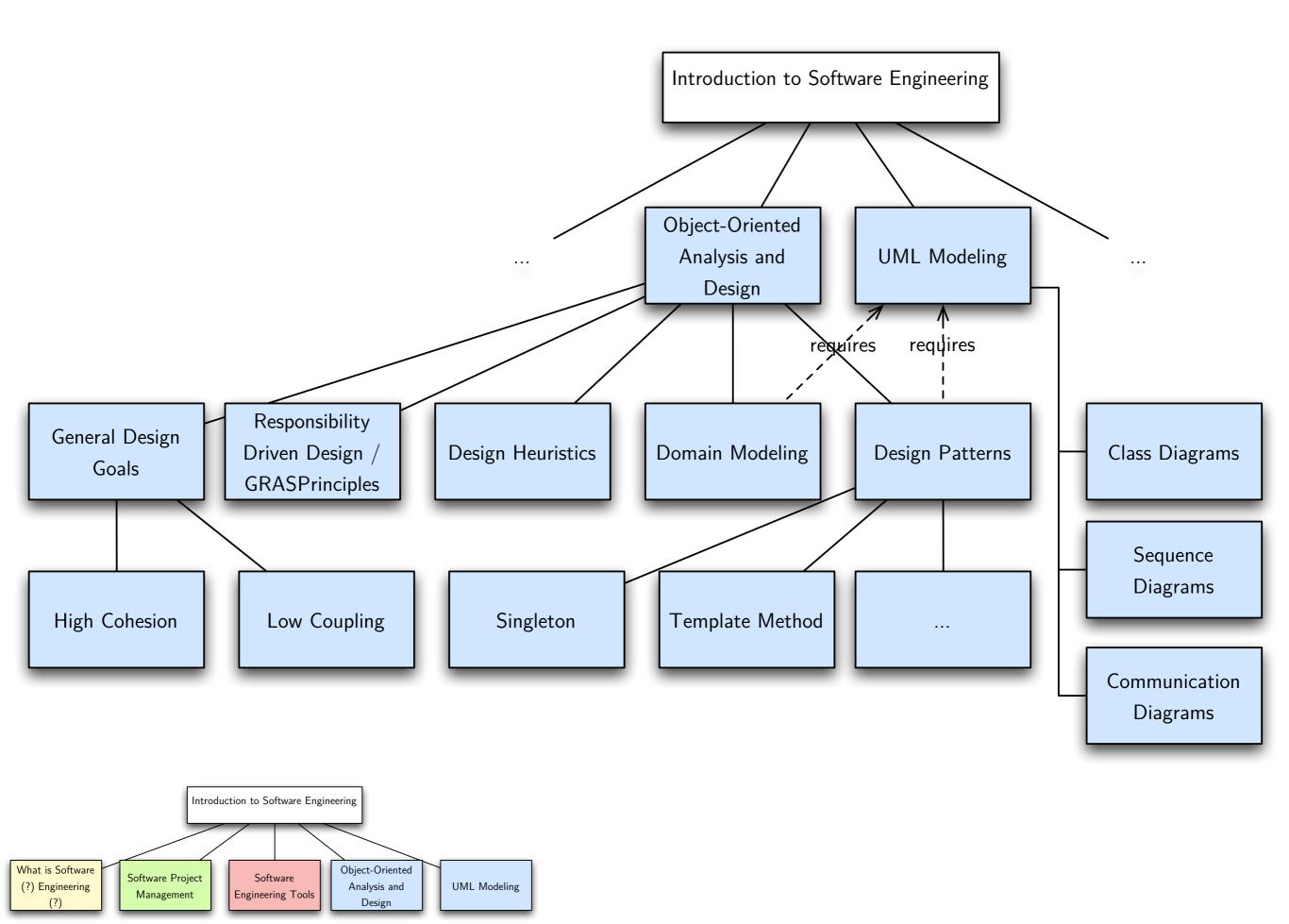
What is Software

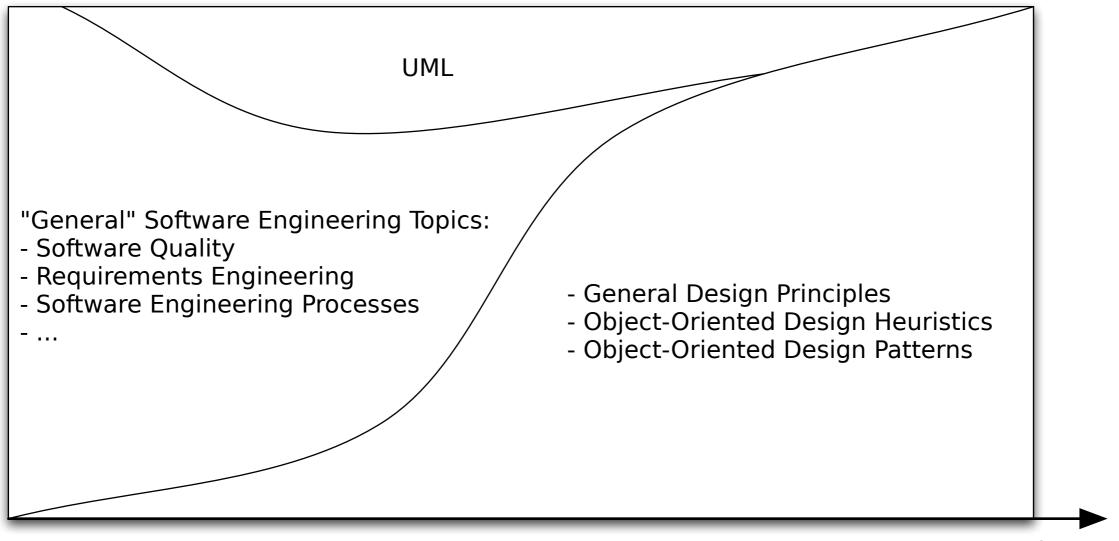
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Lecture

