



Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please [visit the exchange programmes webpages](#).

Intelligent Systems

Course Code	XB_0031
Credits	6
Period	P2
Course Level	100
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. K.S. Schlobach
Examiner	dr. K.S. Schlobach
Teaching Staff	dr. N. Ullah, dr. K.S. Schlobach
Teaching method(s)	Seminar, Lecture, Practical, Written partial exam

Course Objective

Knowledge and understanding: at the end of the course, the students will be familiar with basic knowledge of some of the core aspects of AI: state-space representations, search, adversarial search, logic, automated reasoning, reasoning with uncertainty and vagueness and machine learning.

Applying knowledge and understanding: students will be able to implement basic (adversarial) search algorithms, as well as knowledge based and adaptive methods to build Intelligent Agents.

Making judgements: the students will have a basic understanding of the ethical and societal implications of the developments in AI.

Communication skills: students will be able to write a scientific reports about an original research question in a group of students.

Learning skills: students will be trained in acquiring a set of complex AI related topics in a restricted period of time, come up with an original research question and perform the necessary (empirical) research.

Course Content

The course will provide an introduction to some of the basic concepts of Artificial Intelligence, such as search, adversarial search, knowledge representation and machine learning.

Additional Information Teaching Methods

2 lectures of 2 hours per week. Working groups to practice the theoretical material (2 hours) Practical groups to apply the acquired knowledge (flexible, on demand)

Method of Assessment

The grade will be determined via two (digital) exams (35%+35%), and a number of practical assignments (30% in total). All three components have to been completed successfully to pass the course. There will be a (single) resit exam, combining both partial results, but no resits for the practical assignments.

Literature

Chapters from "AI a Modern Approach", Russell and Norwig, provided as a part of a reader.

Additional Information Target Audience

Bachelor Artificial Intelligence (year 1)

Recommended background knowledge

Some basic Programming in Python, as taught in the the first part of the Introduction to Programming course in P1.