



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](#).

Information Retrieval

Course Code	X_400435
Credits	6
Period	P2
Course Level	300
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. R.M. Siebes
Examiner	dr. R.M. Siebes
Teaching Staff	dr. R.M. Siebes
Teaching method(s)	Seminar, Lecture, Computer lab, Written partial exam

Course Objective

At the end of this course, students will:

- understand how search engines and other information retrieval systems work (knowledge and understanding);
- understand the general principles and methods of information retrieval systems (knowledge and understanding);
- have acquired some basic skills and experiences in programming important aspects of information retrieval systems (apply knowledge and understanding).

Course Content

This course covers the core aspects of information retrieval and search engines, including indexing, Boolean retrieval, the different types of queries, query execution, the vector space model, web crawling, networks, link analysis, PageRank, classification, and clustering.

Additional Information Teaching Methods

Lectures, which are video-recorded, and practical sessions. The lecture recordings are made available through Canvas afterward. Physical presence in the lectures is recommended but not mandatory. The practical sessions provide help for the assignments and are optional.

Method of Assessment

Six programming assignments in Python (5% of final grade each) and a final exam in the form of a multiple-choice test (70% of final grade). The final exam must be completed with a passing grade to pass the course. There is no resit for the programming assignments.

Literature

"Introduction to Information Retrieval" by Manning, Raghavan and Schütze. The book can be found online: <http://nlp.stanford.edu/IR-book/>

Additional Information Target Audience

Minor Applied Mathematics
Minor Business Analytics & Data Science
Minor Bioinformatics & Systems Biology
Bachelor Econometrics and Operations Research

Recommended background knowledge

Basic programming skills are expected (in Python). Students without previous programming experience should reserve additional time in the weeks before the course starts to learn the basics of Python programming on their own.