1.	Course Title	Artificial Intelligence
2.	Code	F18L2S030
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 2 / summer / optional	7. ECTS credits 6
8.	Teacher	full professor Katerina Zdravkova, associate professor SoNja Gievska, associate professor Andrea Kulakov, assistant professor Petre Lameski, assistant professor Kire Trivodaliev
9.	Course enrollment prerequisites	Алгоритми и податочни структури
10.	Course program goals (competencies): Upon successful completion of the course, students will have an understanding of the basic areas of artificial intelligence including search, problem solving, knowledge representation, reasoning, decision making, planning, perception and action, and learning -- and their applications. Students will also be able to design and implement key components of intelligent agents of moderate complexity and evaluate their performance.	
11.	Course program content: Artificial intelligence Intelligent agents Introduction to search Heuristic search Adversarial search Constraints satisfaction Logical agents and predicate calculus Probabilistic reasoning Knowledge representation Learning Neural networks Genetic algorithms Communication	
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 + 60 + 15 + 15 + 60 = 180 hours
15.	Teaching activity forms	15.1.	Lectures – theoretical teaching	30 hours
		15.2.	Exercises (laboratory, auditory), seminar papers, teamwork	60 hours

16.	Other activity forms		16.1.	Project Tasks	15 hours
			16.2.	Independent Learning Tasks	15 hours
			16.3.	Home learning	60 hours

17.	Assessment methodology		
	17.1.	Tests	40 points
	17.2.	Seminar paper/project (presentation: written and oral)	0 points
	17.3.	Activity and learning	10 points
	17.4.	Final exam	50 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	Stuart Russell and Peter Norvig	Artificial Intelligence: A Modern Approach	Prentice Hall	2009
2	Eric Matthes	Python Crash Course: A Hands-On, Project-Based Introduction to Programming	No Starch Press	2015
3	Prateek Joshi	Artificial Intelligence with Python: A Comprehensive Guide to Building Intelligent Apps for Python Beginners and Developers	Packt Publishing	2017

22.2.	Additional course material			
No.	Author	Title	Publisher	Year