

<b>Study program: Multimedia Communicaton Systems</b>			
<b>Course title: Information Systems Design</b>			
<b>Professor/assistant: Miloš B. Stojanović, Ph.D.</b>			
<b>Type of course:</b> elective			
<b>ECTS credits:</b> 7			
<b>Pre-requisites:</b> none			
<b>Aims of the course:</b> As part of this course, the student will become familiar with the basic methodology of the development of information systems. The most important part of this course is the understanding of techniques and principles of objective-oriented analysis and information system design. Using the Rational Software Architect tool in class, and solving tasks during lectures, the students are taught to define system architecture, to recognize the appropriate design patterns, analysis and design of the overall system by using the UML language. In the end, students are introduced to the pre-existing business solutions which are mostly implemented in large organizations.			
<b>Learning outcomes:</b> The student will be able to: model business processes using the UML standards, understand information systems from various angles, from the aspect of implemented developed solutions, from the aspect of the development of specific systems, as well as solve any current problems in the IT domain which any modern institution may face.			
<b>Syllabus</b>  <i>Theoretical part</i> Basic concepts of information systems. Methodology of the development of information systems. Modelling business processes. Service-oriented modelling of business processes. Executing business processes. An objective-oriented analysis of information systems. Design of information systems. Implementation and introduction of information systems. Business solutions. Intelligent business systems. <i>Practical part</i> Learning to use the Rational Software Architect tool. The use case diagram. The activity diagram. The sequence diagram. The state diagram. The class diagram. The distribution diagram. The BPMN diagram. Using the RSA – added functionality, the component diagram.			
<b>Literature</b> 1. A. Veljković, M. Zahorjanski, Modeliranje informacionih sistema, CET, 2016. 2. A. Veljković, Projektovanje informacionih sistema u praksi, Kompijuter biblioteka, 2008. 3. R. K. Rainer, E. Turban, Uvod u informacione sisteme, DataStatus, 2009.			
<b>Number of active classes 75</b>			Other forms of teaching:
Lectures: 45	Practical classes: 30	Research work:	
<b>Teaching methods</b>			
<b>Grading system</b> (maximum 100 points), <b>grading scale</b> from 5 to 10: below 51 points grade 5, grade 6 from 51-60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91-100 points.			
<b>Pre-exam obligations</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
activity during theoretical lectures	<b>10</b>	written exam	<b>30</b>
practical training		oral exam	
colloquium(s)/seminar papers	<b>40+20</b>		
<b>Sum</b>	<b>70</b>	<b>Sum</b>	<b>30</b>