

## The AMOS Project

1	Modulbezeichnung	OSS-AMOS-PO OSS-AMOS-SD	5 ECTS 10 ECTS
2	Lehrveranstaltungen	OSS-AMOS-VL OSS-AMOS-UE	2 SWS 2 SWS
3	Dozenten	Prof. Dr. Dirk Riehle, M.B.A.	

4	Modulverantwortlicher	Prof. Dr. Dirk Riehle
5	Inhalt	<p>This course teaches agile methods (Scrum and XP) and open source tools using a single semester-long project.</p> <p>Topics covered are:</p> <ul style="list-style-type: none"> <li>• Agile methods and related software development processes</li> <li>• Scrum roles, process practices, including product and engineering management</li> <li>• Technical practices like refactoring, continuous integration, and test-driven development</li> <li>• Principles and best practices of open source software development</li> </ul> <p>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:</p> <ul style="list-style-type: none"> <li>• Product owner. In this function, a student defines, prioritizes, communicates, and reviews requirements. The total effort adds up to 5 ECTS.</li> <li>• Software developer. In this function, a student estimates their effort for requirements and implements them. The total effort adds up to 10 ECTS.</li> </ul> <p>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.</p> <p>AMOS projects are run as shared projects, in which all participants contribute and get to participate in the project results. Read more at <a href="https://wp.me/pDU66-2p4">https://wp.me/pDU66-2p4</a>.</p> <p>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 <a href="http://goo.gl/BZpU8">http://goo.gl/BZpU8</a>.</p> <p>The schedule spreadsheet contains a link to the StudOn course section. Please sign-up on StudOn at least two weeks</p>

		before classes start. We expect to inform you the week before whether you got a seat in the course or not.
6	Lernziele und Kompetenzen	<ul style="list-style-type: none"> <li>• Understanding of software products and software development in an industry context</li> <li>• Understanding of agile methods, in particular Scrum and Extreme Programming</li> <li>• Understanding of open source software development and its underlying principles</li> <li>• Practical hands-on experience with a Scrum process and XP technical practices</li> </ul>
7	Empfohlene vorherige Veranstaltungen	<ul style="list-style-type: none"> <li>• Product owner role: OSS-PROD</li> <li>• Software developer role: OSS-ADAP</li> </ul>
8	Einpassung in Musterstudienplan	<ul style="list-style-type: none"> <li>• Informatik-Master and Wirtschaftsinformatik-Master (IIS): All semesters</li> <li>• AMOS is also available to other degree programs, see UnivIS.</li> </ul>
9	Verwendbarkeit des Moduls	As broadly as possible, i.e. as lecture + exercise or as a project. Please see UnivIS for details.
10	Studien- und Prüfungsleistungen	<ul style="list-style-type: none"> <li>• In-class participation</li> <li>• Project work</li> </ul>
11	Berechnung Modulnote	<p>OSS-AMOS-PO</p> <ul style="list-style-type: none"> <li>• Classwork (20%) + project work (80%)</li> </ul> <p>OSS-AMOS-SD</p> <ul style="list-style-type: none"> <li>• Classwork (10%) + project work (90%)</li> </ul>
12	Turnus des Angebots	Every two semesters
13	Wiederholung der Prüfungen	-
14	Arbeitsaufwand	5 or 10 ECTS by student role
15	Dauer des Moduls	1 semester
16	Unterrichtssprache	English, occasionally German
17	Vorbereitende Literatur	<a href="http://goo.gl/BZpU8">http://goo.gl/BZpU8</a>