MLDM Multi-Agent Systems
Course level: Master

Course instructors: Balbo Flavien, Boissier Olivier, Picard Gauthier (EMSE, Saint-Etienne)

ECTS Credits: 4.00

Education period (Dates): 1st semester

Expected prior-knowledge: Introduction to AI (from DMKD)

Aim and learning outcomes:
This course presents methods and tools of Artificial Intelligence (AI) – mono-agent– and of its counterpart Multi-Agent (MA) systems. It gives a strong theoretical and practical background which will allow students to embed in existing applications or to develop their own AI and MA methods and tools applied to different contexts.

Topics to be taught (may be modified) ~25h
- Multi-Agent Oriented Programming: ~ 10h
- Multi-Agent Problem Solving ~6h
- Self-Organizing Systems ~4h
- Multi-Agent Simulation ~6h

Practical Laboratory Sessions~10h
- Multi-Agent Oriented programming in practice: application of the different models and tools to develop a decentralized application

Teaching methods: Lectures and lab classes.

Form(s) of Assessment: written exam (70%), practical work (30%)

External/external examiner: --

Examination support: None

Literature and study materials:

Basic textbook:

Additional information:
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