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 Management for CS

Course Code	XB_0087
Credits	6
Period	P5
Course Level	100
Language Of Tuition	English
Faculty	Faculty of Science
Course Coordinator	dr. I.G. Gerostathopoulos
Examiner	dr. I.G. Gerostathopoulos
Teaching Staff	A.S. Iyer, dr. I.G. Gerostathopoulos
Teaching method(s)	Seminar, Written partial exam, Lecture

Course Objective

Through this course, students will study the topic of information management in breadth and in depth. After taking this course, the student will be able to:

1. Explain the strategic relevance of information systems for modern organizations; (Knowledge and understanding) (Applying knowledge and understanding)
2. Analyze the level of competition within an industry and determine is implications for an information systems strategy; (Applying knowledge and understanding)
3. Understand the impact of the advent of the internet on the management of information within and between organizations; (Knowledge and understanding)
4. Identify the various phases in the development of an information system; (Applying knowledge and understanding)
5. Model simple and moderately complex business processes with a formal modeling technique (Petri nets); (Making judgements) (Applying knowledge and understanding)
6. Analyze process models with respect to various behavioral properties. (Lifelong learning skills)

Course Content

No organization can do without information systems. For some organizations, such systems are even of strategic relevance, as they offer a clear competitive advantage. Think, for example, of how Amazon has become such a dominant retailer or how an organization like Uber has conquered the taxi market.

This course explains the relevance and use of information systems in modern organizations. We will briefly sketch how the role of information systems has developed over the years to reach its current ubiquitous level. Special attention is devoted to the rise of the internet and its impact on traditional organizations, as well as the emergence of new types of (cloud-based) organizations.

Reasoning from the organizational importance of information systems, we will look into the way information systems are developed such that organizations can achieve their objectives. We will pay considerable attention to an important phase in information system development, namely how we analyze and model business processes. For this purpose, we will rely on the use of classical Petri nets.

This course will approach the topic of information management in breadth and in depth. Breadth is achieved by giving an overview of all relevant topics in the area of information management; depth is attained by introducing students to a powerful, formal modeling technique that they will learn to master in the context of organizational analysis.

Additional Information Teaching Methods

This course consists of lectures and practicals. Attendance is not mandatory but highly encouraged.

Method of Assessment

Intermediate exam (individual, 30%) and final project (group-based, 70%).

Resit option: resit for intermediate exam, re-submission of the final project.

Literature

1. "Business Information Management: Improving Performance using Information Systems", by Dave Chaffey and Steve Wood. ISBN: 9780273686552.
2. "Modeling Business Processes", Wil van der Aalst and Christian Stahl. ISBN: 9780262015387 (print), 9780262296465 (eBook).

Additional Information Target Audience

Bachelor Computer Science (year 1)