

<b>Study program: Multimedia Communication Technologies</b>			
<b>Course title: Multimedia Contents Archiving</b>			
<b>Professor/assistant: Nataša J. Nešić, 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> This subject provides students with the knowledge of modern computer systems for storing and archiving multimedia contents.			
<b>Learning outcomes:</b> As the outcome of this course students will be able to independently analyze, design and realize modern computer systems for storing and archiving multimedia contents.			
<b>Syllabus</b>			
<i>Theoretical part</i> Introduction. Multimedia contents. Text. Audio. Voice. Picture. Video. Multimedia signal compression. Compression algorithms. Memory resources required for archiving. Computer system resources. CPU. Memories. Solid state memories. RAM. ROM. EPROM. EEPROM. Flash memories. Magnetic media. Optical memories. Computer system architecture for storing and archiving multimedia contents. Dedicated computer systems. The dedicated computer systems compared to the other computer systems. Storage network resources. Network Attached Storage (NAS). Memory space and file sharing. Multimedia content server. Cloud storing. System performance for memory contents storing. Performance analyses and optimal problem solving.			
<i>Practical part</i> Practical exercises follow theoretical lessons. Computer -aided exercises. Projects design.			
<b>Literature</b>			
<ol style="list-style-type: none"> <li>1. W. Stallings, Organizacija i arhitektura računara: projekat u funkciji performansi, CET, 2013.</li> <li>2. Z. Bojković, D. Martinović, Osnove multimedijalnih tehnologija, Visoka škola elektrotehnike i računarstva, Beograd, 2011.</li> </ol>			
<b>Number of active classes 75</b>			Other forms of teaching:
Lectures: 45	Practical classes: 30	Research work:	
<b>Teaching methods</b> Combination of interactive approach with practical problem solving.			
<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	10	written exam	20
practical training	10	oral exam	30
colloquium(s)/seminar papers	30		
<b>Sum</b>	<b>50</b>	<b>Sum</b>	<b>50</b>