1.	Course Title	Cybersecurity for Beginners		
2.	Code	F18L1S066		
3.	Study program	Software engineering and information systems		
4.	Study Program Organizer	Faculty of Computer Science and Engineering		
5.	Degree (first, second, third cycle)	first cycle		
6.	Academic year / semester 1 / summer / mandatory	7. ECTS credits 6		
8.	Teacher	associate professor SoNja Filiposka, associate professor Anastas Mishev		
9.	Course enrollment prerequisites			
10.	Course program goals (competencies): The student will understand the concept of cyber security, threats and risks. Will be aware about the problems related to cyber crime and will be able to understand the risks of attacks and the basic mechanism for protection.			
11.	Course program content: (1) What is cyber security, cyber risks and threats (1) Digital identities and privacy (1) Incidents and responses (1) Critical infrastructure, physical security (1) What is computer crime, hackers, hacktivism (1) Malicious software (1) Cyberwarfare and cyberespionage (1) Cyber attacks defence (1) Digital values and currencies (1) Social engineering and X-factor (1) Open source intelligence (OSINT) (1) Security evaluation, analysis and establishment (1) Availability, assurance, accountability			
12.	Learning methods: Lectures using presentations, interactive lectures, exercises (using equipment and software packages), teamwork, case studies, invited guest lecturers, independent preparation and defense of a project assignment and seminar work.			
13.	Total available time	6 ECTS x 30 hours = 180 hours		
14.	Distribution of the available time	30 + 45 + 15 + 15 + 75 = 180 hours		
15.	Teaching activity forms	15.1.	Lectures – theoretical teaching	30 hours
		15.2.	Exercises (laboratory, auditory), seminar papers, teamwork	45 hours
16.	Other activity forms	16.1.	Project Tasks	15 hours

		16.2.	Independent Learning Tasks	15 hours
		16.3.	Home learning	75 hours

17.	Assessment methodology		
	17.1.	Tests	10 points
	17.2.	Seminar paper/project (presentation: written and oral)	10 points
	17.3.	Activity and learning	10 points
	17.4.	Final exam	70 points

18.	Assessment criteria (points/grade)	up to 50 points	5 (five) (F)
		51 to 60 points	6 (six) (E)
		61 to 70 points	7 (seven) (D)
		71 to 80 points	8 (eight) (C)
		81 to 90 points	9 (nine) (B)
		91 to 100 points	10 (ten) (A)
19.	Course completion and final exam requirements	Realized activities 15.1 and 15.2	
20.	Teaching Language	Macedonian and English	
21.	Teaching quality evaluation method	Internal evaluation mechanisms and questionnaires	

22. Course Material

22.1. Mandatory course material

No.	Author	Title	Publisher	Year
1	Raef Meeuwisse	Cybersecurity for Beginners	Cyber Simplicity Ltd	2017
2	P. W. Singer	Cybersecurity and Cyberwar	Oxford University Press	2014

22.2. Additional course material

No.	Author	Title	Publisher	Year