Software Architecture

1	Modulbezeichnung	PSWT-ARCH (Software Architecture)	5 ECTS
2	Lehrveranstaltungen	1. OSS-ARCH 2. OSS-ARCH-TALK	
3	Dozenten	1. Dr. Martin Jung 2. Prof. Dr. Dirk Riehle, M.B.A.	

4	Modulverantwortlicher	Prof. Dr. Dirk Riehle
5	Inhalt	The architecture of a software system describes the key components of the system, their relationships and structure, and the behavior and dynamics of their relationships and structure. This seminar presents and discusses the following key aspects of software architecture: • Basic building blocks and relationships • Software architecture description languages • Software architecture styles and patterns • Libraries, frameworks, and plattforms • Formal as well as de-facto industry standards • Noteworthy systems and their architectures • Non-technical criteria in software architecture • Tools for software architects • The role and function of the software architect This Seminar module has two main class components, ARCH and ARCH-TALK. • The ARCH class is conducted in traditional seminar style. Students pick a topic and present about it in class. We then discuss its content. • ARCH-TALK is a multimedia-based class. Every session we watch a video and discuss it in class. For more information see http://wp.me/pDU66-lb ARCH and ARCH-TALK are run as a block from 9am – noon on Monday morning. For past ARCH seminar impressions see http://osr.cs.fau.de/category/teaching/arch There should be a StudOn class section with additional materials; please make sure you sign-up. If the materials aren't there yet, they'll be coming soon.
6	Lernziele und Kompetenzen	• Understand key concepts of software architecture • Understand the role and function of an architect • Understand industry relevant software architectures

7	Voraussetzungen für die Teilnahme	PSWT-PSWT
8	Einpassung in Musterstudienplan	• Informatik Bachelor: During or after 4th semester • Informatik Master: During or after 1st semester
9	Verwendbarkeit des Moduls	Seminar
10	Studien- und Prüfungsleistungen	ARCH (80%): • seminar presentation (50%) • active class participation (50%) ARCH-TALK (20%): • summary homework (50%) • class participation (50%) For more information see http://wp.me/pDU66-bx
11	Berechnung Modulnote	ARCH (80%) + ARCH-TALK (20%)
12	Turnus des Angebots	Every two semesters
13	Wiederholung der Prüfungen	-
14	Arbeitsaufwand	60h in class, 90h pre- and post-work
15	Dauer des Moduls	1 semester
16	Unterrichtssprache	Englisch or German, decided during first session
17	Vorbereitende Literatur	-