

Study program: Communication technologies			
Course title: Data Protection in Communication Networks			
Professor/assistant: Mirko Kosanović, Ph. D			
Type of course: compulsory			
ECTS credits: 6			
Pre-requisites:			
Aims of the course: Acquiring basic knowledge about the techniques and methods of protection of data which are sent to communication networks.			
Learning outcomes: Explain the role and importance of the application of security measures in communication links, recognize and explain various ways of compromising the security of communication networks, apply appropriate protection, and neutralize possible attacks on security of the system.			
Syllabus			
<i>Theoretical part</i> The concept of security, types of security and methods. Characteristics of all threats and attacks. Security architecture and protocols. Basic concepts of cryptography. Hash functions, public keys, certification, digital signatures. Organizational, physical and legal methods of protection. Security and surveillance of wire, wireless and mobile networks. E-commerce security and security on the Internet. Planning continuity of work and recovery from malicious intrusions. Network barrier characteristics and systems for detecting and preventing hopes Yes.			
<i>Practical part</i> Characteristics and installation of an antivirus program and Firewall.			
Literature			
<ol style="list-style-type: none"> 1. Sigurnost računarskih sistema i mreža`, D.Pleskonjić, N.Maček, B.Đorđević, M.Carić, Mikro knjiga 2007. 2. `Hakerski vodič za zaštitu – Maksimalna sigurnost`, Anonimus, Kompjuter biblioteka, 2003. 3. Interna skripta - `Sigurnost u računarskim mrežama`, M.Kosanović, VTŠ Niš. 			
Number of active classes 75			Other forms of teaching:
Lectures: 30	Practical classes: 30+15	Research work:	
Teaching methods Combination of interactive approach with practical problem solving.			
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	30
practical training	20	oral exam	
colloquium(s)/seminar papers	40		
Sum	70	Sum	30