

(Table 5.2) Course unit description

Study program: Informatics				
Type and level of studies: Master				
Course unit: Intelligent systems 2				
Teacher in charge : Vladimir Cvjetković				
Language of instruction: <i>English</i>				
ECTS: 8				
Prerequisites: None (Assumed passed exam from corresponding subject on bachelor studies)				
Semester: <i>Winter</i>				
Course unit objective Getting known the concepts of artificial intelligence, areas and techniques of application				
Learning outcomes of Course unit Students can identify artificial intelligence problems / tasks and can apply learned software paradigms for solution				
Course unit contents				
<i>Theoretical classes:</i> Fundamental concepts of artificial intelligence. Basic notions and definitions. The history. Intelligent agents. Structure. Surroundings.				
Problem solving. Problem space. Search of problem space. None informed and informed search methods.				
Knowledge and reasoning. Agents acting logically. Reasoning in first order predicate logic. Knowledge representation. Reasoning with uncertainty. Probabilistic approach. Fuzzy logic and other logics.				
Learning. Learning by observation. Artificial neural networks. Bayesian networks.				
Application of artificial intelligence. Games. Processing of natural language. Robotics.				
Concluding considerations.				
<i>Practical classes:</i> Implementation of algorithms from theoretical classes using .Net languages				
Literature				
R. Norvig, P. Stuart, Artificial Intelligence: A Modern Approach, Prentice Hall, Englewood Cliffs, New Jersey 07632, ISBN 0-13-103805-2				
http://www.cin.ufpe.br/~tf12/artificial-intelligence-modern-approach.9780131038059.25368.pdf				
Number of active teaching hours				Other classes
Lectures: 2	Practice: 2	Other forms of classes: <i>mentoring system</i>	Independent work:	
Teaching methods				
Problem oriented classes, seminal works, practical education, consultations				
Examination methods (maximum 100 points)				
Exam prerequisites	No. of points:	Final exam	No. of points:	
Student's activity during lectures	4	oral examination		
practical classes/tests	36	written examination	30	
Seminars/homework	30		
Project				
Other				
Grading system				
Grade	No. of points		Description	
10	>= 91		Excellent	
9	81 - 90		Exceptionally good	
8	71 - 80		Very good	
7	61 - 70		Good	
6	51 - 60		Passing	
5	< = 50		Failing	