

<b>MODULE</b>	<b>ESD – Enterprise Software Development</b>											
<b>SEMESTER</b>	7	<b>CREDITS (ECTS)</b>	5	<b>VALID AS OF</b>	2017-08-28							
<b>LECTURES / WEEK</b>	2	<b>PRACTICAL HOURS / WEEK</b>	2	<b>TOTAL EFFORT</b>	140 hours							
<b>AUTHORS</b>	Pieter van den Hombergh, Stefan Sobek											
<b>CREDENTIALS</b>	New Description											
<b>INTRODUCTION AND MOTIVATION</b>												
<p>Software development is only part of the story. The application should be tested, deployed etc. The application should be adaptable to new requirements, and quickly too. These aspects decide the application architecture.</p> <p>In this module the students investigate <b>in pairs</b> an architectural aspect or a technology with architectural implications, for good or bad, and present their findings in a work shop, visited by the remainder of the class.</p> <p>In the startup sessions students and tutors decide the topics.</p>												
<b>LEARNING GOALS: THE STUDENT IS ABLE TO ...</b>												
LG 1	... investigate aspects of modern software and system architectures.											
LG 2	... prepare and execute a workshop to introduce the technology to peers (flip the classroom with preparation of exercises).											
<b>List of Topics (historic)</b>												
<ul style="list-style-type: none"> <li>- JEE, Spring, UI Testing with Arquillian, State machine frameworks</li> <li>- Microservices and docker</li> <li>- Continuous integration with Jenkins</li> <li>- AKKA framework</li> <li>- New paradigmas in Java 8, streams and functional programming style.</li> </ul>												
<b>CONTRIBUTION TO FINAL COMPETENCE PROFILE (SEE OER)</b>												
Learning Goals	Architectural Layers (X)					Activities (1..3)					Professional Behaviour	Research Skills
	User Interaction	Business Processes	Infra-structure	Software	Hardware Interfacing	Manage	Analyse	Advice	Design	Realise		
LG 1			X	X			3	3				3
LG 2											3	
<b>MODULE ASSESSMENT</b>												
Learning Goals	Type of Assessment					Grade for		% of Final grade				
	Written Exam	Oral Exam	Performance Assessment	Presentation incl Defense	Report	Individual	Group					
LG 1				x	x		(in pairs)	100				
LG 2				x	x		(in pairs)					

<b><i>TEACHING MATERIAL</i></b>
Whatever suits the topic at hand.
<b><i>PRIOR KNOWLEDGE</i></b>
Semesters 1-4 for SE or BI.
<b><i>ADDITIONAL INFORMATION (ON GRADING, ASSESSMENTS, RETAKES, PRACTICAL PARTS, ..)</i></b>
The students work in pairs. When the total number of students is odd, there will be at most one group of 3 or one group of 1 student(s). The students may indicate their preference from the list of topics. The tutors will do their best to match these preferences into groups. <b><i>PRESENCE IS MANDATORY DURING THE ASSIGNED SCHEDULE HOURS. 3 TIMES ABSENT IS OUT.</i></b>