Course Introduction

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COSS A01

Course Learning Goals

- Understand ...
    - The software industry and its players
    - Commercial open source startups
    - How to spin-out from a university

- Learn how to …
    - Analyze and design a business model
    - Get an open source project off the ground
    - Turn a research project into a startup

Course Content

1. The software industry
   - The software industry
   - Software products
   - Software vendors
   - Business models

2. Commercial open source
   - Open source software
   - Open source projects
   - Commercial open source
   - Cloud computing strategies

3. University spin-offs
   - Software startups
   - Research vs. startup
   - The university spin-off
   - Fundraising
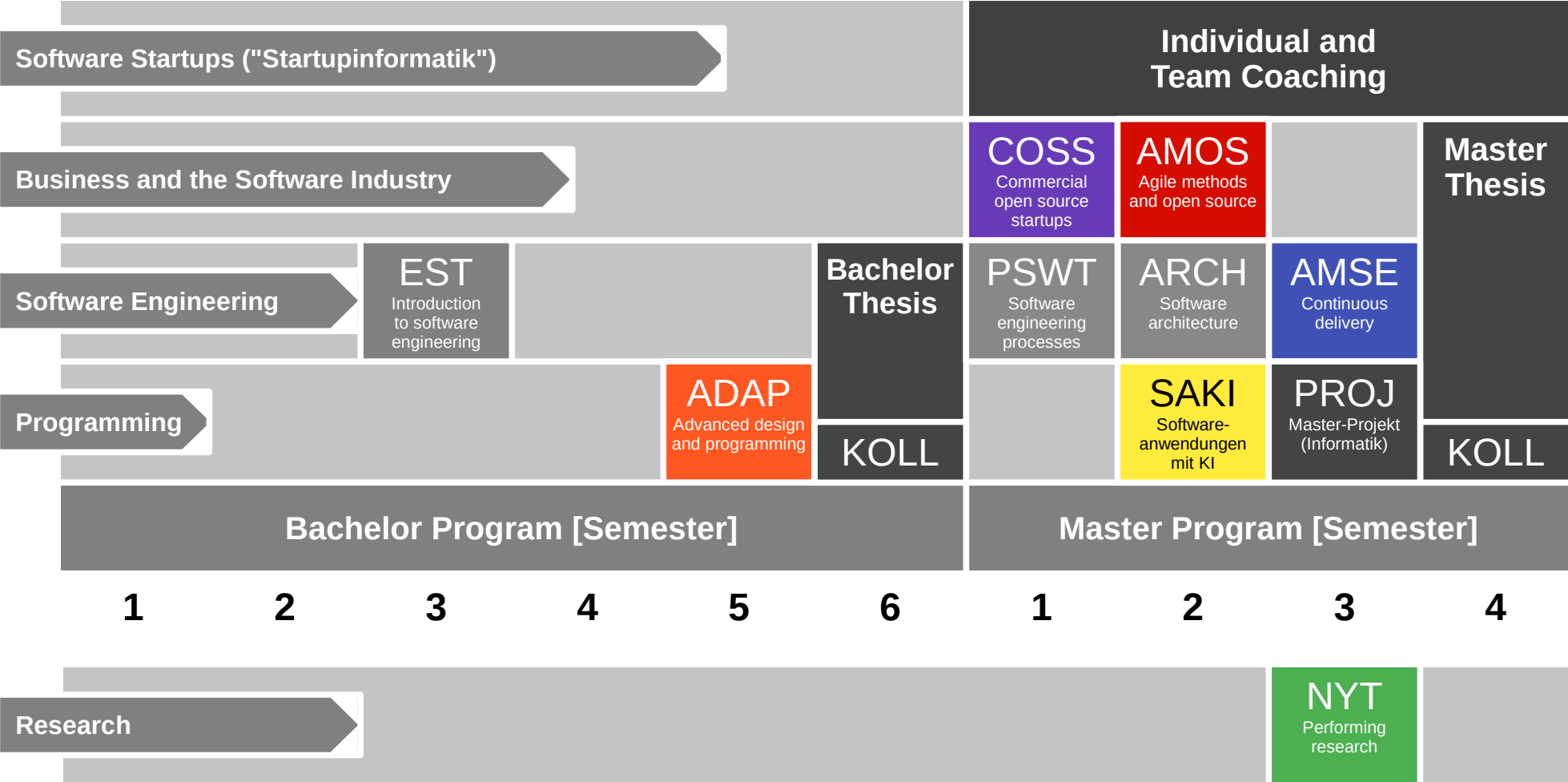
Practitioner Literature Base of the Course

Business Model Canvas [1]	The Lean Startup [2]
Customer Development [3]	Agile Development
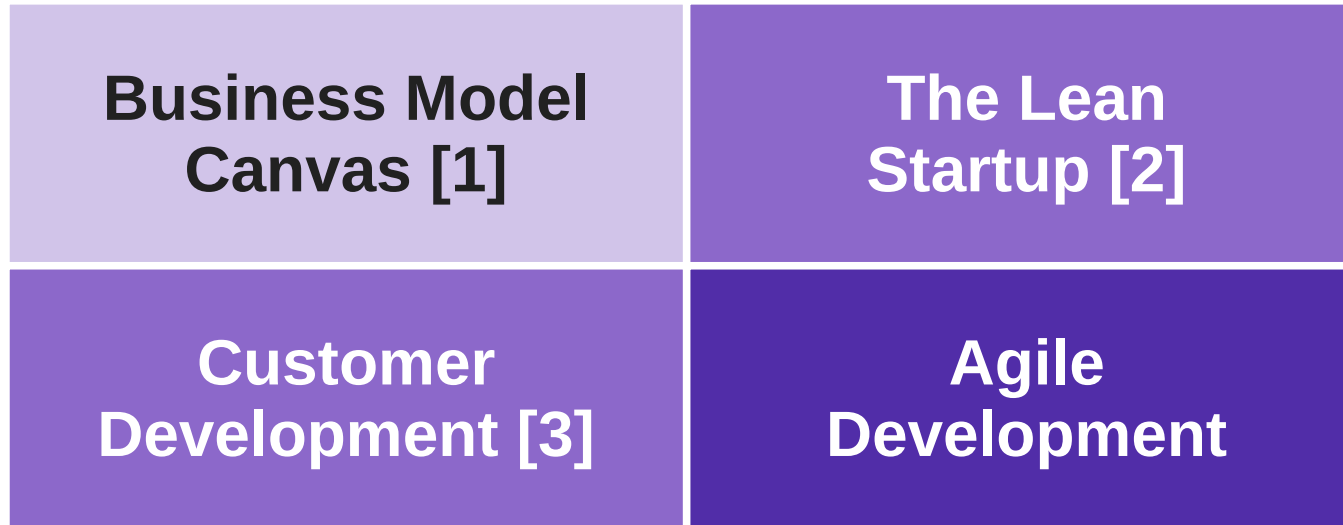
With cleaned-up terminology, and as applied to commercial open source

[1]   Osterwalder, A. & Pigneur, Y. (2010). Business Model Generation.
[2]   Ries, E. (2011). The Lean Startup.
[3]   Blank, S., & Dorf, B. (2012). The Startup Owner's Manual.

Skills Required for Course

- Required ...
  - Basic business understanding

- Familiar with ...
  - N/A

- Expected of student
  - Self-study where necessary
  - Team work for project

Course Position in Curriculum

		Bachelor Program [Semester]						Master Program [Semester]			

Software Startups ("Startupinformatik") → | | | | | | **Individual and Team Coaching** | | | |

Business and the Software Industry → | | | | COSS (Commercial open source startups) | AMOS (Agile methods and open source) | | **Master Thesis**

Software Engineering → EST (Introduction to software engineering) | | | **Bachelor Thesis** | PSWT (Software engineering processes) | ARCH (Software architecture) | AMSE (Continuous delivery)

Programming → | | | ADAP (Advanced design and programming) | KOLL | | SAKI (Software-anwendungen mit KI) | PROJ (Master-Projekt (Informatik)) | KOLL

Semester: 1 2 3 4 5 6 | 1 2 3 4

Research → | | | | | | | | NYT (Performing research) |

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Courses and Modules

		Courses (Lehrveranstaltungen)		
		OSS-COSS-VL	OSS-COSS-UE	Total ECTS
Modules	**OSS-COSS-VUE**	**x**	**x**	**5**

VUE = Lecture + exercise (Vorlesung + Übung)
PROJ = Project

Course Grading [1]

- Lecture-time contributions = 50% of total grade
  - Class quizzes = 20%, graded [0..10]
    - Administered for each video lecture

  - Homework = 20%, graded using [0|1]
    - Three homework submissions during course of semester

  - Presentation = 20%, graded using [0|1|2|3]
    - Three presentations in class

  - Final report = 40%, graded using [0..10]
    - Three sections (out of nine) for each of the three roles

- Oral exam = 50% of total grade
  - If both you and we agree on not having an oral exam, it can be dropped
    - If there are questions about a student's performance, we will not drop the oral exam
    - If the oral exam is dropped, the semester contributions become 100% of the grade

[1] Also see http://osr.cs.fau.de/teaching/course-resources/grading-schemes-and-scales/
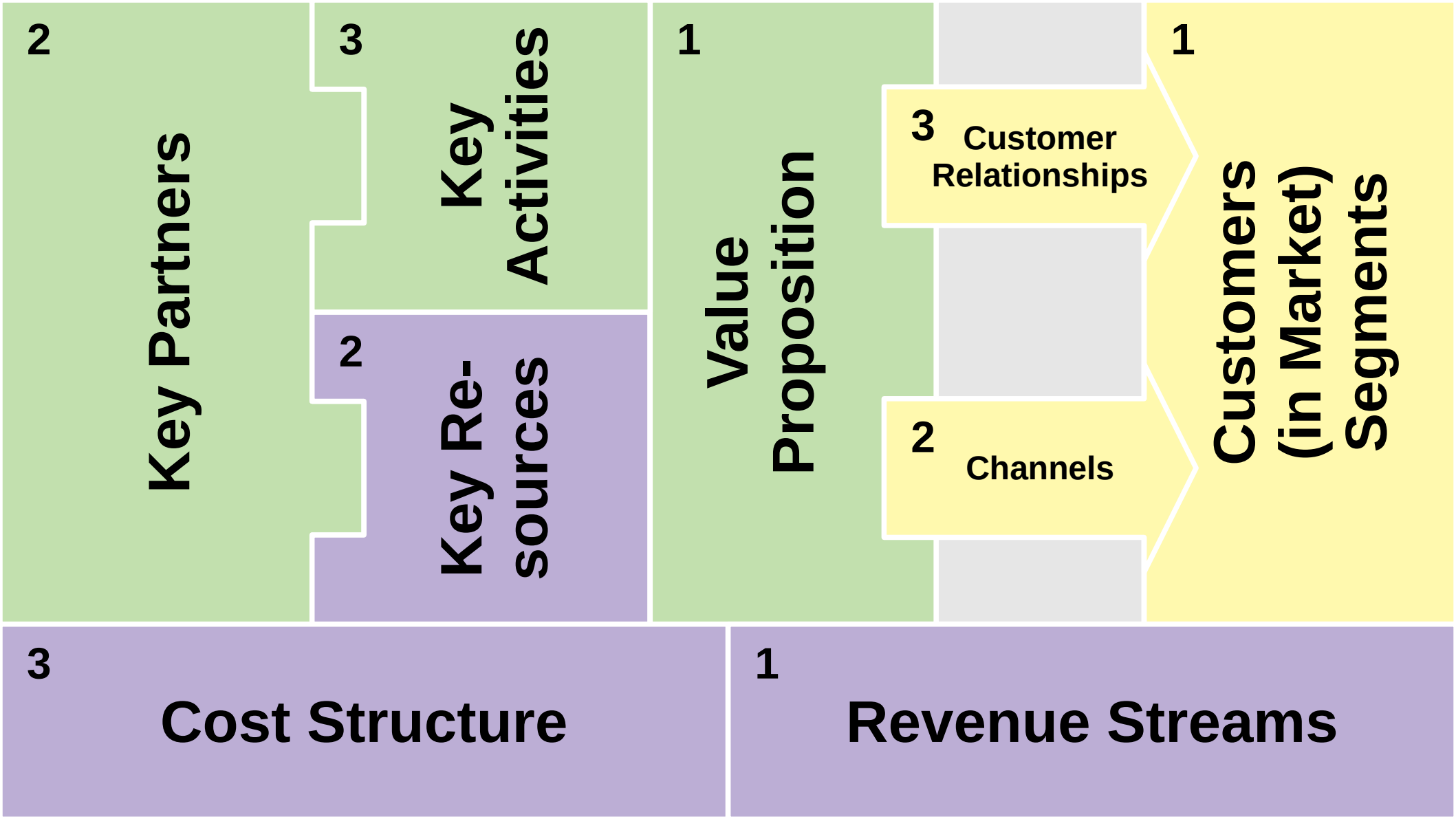
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Class Quizzes

- Each class session starts with a class quiz
  - A quiz will test your understanding of last session's lecture(s)
  - A quiz typically has 5 questions and will last 10 minutes
  - The overall quiz is graded using [0..10] scheme (10 points in total)

- A class quiz will open precisely when class starts
  - The quiz is administered automatically through StudOn
  - It is your job to have reliable Internet access etc.
  - There is no way to make up for a missed quiz

- Please see the StudOn quiz FAQ https://bit.ly/2JpgjnQ

Course Homework [1]

- Student teams design a business model as course work; consists of
  - Three homework submissions during semester
  - Graded explanation of homework in exercises
  - Compilation and presentation in final report

- Student teams consist of three people, each playing one role
  - "Hustler" (sales and marketing)
  - "Designer" (user experience)
  - "Coder" (software engineering)

- Student teams choose one of (most likely) three projects to work on
  - Students pitch a project idea (optional)
  - Students prioritize available projects
  - We decide, if necessary, with backup

2 Key Partners

3 Key Activities

2 Key Re-sources

1 Value Proposition

3 Customer Relationships

2 Channels

1 Customers (in Market) Segments

3 Cost Structure

1 Revenue Streams

Homework Schedule Overview

1. Homework bundle 1
   a) Customers (in market) segments
   b) Value proposition
   c) Revenue streams

2. Homework bundle 2
   a) Channels
   b) Key partners
   c) Key resources

3. Homework bundle 3
   a) Customer relationships
   b) Key activities
   c) Cost structure

4. Final report

Receiving a Grade for the Course

- If you want to receive a grade
  - You must register through the course registration system during the registration period

- If you cannot register through the course registration system
  - Please follow these instructions: https://wp.me/PDU66-2bx

- Otherwise: No grade

Course Language [1]

- Class
  - Lecturer: English
  - Student: Choice of German or English

- Homework
  - Instructor: English
  - Submissions: English

[1] See http://osr.cs.fau.de/2012/03/10/english-or-german-deutsch-oder-englisch/

Course Communication

- Announcements by email (through course management system)
- Please ask your questions using the FSI Forum for this course
- For email, use the teaching team alias from the **Course Organization** doc

Course Information

- See **Course Organization** doc at https://oss.cs.fau.de/oss-coss-course

Thank you! Questions?

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DR

Credits and License

- Original version
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- Contributions
  - None yet