

<b>Level:</b> bachelor				
<b>Course title:</b> Component based development (code I376)				
<b>Status:</b> obligatory				
<b>ECTS:</b> 7.5				
<b>Requirements:</b> none				
<b>Learning objectives</b> The main objective of this course is to provide practical overview of the component based development and its relationship to the object-oriented approach. Service oriented architecture is studied as prevailing approach to the component based development. EJB 3 technology, especially its aspects related to this topic, is introduced.				
<b>Learning outcomes</b> <i>Minimal:</i> Students should show clear understanding of theoretical concepts of the component based development and be able to apply the appropriate techniques of implementation using the EJB 3 technology. <i>Desirable:</i> Students should show the ability to critically discuss the key concepts in component based development and influence of this topic on modern trends in business computing and software engineering. Additionally, detailed knowledge of aspects of EJB 3 technology that allow development of applications based on components and service oriented architecture.				
<b>Syllabus</b> <i>Theoretical instruction</i> Theoretical background of the component based development, architecture of software based on components, relation to object-oriented approach, service oriented architecture. Basic concepts of EJB 3 technology, EJB 3 messaging, development of web services using the EJB 3 technology, EJB 3 security.  <i>Practical instruction</i> Analysis of case studies through use of EJB technology, Eclipse development environment and JBoss application server. Individual work on a comprehensive case study.				
<b>Weekly teaching load</b>				<b>Other:</b>
Lectures: 2	Exercises: 3	Other forms of teaching:	Student research:	