

Course Name : Data Security							
Course Code	Course Type	Regular Semester	Lecture (hours/week)	Seminar (hours/week)	Lab. (hours/week)	Credits	ECTS
CMP 312	B	Spring	2.00	0.00	2.00	3.00	6.00
Lecturer Rexhion Qafa, Msc							
Assistant Erjola Osmani, Msc							
Course language Albanian							
Course level Bachelor							
Description		The objectives of this course are to familiarize students with: basic security threats on networks connected to the Internet basic tools to provide user and system security, and security resources available on the Internet. Topics include security framework overview, footprinting, scanning, enumeration, hacking framework, backdoor servers and Trojans, rootkits, Windows (7, 8, 10) and Linux vulnerabilities, dialup, VPN and network devices vulnerabilities, firewalls, Intrusion Detection System (IDS), Denial of Service (DoS) and DDoS, buffer overflows, spyware, phishing, social engineering and protecting the Web end-user. This is a project-oriented course using a restricted access UB Lab to practice the use of hacking and security tools.					
Objectives							
Core Concepts		Topics include security framework overview, footprinting, scanning, enumeration, hacking framework, backdoor servers and Trojans, rootkits, Windows (7, 8, 10) and Linux vulnerabilities, dialup, VPN and network devices vulnerabilities, firewalls, Intrusion Detection System (IDS), Denial of Service (DoS) and DDoS, buffer overflows, spyware, phishing, social engineering and protecting the Web end-user.					
Course Outline							
Week	Topic						
1	Introduction to Computer Security						
2	Networks and the Internet						
3	Cyber Stalking, Fraud, and Abuse						
4	Denial of Service Attacks						
5	Malware						
6	Techniques Used by Hackers						
7	Industrial Espionage in Cyberspace						
8	Encryption						
9	Computer Security Software						
10	Security Policies						
11	Network Scanning and Vulnerability Scanning						
12	Cyber Terrorism and Information Warfare						
13	Cyber Detective						
14	Introduction to Forensics						
15	Review						

16	Final Exam		
Prerequisites	The student must attend the course at a minimum rate of 75%.		
Literature	• Computer Security Fundamentals 5th Edition		
References			
Course Outcome			
1	1. Temat përfshijnë përmbledhjen e kornizës së sigurisë, gjurmimin e gjurmëve, skanimin, numërimin, kornizën e piraterisë, serverat dhe Trojanët e backdoor, rootkits, dobësitë e Windows (7, 8, 10) dhe Linux, dobësitë e telefonit, VPN dhe pajisjet e rrjetit, firewalls, Sistemi i Zbulimit të Ndërhyrjeve (IDS) , Mohimi i Shërbimit (DoS) dhe DDoS, tejmbushja e buffer-it, spyware, phishing, inxhinieri sociale dhe mbrojtja e përdoruesit të fundit të Web-it. Ky është një kurs i orientuar drejt një projekti duke përdorur një UB Lab të qasjes së kufizuar për të praktikuar përdorimin e mjeteve të piraterisë dhe sigurisë.		
Course Evaluation			
	In-term Studies	Quantity	Percentage
	Midterms	1	40
	Quizzes	0	0
	Projects	0	0
	Term Projects	0	0
	Laboratory	0	0
	Class Participation	0	0
	Total in-term evaluation percent		40
	Final exam percent		60
	Total		100
ECTS Workload (Based on Student Workload)			
	Activities	Quantity	Duration (hours)
	Course duration (Including the exam week: 16x Total hours of the course)	16	4
	Study hours outside the classroom (Preparation, Practice, etc.)	14	6
	Duties	0	0
	Midterms	1	4
	Final Exam	1	4
	Other	0	0
	Total Work Load		156
	Total Work Load / 25 (hours)		6.24
	ECTS		6.00