



DD2439 Artificial Intelligence and Multi-agent Systems, Project Course 21.0 credits

Artificiell intelligens och multiagentsystem, projektkurs

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

Course syllabus for DD2439 valid from Autumn 2008

Grading scale

P, F

Education cycle

Second cycle

Main field of study

Specific prerequisites

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After completing the course the students should:

- be familiar with the more important tools and technologies used in artificial intelligence,
- understand and be able to use a number of these tools and technologies,
- be able to develop intelligent multi-agent systems,
- be able to assess the value of, and to a suitable extent utilize, existing solutions as a part of a programming project,
- have reached some degree of insight into the workings of working in a group within the scope of a larger project,
- be familiar with some of the roles one can fill in a larger programming project,
- be able to present their work and results, both orally and in writing,
- be able to write a basic scientific paper in English.

Course contents

The students will in groups of 8-15 in project form design and implement a RoboCup team. The actual course content can vary based on which solutions the students choose to use.

The following areas will to a smaller or greater extent, dependent on the students' choices, be treated in the course: technologies for intelligent multi-agent systems, machine learning, communication, coordination and cooperation, knowledge representation.

The course will also train the ability to manage and participate in larger projects, specifically the coordination of effort in a large group, the assessment of existing solutions and their possible use, and how to work with existing code.

Course literature

To be announced at least 2 weeks before course start at course web page.

Examination

- INL1 - Assignment, 3.0 credits, grading scale: P, F
- PRO1 - Project, 7.5 credits, grading scale: P, F
- PRO2 - Project, 6.0 credits, grading scale: P, F
- PRO3 - Project, 4.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade

Exercises (INL1, 3 university credits)

Project work, small groups (PRO1, 7,5 university credits)

Project work, big groups (PRO2, 6 university credits)

Project conclusion (PRO3, 4,5 university credits)

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.