Study programme: Security studies

Course title: Information system security

Lecturer: Velimir Dedić

Course status: Required

ECTS: 8

Condition: None

Course aims

Acquiring the basic necessary theoretical and practical knowledge on the protection of information systems.

Course outcome

Students will be able to define, understand and identify the basic threats to which information systems and resources are exposed in general. Students will be able to apply the triad of security to risk analysis, will be able to demonstrate the functioning of simple coding systems and to classify coding systems. Students will understand the basic ideas of symmetric coding systems and will be able to propose the implementation of these systems in the proper way in the organization. Recognizing threats to networks and databases. Students will be able to propose adequate technical protection solutions.

Cours content

Theory classes

Theoretical framework, triad of security, security models, risk, risk assessment, security equation, perimeter security, cryptography basis, simple cryptosystems, substitution systems, advanced cryptography, symmetric systems, public and secure key systems, security of networks, barriers, censure control, network security, protocols and security, database security, e-commerce and security, mobile networks, ethics in surveillance, malware, security, and personnel.

Practice classes

Passing terms with lectures, case studies, laboratory work on developing and demonstrating examples of cryptosystems and other technical solutions.

Literature

- 1. Pleskonjić, Maček: Zaštita računarskih mreža, Mikroknjiga, 2014.
- 2. Easttom, C: Computer security fndamentals, Pearson, 2012.

Number of active teaching classes: 5	Theory classes: 2	Practice classes: 3
Teaching methods		
Lectures, auditory and laboratory exercises.		

Knowledge assessment (maximum 100 points)

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Pre-exam tasks	Points	Final exam	Points	
In-class activity	10	Written exam		
Practice class		Oral exam	30	
Mid-term tests	60			
Seminar papers				
		11.00		

The above listed knowledge assessment means are just few among different options (written exams, oral exam, project presentation, seminars etc.)

* Maximum one page A4 in length