

MSC IN COMPUTER SCIENCE*

FOR A CAREER IN PROGRAMMING AND SOFTWARE DEVELOPMENT



◀ I arrived in Aarhus as an exchange student on the Erasmus programme. I already had a BSc in computer science from Pisa, but it was not till I arrived in Denmark that I found out how great academic life at a university can be, and I decided to stay in Aarhus for my master's degree. After my studies, I worked for seven years at Danske Bank before joining Bestseller as Head of Customers Circle in 2018. It is an exciting place to work, because it still has a great learning culture applied in a business context. We experiment, learn and use new tech and approaches to deliver ever greater business value to our customers in our production environments. Learn more about Angelo at cs.au.dk/career

ANGELO AGATINO NICOLOSI
MSc in Computer Science, from Italy
Information Technology Consultant at YanchWare

HIGH-LEVEL RESEARCH

Whether your interest is in complex algorithms, IT security, logic, and semantics, pervasive computing, machine learning or something completely different within the field of computer science, this programme will give you the opportunity to specialise in an area of your choice.

For more information regarding research areas in computer science at Aarhus University, visit www.cs.au.dk/research.

QUALITY TEACHING IN AN INFORMAL SETTING

The Master's programme in Computer Science is dedicated to the highest-quality teaching in an informal learning environment. Our international teaching staff expect students to take an active part in the programme, and staff-student consultation is always encouraged. The teaching is a mix of lectures and classes, with preparatory work in study groups.

ADMISSION REQUIREMENTS

We expect applicants to have a bachelor's degree giving a thorough background in basic computer science. This should include: computation theory (formal languages and compilation, mathematical logic and undecidability, design and analysis of algorithms, and data structures), programming (object-oriented programming, functional programming, software architecture, and interaction design), and systems (computer architecture, operating systems, distributed systems, security, databases).

For students who meet these requirements, our Master's programme offers a number of specialisations, such as cryptology, algorithmics, advanced machine learning and data science, programming languages, HCI, bioinformatics, data-intensive systems and ubiquitous computing and interaction.

STUDENT LIFE

The Computer Science department has a range of social spaces for get-ting together with fellow students outside class, and these are an excellent basis for both study-related and social activities. Our study café is also a great place to get together and work with your study group. The department and our various student associations organise a variety of events and tech talks in collaboration with local and international companies. As a first-year student, you will also be allocated a mentor to guide and support your studies throughout the year.

CAREERS

Computer scientists continue to be in great demand all over the world, and AU computer science graduates have a very good reputation. In Aarhus, many IT companies are on the lookout for graduates and student employees for part-time jobs. The department has a close collaboration with these local businesses and organisations. Recent graduates have been recruited by leading IT companies all over the world in areas such as software development, consultancy work, project management, and research.

See more at cs.au.dk/career.



PLACE OF STUDY

Aarhus

ANNUAL TUITION FEE

EU/EEA/Swiss citizens: FREE
Others: EUR 14,700

WWW

masters.au.dk/computerscience
cs.au.dk/international

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SELECTION CRITERIA

As the Master's programme admits only a limited number of students each year, meeting the admission requirements does not in itself guarantee admission to the programme. Student places are allocated on the basis of an overall assessment. In evaluating qualified applicants, the admissions committee assesses applicants according to the following criteria: academic background; overall grade level of bachelor's degree; grades achieved on relevant courses; and relevant courses (measured in credit units) included in the bachelor's degree.

Relevant courses include core courses within the subject areas of computer science, mathematics, probability theory, and statistics.

PROGRAMME STRUCTURE

With a combination of two specialisations and electives, there are many ways to structure your Computer Science master's programme. It is also possible to choose just one specialisation and then study abroad during the third semester.

1 ST SEMESTER	2 ND SEMESTER	3 RD SEMESTER	4 TH SEMESTER
Specialisation 1			THESIS
Specialisation 2			
Elective Courses	Elective Courses	Elective Courses	
30 ECTS	30 ECTS	30 ECTS	30 ECTS

SPECIALISATIONS (ALL 30 ECTS)

- Advanced Machine Learning and Data Science
- Algorithmics
- Cryptology
- Data-Intensive Systems
- Human-Computer Interaction
- Logic, Semantics and Verification
- Programming Languages and Software Security
- Ubiquitous Computing and Interaction
- Bioinformatics

For more in-depth information about the Computer Science study programme and subjects, please visit masters.au.dk/computerscience.

PARTNERSHIP WITH DESTINATION AARHUS

The Department of Computer Science closely collaborate with the industrial network Destination AARhus. Destination AARhus is a professional knowledge-sharing and development community of IT experts from the major IT organisations in greater Aarhus. It is a community for IT talent from all over the world, exploring the unique opportunities for building an IT career in the greater Aarhus area. Destination AARhus brings together companies employing more than 3,000 IT specialists in greater Aarhus. It also hosts career events and tech talks for international students and professionals based in Aarhus.

More information at www.destinationaarhus.com

IT CITY KATRINEBJERG

The Department of Computer Science is located in IT City Katrinebjerg, the centre where Aarhus University has consolidated all its IT degree programmes and research. IT City Katrinebjerg is the base for several IT-related companies. This facilitates contact between the university, research and the business community, and provides the ideal base for advanced technological innovation. As the largest IT education centre in Denmark, with approximately 2,500 students and more than two hundred researchers, IT City Katrinebjerg is an exciting study environment. This multidisciplinary hub, unique to Aarhus University, provides great opportunities in IT for students, researchers, and the business community.