

1.	Course Title	Introduction to Computer Science		
2.	Code	F18L1W007		
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 / winter / mandatory	7. ECTS credits 6		
8.	Teacher	full professor Panche Ribarski, full professor Kosta Mitreski, full professor Katerina Zdravkova, assistant professor Ivan Kitanovski, assistant professor Vesna Dimitrievska Ristovska, assistant professor Biljana Stojkoska		
9.	Course enrollment prerequisites			
10.	<p>Course program goals (competencies):</p> <p>The goal of this course is to obtain a solid knowledge of the basics of information and communication technologies, their creation, the current and future trends; the way computers work, the basics of the Web, image processing, video and animations; key areas of information and communication technologies and their impact: the ability to manipulate text, tables, graphs, images, audio and video.</p>			
11.	<p>Course program content:</p> <p>The history of informatics and first computers. Analog and digital signals. Representation of numbers: bits, bytes. Architecture and organization of computers: processors, memory, peripherals. Internet, ip addresses, routing, ethernet, wi-fi. Software and its operations. Basics of computer security. Digital data: images, videos, audio, compression. An overview of computer science and engineering disciplines.</p>			
12.	<p>Learning methods:</p> <p>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.</p>			
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	Conery, J., S	Exploration in Computing	CRC Press	2010
		2	Evans, D.	Introduction to Computing: Exploration in Language, Logic, and Machines	CreateSpace Independent Publishing Platform	2011
	22.2.	Additional course material				
		No.	Author	Title	Publisher	Year

