Study program: Multimedia Communication Technologies

Course title: Multimedia Communications

Professor/assistant: Dejan Blagojević, Ph. D.

Type of course: compulsory

ECTS credits: 6

Pre-requisites:

Aims of the course:

- Introducing students with the influence of the importance and principles of multimedia communicators as well as the areas of their application.
- Acquiring practical and expert knowledge necessary for creating, designing and presenting the appropriate multimedia content as well as further transfer of the same within the communication systems.
- Acquiring the skills and methods necessary for working with multimedia content with appropriate hardware and software equipment in creating multimedia content.

Learning outcomes:

Complete familiarity and training of students in the procedure:

- Distribution of multimedia content to end users via the network,
- Troubleshooting and analyzing the QoS parameter,
- Optimizing multimedia content,
- Realization of multimedia services.

Syllabus

Theoretical part

Multimedia communication systems. Transfer of records within multimedia communication systems. Processing and transferring audio tracks. Processing and downloading graphic files. Processing and downloading video files. TCP / IP protocol stack architecture. - OSI Model QoS parameters, Audio communication - Video Communication - streaming multimedia content. Video conferencing and audio conferencing. Interactivity of Multimedia Content. Optimization techniques, Mobile multimedia communications.

Practical part

Multimedia communication systems. Transfer of records within multimedia communication systems. Processing and transferring audio tracks. Processing and downloading graphic files. Processing and downloading video files. TCP / IP protocol stack architecture. - OSI Model QoS parameters, Audio communication - Video Communication - streaming multimedia content. Video conferencing and audio conferencing. Interactivity of Multimedia Content. Optimization techniques, Mobile multimedia communications.

Literature

1. Rao R.,Rao K.,Bojković Z.,Milovanović D.,Multimedia communication system, Prentence Hall, 2002.
2. Hashimoto A., Visual Design Fundamentals, Charls River Media 2004.
3. Јевтовић, М., Величковић, З., Комуникациони протоколи преплетених слојева, Академске мисао, Београд 2013.

Number of active classes 75			Other forms of teaching:
Lectures: 45	Practical classes: 30	Research work:	

Teaching methods

Teaching method is carried out in the form of lectures, calculus and practical exercises. The inductive method is used in the lectures. Based on a series of simpler examples, conclusions are drawn and formed knowledge that over time becomes an engineering intuition.

Grading system (maximum 100 points), grading scale 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.

Pre-exam obligations	**points**	**Final exam**	**points**
activity during theoretical lectures	10	written exam	
practical training	20	oral exam	70
colloquium(s)/seminar papers			
Sum	**30**	**Sum**	**70**