1.	Course title	**Mathematical Logic**		
2.	Course code	KK-I-03		
3.	Study program	**Coding and Cryptography**		
4.	Unit offering the course	**FCSE**		
5.	Undergraduate/master/PhD	**Master**		
6.	Year/semester 1(2)/winter/elective	7. ECTS: **6**		
8.	Teacher(s)	Prof. Smile Markovski, Assis. Prof. Vesna Dimitrova		
9.	Course prerequisites	None		
10.	Goals (competences): Propositional and predicate logic and their applications in computer sciences.			
11.	Course content: Propositional logic: Boolean operations and interpretations, propositional formulas, logical equivalences and replacements, semantic tables, deductive proofs, resolutions, Hilbert system. Predicate calculus: relations, predicate formulas, interpretations, logical equivalences and replacements, semantic tables, deductive proofs, functions and terms. Logical programing, principal resolution, replacement, unification, temporal logic.			
12.	Teaching methods: Lectures supported by slide presentations, interactive lectures, trainings (using lab equipment and software packages), team work, case studies, invited guests and lectures, individual practical assignments presentations, seminar paper, e-learning (forums, consultations).			
13.	Total available time	6 ECTS x 30 hours = 180 hours		
14.	Distribution of the available time	45 + 45 + 30 + 30 + 30 = 180 hours		
15.	Teaching activities	15.1.	Lectures	45 hours
		15.2.	Training (labs, problem solving), seminar and team work	45 hours
16.	Other activities	16.1.	Project work	30 hours
		16.2.	Self study	30 hours
		16.3.	Home work	30 hours
17.	Grading			
	17.1.	Tests		50 points
	17.2.	Seminar work/project (written or oral presentation)		30 points
	17.3.	Active participation		20 points
18.	Grading criteria	to 50 points		5 (five) (F)
		from 50 to 59 points		6 (six) (E)
		from 60 to 69 points		7 (seven) (D)
		from 70 to 79 points		8 (eight) (C)
		from 80 to 89 points		9 (nine) (B)

				from 90 to 100 points	10 (ten) (A)	
19.	Final exam prerequisites			Successfully completed activities 15.1 and 15.2		
20.	Course language			Macedonian and English		
21.	Quality assurance methods			Internal evaluation and student questionnaires		
22.	Literature					
	22.1.	Compulsory				
		No.	Authors	Title	Publisher	Year
		1.	M. Ben-ari	Mathematical logic for computer science	Prentice Hall	1992
	22.2.	Additional				
		No.	Authors	Title	Publisher	Year