PSWT / OSS Teaching 2013

Course Overview 2013 and Forward

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1 Overview

Software Engineering

- Software engineering is the systematic (engineering-science-based) approach to the design, development, and operation of software systems.
- PSWT is one of two variants of studying software engineering at Friedrich-Alexander-University; its focus is being applied to and close to industry needs.
- PSWT is taught by the „Research and Teaching Alliance for Applied Software Engineering“ (PSWT) provided by Lehrstuhl Informatik 2 and Professur für Open-Source-Software.

Goals of Education

- Researcher
- Entrepreneuer
- Industrialist

We are available for individual consultation as to your study goals in software engineering.

1.1 Lecturers

Klaudia Dussa-Zieger

Method Park

Bernd Hindel

Method Park AG

Martin Jung

Develop Group

Detlef Kips

Develop Group

Erich Meier

Method Park

Norbert Oster

FAU, I2

Dirk Riehle

FAU, OSS

Peter Wilke

FAU, I5

1.2 List of Courses

Code	Type	Lecturer	Full Name	Language
PSWT	VL	BH, DK, NO, DR	Applied Software Engineering	Mixed
ADAP	VL + UE	DR	Advanced Design and Programming Practices	German
AMOS	VL + UE, PR	DR	Agile Methods and Open Source	English
ARCH	VL + UE	MJ, DR	Software Architecture	German
PROD	VL + UE, SEM	EM, DR	Product Management	English
SPM	VL + UE	BH	Software Project Management	English
UML	VL + UE	DK	Object-Oriented Analysis and Design with UML	German
TSWS	VL + UE	KD, NO	Testen von Softwaresystemen	German
DP	PR	PW	Design Patterns	German
NYT	VL + UE, PR	DR	Nailing your Thesis	English

More information is available at http://osr.cs.fau.de/teaching/course-overview/

1.3 Regularity of Courses

Winter Semester	
PSWT	SPM
ADAP	DP
NYT	

Summer Semester	
PROD	ARCH
AMOS	TSWS
UML	

All classes repeat every two semesters.

1.4 More Information

Official course information

- http://osr.cs.fau.de/teaching/
- https://pswt.cs.fau.de/teaching/

Other teaching information

- Impressions: http://osr.cs.fau.de/category/teaching/
- Schedules, syllabi: http://wp.me/PDU66-CA

Some course-specific information

- PROD: http://osr.cs.fau.de/category/teaching/prod/
- AMOS: http://osr.cs.fau.de/category/teaching/amos/

2 Recommended Paths

We specifically support three typical paths through the program:

- A **researcher's** path for students, who want to continue on to a Ph.D.
- An **entrepreneur's** path for students, who are considering to do a startup after college
- An **industrialist's** path for students, who want to take a job at an established company after college

You are, of course, free to choose your own path. These are only recommendations.

2.1 Researcher's Choice

This is a ***minimal*** sensible choice.

Bachelor		**Master**			
WS	**SS**	**WS**	**SS**	**WS**	**SS**
5. Semester	**6. Semester**	**1. Semester**	**2. Semester**	**3. Semester**	**4. Semester**
Informatik and other Engineering Sciences					
PSWT (5)	AMOS (5 or 10)	PSWT (5)	AMOS (5 or 10)		
NYT (5 or 10)	THESIS (15)	ADAP (5)		NYT (5 or 10)	THESIS (30)
Wirtschaftsinformatik / International Information Systems					
		PSWT (5)	AMOS (5 or 10)		
NYT (5 or 10)	THESIS (15)	NYT (5 or 10)	PROD (5)	NYT (5 or 10)	THESIS (30)

Some classes can be taken at different times, but they can't be taken more than once.

2.2 Entrepreneur's Choice

This is a ***minimal*** sensible choice.

Bachelor		**Master**			
WS	**SS**	**WS**	**SS**	**WS**	**SS**
5. Semester	**6. Semester**	**1. Semester**	**2. Semester**	**3. Semester**	**4. Semester**
Informatik and other Engineering Sciences					
PSWT (5)	THESIS (15)	PSWT (5)	AMOS (10)	ADAP (5)	THESIS (30)
ADAP (5)	AMOS (10)		PROD (5)		
Wirtschaftsinformatik / International Information Systems					
		PSWT (5)	AMOS (10)		THESIS (30)
			PROD (5)		

Some classes can be taken at different times, but they can't be taken more than once.

2.3 Industrialist's Choice

This is a ***maximal*** choice.

Bachelor		**Master**			
WS	**SS**	**WS**	**SS**	**WS**	**SS**
5. Semester	**6. Semester**	**1. Semester**	**2. Semester**	**3. Semester**	**4. Semester**
Informatik and other Engineering Sciences					
PSWT (5)	THESIS (15)	PSWT (5)	AMOS (5 or 10)	ADAP (5)	THESIS (30)
PROD (5)		SPM, DP (5)	ARCH, UML (5)		
Wirtschaftsinformatik / International Information Systems					
		PSWT (5)	AMOS (5 or 10)		THESIS (30)
		SPM (5)	PROD, UML (5)		

Some classes can be taken at different times, but they can't be taken more than once.

3 Course Grading

Oral exam dates are announced on our website typically one year in advance:

- http://osr.cs.fau.de/category/announcements/exam-dates/

3.1 Grading in OSS Teaching

The best strategy for a good grade is continuous active participation in class and homework while applying the highest competence you have available for school and the particular course.

- During the semester, we count grade points; points get converted at the end of the semester
- Grade points are derived from course participation; grade points are taken every week
- Grade points are taken for both homework and class participation (lecture)
- Grade points can be 0, 1, 2, 3, where
  - 0 means, no homework was done or person did not show up for class
  - 1 means, homework was attempted but not completed or person was silent during class
  - 2 means homework was completed satisfactorily or person actively participated in class
  - 3 means homework exceeded expectations or person provided unusual insight during class
- Talking too much or content-free statements count as being silent, will be held against you
- The final grade combines the grade points of the module parts weighted by time spent on it
- We may modify the grade +/- 0,3 using factors outside this performance measuring process

This process applies to ADAP, AMOS, ARCH, PROD and NYT.

3.2 Grading in All Other Teaching

PSWT is graded in an oral exam, please see http://osr.cs.fau.de/category/announcements/exam-dates/.

UML, SPM, TSWS, and DP follow the grading rules of the respective lecturer.

4 Final Theses

In line with the three typical paths through the program, we specifically support three types of final theses:

- A **researcher's** thesis. We integrate you as well as we can into our research to open up perspectives for you as a future Ph.D. student and researcher at an institution of your choice, including our own.
- An **entrepreneuer's** thesis. We work with you to get your product developed and your business started as part of your thesis work while complying with the requirements of the Prüfungsordnung.
- An **industrialist's** thesis. We work with you to find a suitable industry partner to inspire a reasonable topic while complying with the requirements of the Prüfungsordnung.

We strongly recommend you consider a researcher's or entrepreneur's thesis first, before considering an industrialist's thesis. This is your time to make a difference rather than just earning money! The job market is so good that you don't have to worry about finding a position.

More at http://osr.cs.fau.de/2012/07/12/writing-your-final-thesis-with-the-osr-group/

4.1 Industry Partners

A complete and current list is available at http://osr.cs.fau.de/industry/partners

5 Impressum

PSWT, the research and teaching alliance for applied software engineering, is led by Prof. Dr. Dirk Riehle, M.B.A. He also leads OSS, the open source research group. His formal position at FAU is the Professor für Open-Source-Software.

Contact Information

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Group Information

Reports: http://osr.cs.fau.de/category/general/letters-to-stakeholders/

Teaching: http://osr.cs.fau.de/category/teaching/

Research: http://dirkriehle.com/publications/