Study programmes: Bachelor studies - Informatics

Course name: R260 - Artificial Intelligence

Lecturers: Predrag Janičić and other lecturers of the Department for Computer Science

Status: Compulsory

ECTS: 6

Attendance prerequisites: P100, P101, P102, M105, M106

Course aims: Acquiring basic knowledge about artificial intelligence and applications.

Course outcome: After the course, the student is able to model problems and to understand, construct, and implement basic algorithms of artificial intelligence.

Course content:

- Propositional logic, syntax and semantics;
- Modelling in propositional logic; applications of SAT solvers;
- First-order logic, syntax and semantics;
- Modelling in first-order logic; applications of resolution provers;
- Unification; resolution (without detailed analysis of properties);
- Prolog;
- Non-classical logics; examples and applications;
- CSP; applications of CSP solvers;
- Search; Sorts of search and properties;
- Finding paths in graphs and A*;
- Programming of logical games;
- Genetic algorithms;
- Classification;
- Regression;
- Clustering;

Literature:

- 1. Predrag Janičić, Mladen Nikolić: Veštačka inteligencija, Matematički fakultet, 2008.
 - 2. Stuart Russell, Peter Norvig: Artificial Intelligence: A Modern Approach, Prentice Hall, 2009. (the lecturer can choose another appropriate literature)

Number of hours: 5	Lectures: 2	Tutorials: 3	Laboratory: -	Research: -		
Teaching and learning methods: Frontal/Lectures/Exercises						
Assessment (maximal 100 points)						

rissessment (maximum 100 points)					
Course assignments	points	Final exam	points		
Lectures	-	Written exam	-		
Exercises / Tutorials	-	Oral exam	-		
Colloquia	50	Written-oral exam	50		
Essay / Project	-				