Course title: Computer Network Security
Course code: 50047
ECTS credits: 6
Requirements: None
Basic information
Level of studies: Master applied studies
Year of study: 1
Trimester: 2
Goal: Introducing basic terms and procedures related to information system and computer network security.
Outcome: Students should acquire theoretical and practical knowledge of information system and computer network security.
Contents of the course
Theoretical instruction
1. Security issues in computer networks and information systems
2. Common security threats in modern computer networks
3. Overview of security techniques and standard cryptographic algorithms
4. Trends in network protection, potential attacks, different methods of defense, protection technologies
5.Digital signature, PKCS standards and multi-layered security architecture
6. Aspects of building an information security management system
7. Public key infrastructure
8. IPS / IDS systems
9. Firewalls
10. SIEM, EPS, web content filtering, web application control, database protection
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. Demonstration of security mechanisms and systems
2. Practical training in the development of appropriate software and hardware security modules based on smart cards.

Textbooks and References	
1. ISO/IEC 27002:2005 Information technology — Security techniques — Code of practice for information security management	
2. D. Pleskonjić, N. Maček, B. Đorđević, M. Carić: "Sigurnost računarskih sistema i mreža", Mikro knjiga, Beograd, 2007.	
3. Lecture materials - Prof. Dr Milan Marković	
Number of active classes (weekly)	
Lectures: 4	
Practical classes: 2	
Other types of classes: 0	
Grading (maximum number of points: 100)	
Pre-exam obligations: Points	
Activities during lectures: 0	
Activities on practical exercises: 0	
Seminary work: 20	
Colloquium: 30	
Final exam: Points	
Written exam: 50	
Oral exam: 0	
Lecturer: Milan Pavlović, PhD	
Associate: Marija Zajeganović, MSc	