

Course Introduction

Prof. Dr. Dirk Riehle

Friedrich-Alexander University Erlangen-Nürnberg

AMOS A01

Licensed under [CC BY 4.0 International](#)

To introduce students to agile methods by creating useful software.

- [1] Professional = ambition + collaboration with external partner
- [2] Agile methods = our focus here, specifically Scrum + XP
- [3] We teach both overall processes as well as best practices
- [4] Useful software is software that has value to someone!

Course Learning Goals 2 / 2

- Learning objectives (lectures / tutorials, projects)
 - Gain conceptual understanding and practical skills of using
 - agile software development methods
 - software project management tools
 - software development tools
 - Learn how to work
 - with an external stakeholder
 - in a (student) project team
- Project objectives
 - Develop useful software
 - Perform a great demo on demo-day!

Industry Partners and Teaching Projects



Audi
Vorsprung durch Technik



D I T E S T



BOSCH

Continental



DATEV



methodpark

NEWSTORE

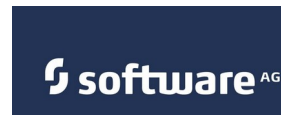


SOLYP

SENACOR

SIEMENS

sivantos
the hearing company

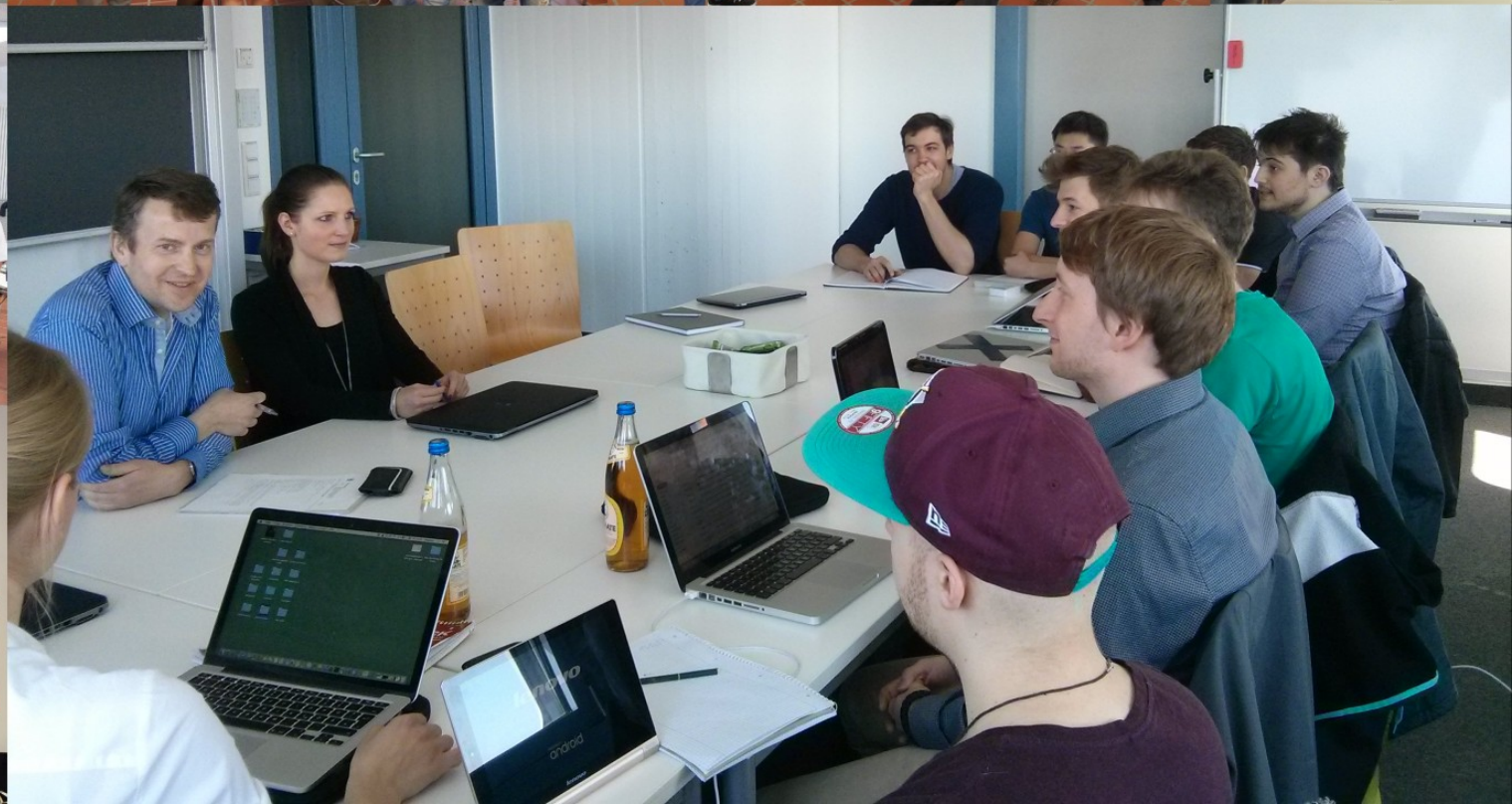
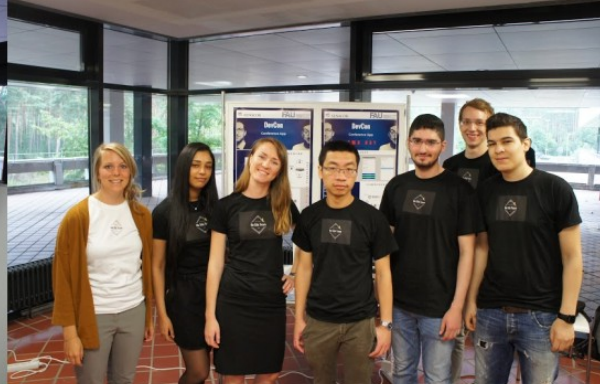


Volkswagen

...

The AMOS Project

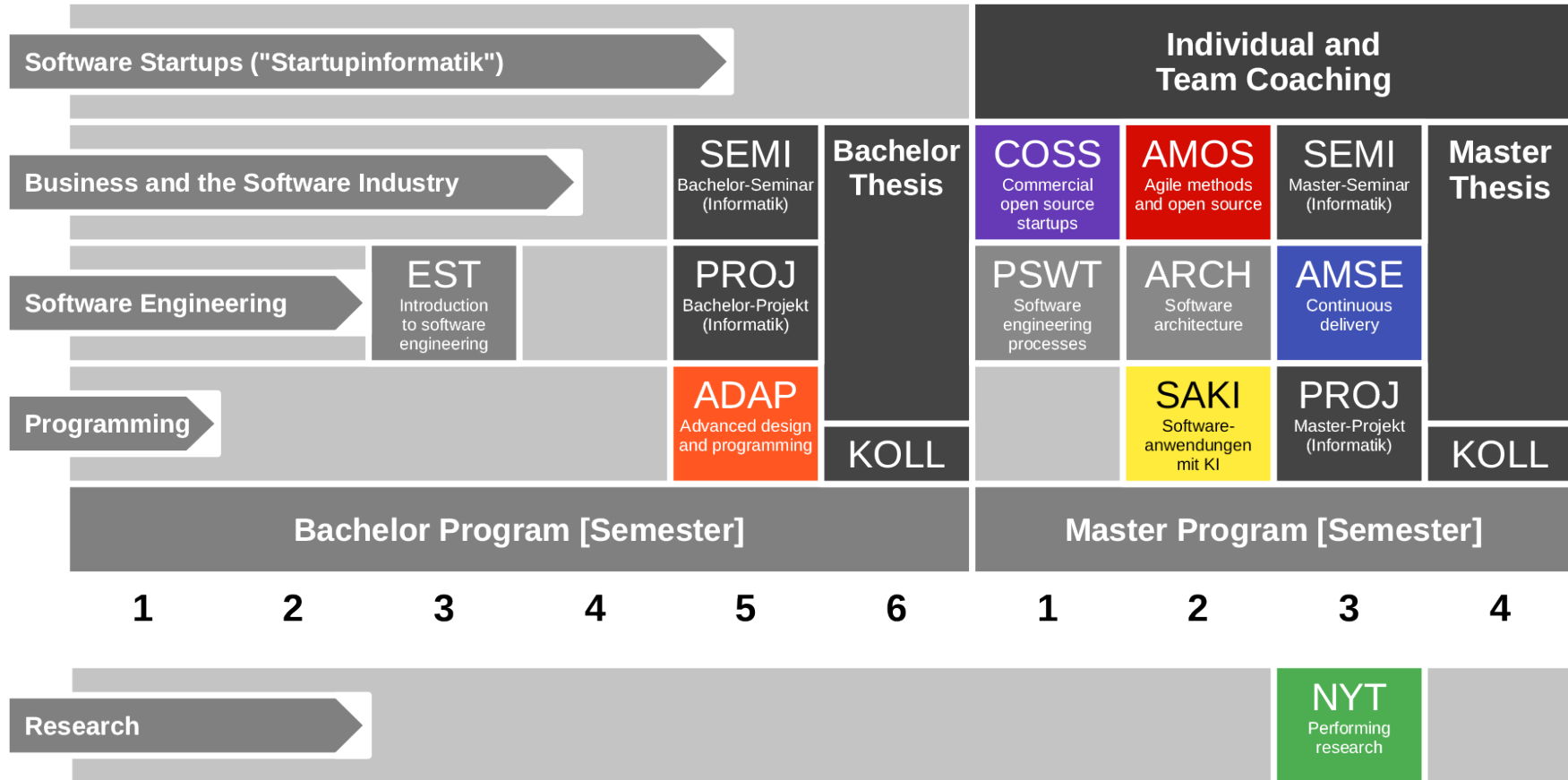
© 2021 Dirk Riehle - Some Rights Reserved



Skills Required for Course

- General skills
 - Willingness and ability to work in a team
 - Ability to acquire skills during the project
- Role-specific skills
 - Product owner (PO) role
 - Strong conceptual thinking
 - Ability to communicate well
 - Affinity to technology
 - Software developer (SD) role
 - Technology stack (specific to project)
 - Development tools like git and GitHub
 - Test-driven development

Course Position in Curriculum



Courses and Modules

		Courses (Lehrveranstaltungen)		
		OSS-AMOS-VL	OSS-AMOS-UE (Team Meetings)	Total ECTS
Modules	OSS-AMOS-PO	x	x	5
	OSS-AMOS-SD	x	x	10

Course Grading [1] (Separate Roles)

- **OSS-AMOS-PO (Product Owner)**

- Theory (lectures) = 20% of grade
 - 2 SWS in 5 ECTS = 20%
 - As measured by class quizzes
 - Grading scale is [0..10] points
- Practice (project) = 80% of grade
 - Individual contribution to teamwork = 50%
 - As measured in team meetings
 - Grading scale is [0|1|2|3]
 - Independent work = 50%
 - As measured by artifacts provided
 - Grading scale is [0|1|2|3]

- **OSS-AMOS-SD (Software Developer)**

- Theory (lectures) = 10% of grade
 - 2 SWS in 10 ECTS = 10%
 - As measured by class quizzes
 - Grading scale is [0..10] points
- Practice (project) = 90% of grade
 - Individual contribution to teamwork = 50%
 - As measured in team meetings
 - Grading scale is [0|1|2|3]
 - Independent work = 50%
 - As measured by artifacts provided
 - Grading scale is [0|1|2|3]

Course Grading

- See **Grading Schema** tab on **Course Organization** doc

Receiving a Grade for the Course

- If you want to receive a grade
 - You must register through the course management system before the deadline
- If you cannot register through the course management system
 - Please follow these instructions <https://wp.me/PDU66-2bx>
- Otherwise: No grade

No Oral or Written Exam [1]



[1] You still have to register for the course

Course Language [1]

- Class
 - Lecturer: English
 - Student: Choice of German or English
- Project and exercises
 - Team: Choice of German or English
 - Submissions: Choice of industry partner

Course Communication

- Announcements by email (through course management system)
- Questions and answers using course communication forum
- Use the **Teaching Team** email alias from **Course Organization** doc



Course Organization

- See <https://oss.cs.fau.de/oss-amos-course>

Thank you! Questions?

dirk.riehle@fau.de – <http://osr.cs.fau.de>

dirk@riehle.org – <http://dirkriehle.com> – [@dirkriehle](#)

Credits and License

- Original version
 - © 2021 Dirk Riehle, some rights reserved
 - Licensed under [Creative Commons Attribution 4.0 International License](#)
- Contributions
 - None yet