



Master of Science in Information Systems (MScIS)

Objectives

In a continuously evolving environment, in which information plays a major role in terms of competitiveness and performance, in-depth knowledge of information systems is essential for the effective management of an organisation. The relevance and quality of managerial responses to the problems raised by the management of organisations fundamentally depend on the information available to the manager. The Master of Science in Information Systems offers a custom profile cut out for graduates, allowing them access to positions requiring critical capabilities.

Acquired skills

The Master of Science in Information Systems brings the necessary expertise to economical actors. It aims to:

- Train high-level experts in the fields of information technology, organisation and communication of business strategies, and management.
- Prepare for PhD studies, especially in Information Systems and Management Information Systems.

Career opportunities

This training prepares experts who are able to design, maintain, evaluate and implement information services and applications. They will be able to interact both with computer science specialists and with interlocutors having a background in human sciences. At the end of this rigorous programme, graduates will be equipped to hold varied positions, such as information project manager, information systems architect, information systems analyst, logistic manager, information security officer, business analyst, etc.

Degree awarded

Master of Science in Information Systems

Credits

90 ECTS, 3 semesters

Teaching languages

French and English

Admission conditions

The programme is open to any holder of a bachelor in information systems, political economy, economic sciences, management or finance – having obtained at least 12 credits for courses in computer science – or in computer science or communication systems – and having obtained at least 12 credits for courses in human or social sciences. Those students having completed a HES bachelor's degree in computer science, software, enterprise economy or management, are accepted subject to the successful completion of an upgrade programme.

Application deadline

April 30 for the Autumn semester (mid-September)
November 30 for the Spring semester (mid-February)

Registration

Bureau des immatriculations
Av. du 1^{er}-Mars 26
CH-2000 Neuchâtel
www.unine.ch/immatriculation

Information

Information Management Institute (IMI)
MScIS@unine.ch
Phone: +41 32 718 13 70
www.unine.ch/mscis



Course structure

The programme includes two semesters of courses and one semester for writing a master thesis. Courses are held in Neuchâtel (rest of week) and Lausanne. The train journey between these two sites lasts 40 minutes. During the first and second semester, 5 courses (30 credits) are to be chosen in each of the two fields below:

- Management of information Systems
- Information Systems Engineering

The last semester is devoted to the realisation of the research project or internship and report (30 credits ECTS). Neuchâtel is renowned for its high quality of life. In particular, it is easy to find appropriate accommodation at a reasonable price.

Interactive teaching

Thanks to recognised and complementary competences of the teaching staff, the students benefit from a personalized training. Courses are taught by the professors and lecturers of the Information Management Institute (IMI). The staff members of the institute work on all aspects of information management, with emphasis on information representation – using the ontology model - and information extraction (data mining). The institute's various projects are largely funded by the Swiss National Fund (SNF), as well as by private funds, through collaborations with businesses. Several projects have led to scientific publications, doctoral theses and patents.

Master programme

Semester 1 (30 ECTS)

Management of Information Systems

Choice between 6 and 18 ECTS

- IT Strategy and IS Governance (Unil)
- Business Model Design & Innovation (Unil)
- Cybercriminalité et Cyberpouvoir (Unil)

Information Systems Engineering

Choice between 6 and 30 ECTS

- Data Mining (UniNE)
- Enterprise Systems Integration (Unil)
- Introduction to Distributed Systems (Unil)
- Probabilistic Algorithms (UniNE)
- Interaction Design (Unil)

Semester 2 (30 ECTS)

Management of Information Systems

Choice between 6 and 24 ECTS

- Project Management and Outsourcing (Unil)
- Business Analytics: Methods and Models (UniNE)
- Cybersécurité et audit de sécurité (Unil)
- Neuro-économie (Unil)

Information Systems Engineering

Choice between 6 and 24 ECTS

- Data Warehousing (UniNE)
- Emerging Distributed Architectures (Unil)
- Analysis, Modeling and Design in IS (Unil)
- Web-Scale Analytics (Unil)

Semester 3 (30 ECTS)

Thesis or internship with report

