The Faculty of Science
and Technology

Master of Science in Computer Science

120 ECTS   Two-year programme

About the programme

Advances in information technology and computer science during recent years have been tremendous. People's day-to-day lives are increasingly influenced by work at this exciting frontier.

A solid foundation in such topics as distributed systems, computer security, semantic technology and integrated services, and image processing allows students to take part in shaping the future development of their field of study.

LEARNING OUTCOMES

With a master's degree in computer science, graduates should be able to design, model, simulate and develop advanced network-based computer systems with a focus on reliability and security. They should also be capable of exploiting wireless communication systems, sensor networks and distributed systems. The programme provides a broad foundation in the field of computer science.

PROFESSIONAL QUALIFICATIONS

This degree will open up a wide variety of exciting career opportunities. A few examples include development of advanced file sharing systems based on mobile agent technology, smart digital maps and geographic information systems, security in the next-generation internet, and development of solutions for e-commerce with the focus on security and automatic error recovery. This master's degree can qualify for admission to the PhD programme in Information Technology offered at the UiS.

ADMISSION REQUIREMENTS

A bachelor's degree in engineering with at least 50 ECTS of computer science/engineering courses, plus a total of 30 ECTS in mathematics and statistics.

CONTACT INFORMATION
Questions about the programme:
computerscience@uis.no

Questions about admission:
admissions@uis.no

Further information:
www.uis.no/computerscience

Reyhaneh Ghergherehchi, Iran

- Master of Science in Computer Science

Coming to Stavanger was one of the best decisions I have made in my life. The city is really safe, it has great landscapes, and, because of the oil industry, it is multinational. Since almost everyone speaks English, you have no communication problems at school, on public transport or in the city. Another important thing is the good job opportunities.

Studying at the UiS wasn't just hard work and research. There were lots of fun activities too, which gave me the opportunity to make new friends and to get to know other cultures. The facilities on campus were also good. The library offers great services. Even if you can't find the book you want, it will not take long to order and receive it. I appreciated the Career Days, during which you meet representatives from a lot of companies and get job opportunities without struggling. They were a great help – that's how I got my own job.

Exchange Students

The exchange portfolio of the University of Stavanger has been expanding rapidly in recent years, resulting in increased student mobility. The UiS participates in exchange programmes such as Erasmus and Nordplus, and has also established numerous bilateral exchange agreements with partner institutions both in non-European and European countries.

Only students enrolled in these partner institutions may apply for an exchange. Visit http://www.uis.no/exchangeapplication/ for an updated list of partner institutions.

Exchange students are expected to take a full-time workload of 30 ECTS per semester. The language of instruction in the exchange programme is English. Students from Nordic countries or those who can document proficiency in a Scandinavian language may take subjects in Norwegian.

Exchange student on a study trip. Linda Wallentinsen, the Netherlands - Outdoor Education.
Photo: Linda Wallentinsen

All exchange courses at the Faculty of Science and Technology are at the master's level, with the exception of the courses marked with *.

Computer Science

Autumn semester

STA 510 Statistical Modelling and Simulation	10 ECTS
MID 270 Semantic Technology and Integrated Services	10 ECTS
DAT 500 Integrated Data-Intensive Services Semantic	10 ECTS
DAT 510 Security and Vulnerability in Networks	10 ECTS
MID 260 Wireless Communications	10 ECTS
ELE 510 Image Processing with Robot Vision	10 ECTS
DAT 530 Discrete Simulation and Performance Analysis	10 ECTS

Spring semester

DAT 600 Algorithm theory	10 ECTS
DAT 520 Distributed Systems	10 ECTS
MOD 190 Reliability Analysis	10 ECTS
ELE 520 Pattern Recognition	10 ECTS
DATMAS Master's thesis	30 ECTS

Natural Science and Mathematics

Autumn semester

MBI 110 Biophysical Chemistry	10 ECTS
MOT 290 Bioinformatics	10 ECTS
MET 100 Water Chemistry	10 ECTS
MOT 380 Biotechnology Methods	10 ECTS
ÅMA 190 Numerical Mathematics	5 ECTS
STA 500 Introduction to Statistics and Probability 2	10 ECTS
ÅMA 150 Mathematical Modelling 1	5 ECTS
MET 150 Natural Water Systems	10 ECTS
MET 160 Environmental Microbiology	5 ECTS
MET 110 Methods in Water Sciences and Technology	10 ECTS
STA 510 Statistical Modelling and Simulation	10 ECTS
MET 170 Environmental Process Analysis	5 ECTS
MET 220 Aquatic Ecotoxicology	10 ECTS

Spring semester

ÅMA 250 Mathematical Modelling 2	5 ECTS
MET 190 Water Technology and Membranes	10 ECTS
MET 250 Advanced Organic Chemistry	10 ECTS
MET 180 Wastewater Treatment	10 ECTS
MBI 140 Protein Biochemistry	15 ECTS
MOT 350 Food Microbiology	10 ECTS
MET 230 Separation Technology	5 ECTS
MPT 130 Fluid Dynamics	5 ECTS

Mechanical and Civil Engineering

Autumn semester

MOS 200 Applied Risk Analysis – Offshore	5 ECTS
MOS 230 Technical Safety	10 ECTS
MOS 210 Risk Analysis and Management	10 ECTS
MOK 120 Offshore Field Development	5 ECTS
MOM 470 Human Factors Engineering, Technology and Organisational Issues	10 ECTS
MOM 400 Industrial Services	5 ECTS
MIN 100 Investment Analysis	5 ECTS
MIN 110 Project Management 1	5 ECTS
MOK 160 Pipelines and Risers	5 ECTS

ADMISSION REQUIREMENTS

Applicants must have a relevant academic background and be enrolled in a partner institution which has an exchange agreement with the UiS. Only candidates holding a bachelor's degree may apply for courses at master's level. Admission to subjects with laboratory-based teaching depends on laboratory capacity. Admission requirements can be found online.

CONTACT INFORMATION
tnexchange@uis.no

Further information:
www.uis.no/exchangetn