

<b>Course title: Information System Security</b>
Course code: 50048
ECTS credits: 3
Requirements: None
<b>Basic information</b>
Level of studies: Undergraduate applied studies
Year of study: 2, 3
Trimester: 4, 7
Goal: The aim of the course is to acquaint students with the basic terms and procedures related to the security of information systems.
Outcome: The outcome of the course is the mastery of theoretical and practical knowledge in the field of security of information systems and computer networks. The student creates a secure information environment, uses appropriate tools to increase the security of information systems, applies the acquired knowledge in solving information system security problems, adhering to the ethical standards of his profession, analyzes and evaluates various concepts, models and principles of information systems protection, assesses the importance of lifelong learning in this area.
<b>Contents of the course</b>
Theoretical instruction
1. Fundamentals of information systems security
2. Symmetric cryptosystems
3. Asymmetric cryptosystems
4. Authentication - HASH, HMAC
5. Key distribution
6. Network access control
7. Cloud security
8. Malicious software and antivirus
9. Types of attacks and defenses
10. Firewall
Practical instruction (Problem solving sessions/Lab work/Practical training)
<b>Textbooks and References</b>

1. W. Stallings: "Osnove bezbednosti mreža", prevod petog izdanja, Računarski fakultet i CET, Beograd, 2014.
2. ISO/IEC 27002:2005 Information technology — Security techniques — Code of practice for information security management
3. Д. Плескоњић, Н. Мачек, Б. Ђорђевић, М. Царић: “Сигурност рачунарских система и мрежа”, Микро књига, Београд, 2007.
4. P. Ivaniš, D. Drajić, Uvod u teoriju informacija i kodovanje, Akademska Misao, Beograd, 2009.
5. R. Raković, Bezbednost informacija - osnove i smernice, Akademska Misao, Beograd, 2017.
<b>Number of active classes (weekly)</b>
Lectures: 3
Practical classes: 0
Other types of classes: 0
<b>Grading (maximum number of points: 100)</b>
<b>Pre-exam obligations: Points</b>
Activities during lectures: 0
Activities on practical exercises: 0
Seminary work: 20
Colloquium: 2*25
<b>Final exam: Points</b>
Written exam: 30
Oral exam: 0
<b>Lecturer:</b>
Natalija Vugdelija, MSc
<b>Associate:</b>