
Modulbezeichnung: **The AMOS Project (SD-Role 10-ECTS) (OSS-AMOS-SD)** **10 ECTS**
 (The AMOS Project (SD-Role 10-ECTS))

Modulverantwortliche/r: Dirk Riehle
 Lehrende: Dirk Riehle

Startsemester: SS 2020	Dauer: 1 semester	Turnus: jährlich (SS)
Präsenzzeit: 60 Std.	Eigenstudium: 240 Std.	Sprache: Englisch

Lehrveranstaltungen:

The AMOS Project (UE) (SS 2020, Übung, Dirk Riehle)
 The AMOS Project (VL) (SS 2020, Vorlesung, 2 SWS, Dirk Riehle)

Empfohlene Voraussetzungen:

- Product owner role: OSS-PROD
- Software developer role: OSS-ADAP

Es wird empfohlen, folgende Module zu absolvieren, bevor dieses Modul belegt wird:

Product Management (VUE 5-ECTS)
 Product Management (PROJ 5-ECTS)
 Product Management (VUE+PROJ 10-ECTS)
 Advanced Design and Programming (5-ECTS)

Inhalt:

THE AMOS PROJECT WILL TAKE PLACE FULLY ONLINE UNTIL THE CORONA-CRISIS-SITUATION ALLOWS TO MEET IN PERSON AGAIN. PLEASE FIND ALL INFORMATION IN THE COURSE INDEX <https://goo.gl/99KtTu> AND SIGN UP ON STUDON THROUGH <https://www.studon.fau.de/crs2849442.html>

This course teaches agile methods (Scrum and XP) and open source tools using a single semester-long project.

Topics covered are:

- Agile methods and related software development processes
- Scrum roles, process practices, including product and engineering management
- Technical practices like refactoring, continuous integration, and test-driven development
- Principles and best practices of open source software development

The project is a software development project in which student teams work with an industry partner who provides the idea for the project. This is a practical hands-on experience. Students can play one of two primary roles:

- Product owner. In this function, a student defines, prioritizes, communicates, and reviews requirements. The total effort adds up to 5 ECTS.
- Software developer. In this function, a student estimates their effort for requirements and implements them. The total effort adds up to 10 ECTS.

Students will be organized into teams of 5-7 people, combining product owners with software developers. An industry partner will provide requirements to be worked out in detail by the product owners and to be realized by the software developers. The available projects will be presented at the beginning of the course.

Class is run as a 4 hour block with a 90min lecture followed by a guided 90min project coaching session. Rooms and times for project meetings are assigned in the beginning of the semester. For the schedule see <http://goo.gl/BZpU8>.

The schedule spreadsheet contains a link to the StudOn course section. Please sign-up on StudOn at least two weeks before classes start. We expect to inform you the week before whether you got a seat in the course or not.

Lernziele und Kompetenzen:

- Understanding of software products and software development in an industry context
- Understanding of agile methods, in particular Scrum and Extreme Programming
- Understanding of open source software development and its underlying principles

- Practical hands-on experience with a Scrum process and XP technical practices

Literatur:

- <http://goo.gl/BZpU8>

Verwendbarkeit des Moduls / Einpassung in den Musterstudienplan:

Das Modul ist im Kontext der folgenden Studienfächer/Vertiefungsrichtungen verwendbar:

[1] Berufspädagogik Technik (Master of Education)

(Po-Vers. 2018w | TechFak | Berufspädagogik Technik (Master of Education) | Gesamtkonto | Unterrichtsfach (Zweifach) inkl. Fachdidaktik | Informatik | Praktikum Informatik | The AMOS Project (SD-Role, PR))

[2] Berufspädagogik Technik (Master of Education)

(Po-Vers. 2018w | TechFak | Berufspädagogik Technik (Master of Education) | Gesamtkonto | Unterrichtsfach (Zweifach) inkl. Fachdidaktik | Informatik | Praktikum Informatik | The AMOS Project (SD-Role, PR))

Dieses Modul ist daneben auch in den Studienfächern "Informatik (1. Staatsprüfung für das Lehramt an Gymnasien)", "Informatik (Bachelor of Arts (2 Fächer))", "Informatik (Bachelor of Science)", "Informatik (Master of Science)", "International Information Systems (IIS) (Master of Science)", "Mathematik (Bachelor of Science)" verwendbar.

Studien-/Prüfungsleistungen:

The AMOS Project (SD-Role, PR) (Prüfungsnummer: 31421)

(englische Bezeichnung: The AMOS Project (SD-Role 10-ECTS))

Prüfungsleistung, Praktikumsleistung

Anteil an der Berechnung der Modulnote: 100%

weitere Erläuterungen:

- Project work (100%) including exercise

Erstabelleung: SS 2020, 1. Wdh.: keine Angabe

1. Prüfer: Dirk Riehle
