

MLDM Introduction to Artificial Intelligence

Course code: MLDM IAI
ECTS Credits: 6.00

Course level: Master

Course instructors: François Jacquenet and Emilie Morvant



Education period (Dates): 1st semester

Language of instruction: English

Expected prior-knowledge: Basis on graph theory and propositional logic.

Aim and learning outcomes:

This course presents a basic introduction to AI tools: logic, prolog programming and operational research (search algorithms and linear optimization)

Topics to be taught (may be modified)~40h

- Introduction to Logic (Propositional and First order logics and inference system)
- Introduction to AI (history, problems' representation, heuristic and exhaustive search algorithms (depth, breadth, minimum cost, A*, AO, AO*))
- Linear Optimization (SIMPLEX)
- Prolog and Constraint Programming

Practical Laboratory Sessions~10h:

- Prolog Programming and CLP

Teaching methods: Lectures and lab classes.

Form(s) of Assessment: written exams

Literature and study materials:

Basic textbook:

- *Artificial Intelligence: A Modern Approach, 3rd Edition*, Stuart Russell, Peter Norvig, Prentice Hall, 2010
- *The Art of Prolog, Second Edition: Advanced Programming Techniques (Logic Programming)*, Ehud Sterling, Leon Shapiro, 1994.

Additional information:

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