

Basic data of the subject			
University:	University of Applied Sciences in Ferizaj		
Academic unit:	Faculty of Engineering and Informatics		
Program:	Applied Informatics		
Title of the subject:	IT Security		
Level:	Bachelor		
Course Status:	Obligatory		
Year of studies:	II, Semester IV		
Number of hours per week:	3		
Value of Credits - ECTS:	5		
Time / location:			
Course lecturer:			
Contact details:			
Course Description:	<i>This course enables students to understand the connection the forms of attacks, algorithms for encryption/decryption, protocols for sending data in secure way through network, Firewalls, Viruses/Trojans, Wireless Security and IPsec.</i>		
Objectives of the course:	<i>The module provides a basic approach to the field of IT security as well as problems and issues related to the security of IT systems.</i>		
Expected learning outcomes:	<p><i>Upon successful completion of this course, student will be able to:</i></p> <ul style="list-style-type: none"> • <i>Enumerate the protective objectives of IT security</i> • <i>Enumerate Methods how the protection objectives can be ensured</i> • <i>Establish the identity and access management in web applications (system hardening)</i> • <i>Map security issues from web to cloud applications</i> • <i>Administrate security systems</i> 		
Prerequisites:	<i>Students should have basic knowledge of information and social network technology. Knowledge of network protocols and information systems security is also outstanding.</i>		
Contribution to the student load (which must correspond with learning outcomes)			
Activity	Hour	Day/Week	In total
Lectures with numerical exercises	3	15	45
Internship			
Contacts with teacher / consultations			
Field exercises			
Midterm, seminars and projects.	3	2	6
Homework			
Self-learning time student (at the library or at home)	3	15	45
Final preparation for the exam	7	2	14

Time spent on evaluation (tests, quiz and final exam)			
Projects and presentations.	3	5	15
Total			125

Teaching methodology:	<p><i>The course takes 15 weeks with 1.5 hours of lectures and 1.5 hours weekly individual and group exercises. Exercises will be held in the form of individual and group work in which concrete examples will be discussed. Active participation is extremely important so students are encouraged to attend lectures and exercises regularly and contribute to the discussions that take place in lectures. Lectures, exercise, individual work, discussions and group work.</i></p>
Assessment methods:	<p><i>The student can choose to be assessed one of the two forms of assessment, given below:</i></p> <ol style="list-style-type: none"> <i>1. Form 1: Evaluation with colloquiums and project</i> <i>2. Form 2: Evaluation with the final exam.</i> <p>Form 1: <i>In the first form of assessment "Assessment with colloquiums and project" the student is assessed in four activities that are carried out during the lectures:</i></p> <ol style="list-style-type: none"> <i>1. Colloquium 1 (35%), individual assessment</i> <i>2. Colloquium 2 (35%), individual assessment</i> <i>3. Class activity (10%), individual assessment</i> <i>4. Project (20%), group assessment.</i> <p><i>If the student is not satisfied with the assessment achieved according to form 1, then he can undergo the assessment according to form 2 to obtain a higher assessment.</i></p> <p>Form 2: <i>Through the final exam, the student can achieve a maximum of 70% of the points from the total of 100 points.</i></p> <p><i>The rest of the 20% points must be completed by group work in the Project, an activity carried out during the lectures.</i></p> <p><i>In Colloquium 1, Colloquium 2 and the final exam, the evaluation of the students will be done through an evaluation form, which must be completed individually by the student. The evaluation form will contain 5 tasks through which the student's learning outcomes will be evaluated.</i></p> <p><i>Activity in the class means the student's engagement in dealing with the issues discussed in the class, during the lectures.</i></p> <p><i>Project (20%), group assessment: it is an activity in which</i></p>

	<p><i>students apply the acquired knowledge in a concrete project. It is carried out in groups of 3 or 4 students who are obliged to carry out the activity, document and present it to the subject professor.</i></p> <p>Rating:</p> <p><i>91-100 points – graded 10 (ten)</i> <i>81-90 points – graded 9 (nine)</i> <i>71-80 points – grade 8 (eight)</i> <i>61-70 points – grade 7 (seven)</i> <i>51-60 points – grade 6 (six)</i> <i>0-50 points – The student repeats the exam</i></p>
The ratio of theory and practice:	<i>70% theory with exercises and 30% laboratory work.</i>
Literature	
Basic Literature:	<i>1. Conklin A. White G. : Principles of Computer Security. Mc Graw Hill, 2nd edition, 2010</i>
Additional Literature:	<i>2. Stallings W., Brown, L. : Computer Security Principles and Practice- Pearson, 2012</i>
Designed learning plan	
Week:	Lectures and exercises to be held
Week one:	<i>Introduction to Computer Security.</i>
Week two:	<i>Cryptography.</i>
Week three:	<i>Cryptography (continued)</i>
Week four:	<i>Authentication & Authorization.</i>
Week five:	<i>Security threads.</i>
Week six:	<i>First evaluation</i>
Week seven:	<i>Secure communication protocols.</i>
Week eight:	<i>Firewalls and Intrusion Detection Systems.</i>
Week nine:	<i>Business Continuity.</i>
Week ten:	<i>Disaster Recovery.</i>
Week eleven:	<i>Risk assessment.</i>
Week twelve:	<i>Web Application Security Identity.</i>
Week thirteen:	<i>Access Management Security.</i>
Week fourteen:	<i>Safety in the Web Management of security systems hardening Cloud Security.</i>
Week fifteen:	<i>Second evaluation</i>
Academic policies and rules of conduct	
<i>Regular attendance of lectures and exercises is necessary, as well as active participation with discussion and solution of tasks. Not impeding the progress required for learning using mobile phones turned off or in silent mode.</i>	