

# MASTER'S DEGREE PROGRAM COMPUTER SCIENCE

# MASTER'S DEGREE PROGRAM

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1. Admission
2. Structure of the Master's Degree Program
  - I. Box diagram
  - II. Specializations
  - III. Elective courses
  - IV. Requirements for the study program
3. Study abroad
4. External Collaboration
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Link to current slides: [www.cs.au.dk/study](http://www.cs.au.dk/study)

# ADMISSION

# ADMISSION

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- When bachelor completed
- You apply for admission into Master's Program
  - Deadline 1 March
- ... or apply for admission into PhD studies
- Admission
  - You must actively apply for admission
  - You must actively apply for SU
  - Making a study program (contract) does not suffice
- <https://kandidat.au.dk/optagelse/ansoegning/>

# TEMPORARY ADMISSION

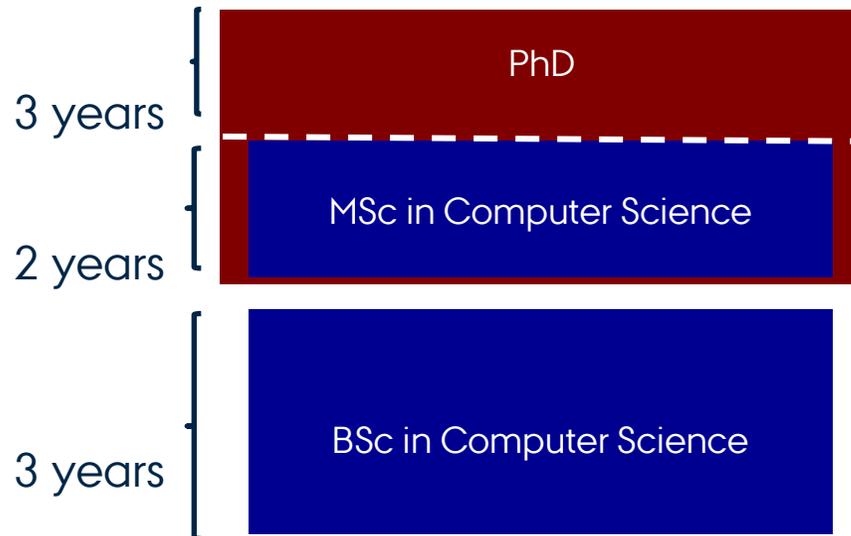
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- If you lack less than 30 ECTS in your bachelor, you may for a 6 months period take up to 30 ECTS courses to be part of your future Master's Program
- You cannot get temporary admission if you still lack a mandatory course and you have failed it twice.
- Never delay (re)examination in a mandatory course.
- If you get temporary admission, it might have SU-related consequences. Remember to clarify the consequences before applying.
- <https://studerende.au.dk/en/studies/subject-portals/computer-science/rules-and-guidelines/temporary-admission-to-the-masters-study-programme>

# PHD STUDIES?

Apply for PhD studies!

- <https://phd.nat.au.dk/programmes/computer-science/>
- You receive a salary while studying!
- Apply for PhD studies directly following your Bachelor's degree, during you Master's studies or following your Master's degree.
- For deadlines see <https://phd.nat.au.dk/for-applicants/>
- Contact Anders Møller for info <http://pure.au.dk/portal/en/amoeller@cs.au.dk>



# STRUCTURE

# STRUCTURE OF MASTER'S DEGREE PROGRAM

1 <sup>st</sup> Semester	Specialization 1 (30 ECTS)	Specialization 2 (30 ECTS)	Elective (30 ECTS)
2 <sup>nd</sup> Semester			
3 <sup>rd</sup> Semester			
4 <sup>th</sup> Semester	Thesis (30 ECTS)		

## Specialization

- Two 30 ECTS specializations

## Elective

- Recommendation is a 3rd specialization.
- A small number of elective courses in computer science is offered in addition to specializations. Project work (partly) is also a possibility.
- Elective courses may be supportive rather than core computer science, e.g. extra mathematics courses.
- There may be requirements for the composition of the study program in connection with possible admission. In this case mandatory courses replace the elective courses (partly).

## Thesis

- Written within the area of specialization 1 or 2

# REQUIREMENTS FOR THE STUDY PROGRAM

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## 120 ECTS in total

- At least 90 ECTS graduate level computer science
- At least 180 ECTS computer science in bachelor's + master's

## Mandatory courses

- Mandatory courses are determined at admission (usually courses missing in bachelor program)

## Specializations

- At least 2 specializations of 30 ECTS each
- A single specialization suffices when the program includes study abroad
- Up to 10 ECTS of the 30 ECTS may be replaced by a course from another specialization or a project work

# SPECIALIZATIONS



# CURRENT SPECIALIZATIONS

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Specializations are taught by active researchers in the corresponding field

## Current offerings

- Advanced Machine Learning and Data Science (30 ECTS)
- Algorithmics (30 ECTS)
- Cryptology (30 ECTS)
- Data-Intensive Systems (30 ECTS)
- Human-computer Interaction (30 ECTS)
- Logic, Semantics and Verification (30 ECTS)
- Programming Languages and Software Security (30 ECTS)
- Ubiquitous Computing and Interaction (30 ECTS)
- Bioinformatics (30 ECTS)

# ADVANCED MACHINE LEARNING AND DATA SCIENCE

1 <sup>st</sup> Sem (Fall)	<a href="#">Deep Learning for Visual Recognition (10 ECTS)</a>	
2 <sup>nd</sup> Sem (Spring)	<a href="#">Cluster Analysis (10 ECTS)</a>	CS
3 <sup>rd</sup> Sem (Fall)	<a href="#">Algorithms, Incentives, and Data (10 ECTS)</a>	IC

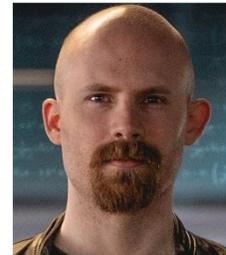
- Semesters are independent – can be taken in any order
- Machine Learning is a prerequisite for this specialization

## Algorithms, Data Structures and Foundations of Machine Learning

- Chris Schwiegelshohn
- Gerth Stølting Brodal
- Kasper Green Larsen
- Peyman Afshani

## Computational Complexity and Game Theory

- Ioannis Caragiannis
- Kristoffer Arnsfelt Hansen



# ALGORITHMICS

1 <sup>st</sup> Sem (Fall)	<a href="#">Computational Geometry: Theory and Experimentation (10 ECTS)</a>	PA
2 <sup>nd</sup> Sem (Spring)	<a href="#">Randomized Algorithms (10 ECTS)</a>	KGL + IC
3 <sup>rd</sup> Sem (Fall)	<a href="#">Theory of Algorithms and Computational Complexity (10 ECTS)</a> OR <a href="#">Quantum Information Processing (10 ECTS)</a>	KAH IBD

- Semesters are independent – can be taken in any order
- Third semester may be replaced with Advanced Data Management and Analysis (10 ECTS) from the Data-Intensive Systems group

## Algorithms, Data Structures and Foundations of Machine Learning

- Chris Schwiegelshohn
- Gerth Stølting Brodal
- Kasper Green Larsen
- Peyman Afshani



## Computational Complexity and Game Theory

- Ioannis Caragiannis
- Kristoffer Arnsfelt Hansen



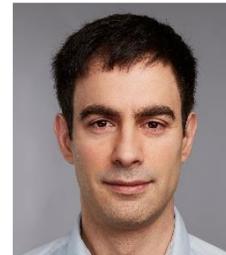
# CRYPTOLOGY

1 <sup>st</sup> Sem (Fall)	<a href="#">Cryptography (10 ECTS)</a>	IBD
2 <sup>nd</sup> Sem (Spring)	<a href="#">Cryptologic Protocol Theory (10 ECTS)</a> OR <a href="#">Systems Security (10 ECTS)</a>	JBD + SY DFA
3 <sup>rd</sup> Sem (Fall)	<a href="#">Cryptographic Computing (10 ECTS)</a> OR <a href="#">Quantum Information Processing (10 ECTS)</a>	PS + CO IBD

- Cryptology is prerequisite for Cryptologic Protocol Theory and Cryptographic Computing
- Systems Security is independent of the other courses

## Cryptography and Security

- Claudio Orlandi
- Diego F. Aranha
- Ivan Bjerre Damgård
- Jesper Buus Nielsen
- Peter Scholl
- Sophia Yakoubov



# DATA-INTENSIVE SYSTEMS

1 <sup>st</sup> Sem (Fall)	<a href="#">Data Visualization (10 ECTS)</a> OR <a href="#">Deep Learning for Visual Recognition (10 ECTS)</a>	
2 <sup>nd</sup> Sem (Spring)	<a href="#">Data Mining (10 ECTS)</a> *	DM
3 <sup>rd</sup> Sem (Fall)	<a href="#">Advanced Data Management and Analysis (10 ECTS)</a>	IA

- Semesters are independent – can be taken in any order
- (\*) Machine Learning is a prerequisite for Data Mining
- Data Visualization and Deep Learning for Visual Recognition are taught by and shared with the Ubiquitous Computing and Interaction group

## Data-intensive Systems

- Davide Mottin
- Ira Assent



# HUMAN-COMPUTER INTERACTION

1 <sup>st</sup> Sem (Fall)	<a href="#">Interactivity and Computer Mediation – Concepts, Theories, Methods, Cases (10 ECTS)</a>	OB
2 <sup>nd</sup> Sem (Spring)	<a href="#">Designing Interactive Technologies (10 ECTS)</a>	NE
3 <sup>rd</sup> Sem (Fall)	<a href="#">Multimodal Interaction (10 ECTS)</a> OR <a href="#">Engineering Interactive Technologies (10 ECTS)</a>	EH MW

- Semesters are independent – can be taken in any order

## Collaboration and Computer-Human Interaction

- Clemens Nylandsted Klokmoose
- Eve Hoggan
- Michael Wessely
- Olav Bertelsen
- Susanne Bødker



## Ubiquitous Computing and Interaction

- Hans-Jörg Schultz
- Niklas Elmqvist
- Kaj Grønbæk
- Ken Pfeuffer
- Marianne Graves Petersen
- Niels Olof Bouvin



# PROGRAMMING LANGUAGES AND SOFTWARE SECURITY

1 <sup>st</sup> Sem (Fall)	<a href="#">Program Analysis (10 ECTS)</a>	AM + AP
2 <sup>nd</sup> Sem (Spring)	<a href="#">Language-based Security (10 ECTS)</a>	AA
3 <sup>rd</sup> Sem (Fall)	<a href="#">Advanced Topics in Programming Language Theory (10 ECTS)</a>	BS

- Semesters are independent – can be taken in any order

## Logic and Semantics

- Amin Timany
- Aslan Askarov
- Bas Spitters
- Jaco van de Pol
- Jean Yves Alexis Pichon
- Lars Birkedal



## Programming Languages

- Anders Møller
- Andreas Pavlogiannis
- Magnus Madsen



# LOGIC, SEMANTICS AND VERIFICATION

1 <sup>st</sup> Sem (Fall)	<a href="#">Formal Software Verification (10 ECTS)</a>	BS
2 <sup>nd</sup> Sem (Spring)	<a href="#">Algorithmic Model Checking (10 ECTS)</a>	JvdP + AP
3 <sup>rd</sup> Sem (Fall)	<a href="#">Program Logics (10 ECTS)</a>	AT + LB

- Semesters are independent – can be taken in any order

## Logic and Semantics

- Amin Timany
- Aslan Askarov
- Bas Spitters
- Jaco van de Pol
- Jean Yves Alexis Pichon
- Lars Birkedal

## Programming Languages

- Anders Møller
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# UBIQUITOUS COMPUTING AND INTERACTION

1 <sup>st</sup> sem (Fall)	<a href="#">Building the Internet of Things with P2P and Cloud Computing (10 ECTS)</a>	NOB
2 <sup>nd</sup> Sem (Spring)	<a href="#">Augmented Reality (5 ECTS)</a>	KP
	<a href="#">Advanced Augmented Reality Project (5 ECTS)</a>	KP
3 <sup>rd</sup> Sem (Fall)	<a href="#">Data Visualization (10 ECTS)</a> OR <a href="#">Deep Learning for Visual Recognition (10 ECTS)</a>	H-JS

- Semesters are independent – can be taken in any order

## Collaboration and Computer-Human Interaction

- Clemens Nylandsted Klokmose
- Eve Hoggan
- Michael Wessely
- Olav Bertelsen
- Susanne Bødker



## Ubiquitous Computing and Interaction

- Hans-Jörg Schultz
- Niklas Elmqvist
- Kaj Grønbæk
- Ken Pfeuffer
- Marianne Graves Petersen
- Niels Olof Bouvin



# SPECIALIZATIONS FROM MASTER'S DEGREE PROGRAM IN **BIOINFORMATICS**

(OFFERED BY BIOINFORMATICS RESEARCH CENTRE)

## Algorithms and Programming

1 <sup>st</sup> Sem (Fall)	<a href="#">Evolutionary Thinking (10 ECTS)</a>
2 <sup>nd</sup> Sem (Spring)	<a href="#">Algorithms in Bioinformatics (10 ECTS)</a>
3 <sup>rd</sup> Sem (Fall)	<a href="#">Data Science in Bioinformatics (10 ECTS)</a> OR Topics in Bioinformatics (10 ECTS) [New in 2024]

## Statistics and Data

1 <sup>st</sup> Sem (Fall)	<a href="#">Data Science in Bioinformatics (10 ECTS)</a>
2 <sup>nd</sup> Sem (Spring)	<a href="#">Statistical and Machine Learning in Bioinformatics (10 ECTS)</a>
3 <sup>rd</sup> Sem (Fall)	<a href="#">Evolutionary Thinking (10 ECTS)</a> OR Topics in Bioinformatics (10 ECTS) [New in 2024]

For more info about the Master's program in bioinformatics, see <http://www.birc.au.dk/Studies>  
Contact: Christian Storm Pedersen [cstorm@birc.au.dk](mailto:cstorm@birc.au.dk)



# SPECIALIZATIONS: PREREQUISITES

If you don't have the prerequisite courses or similar background in your bachelor, you can take a bachelor course as part of your MSc program.

Specialization	Prerequisite (bachelor course)	Recommended / required
Advanced Machine Learning and Data Science	<a href="#">Machine Learning</a>	required
Algorithms and Data Structures	<a href="#">Optimization</a>	recommended
Cryptology	<a href="#">Distributed Systems and Security</a>	recommended
Data-Intensive Systems	<a href="#">Machine Learning</a>	recommended
Human-Computer Interaction	<a href="#">Human-Computer Interaction</a>	required
Logic, Semantics and Verification	<a href="#">Computability and Logic</a>	recommended
Programming Languages and Software Security	<a href="#">Compilation</a>	required
Ubiquitous Computing and Interaction	<a href="#">Distributed Systems and Security</a>	recommended

# EXAMPLES

# EXAMPLE 1:

Advanced Machine Learning and Data Science

+

Data-Intensive Systems

1. Sem (Fall)	<u>Deep Learning for Visual Recognition (10 ECTS)</u>	<u>Data Visualization (10 ECTS)</u>	Elective 1
2. Sem (Spring)	<u>Cluster Analysis (10 ECTS)</u>	<u>Data Mining (10 ECTS)</u>	Elective 2
3. Sem (Fall)	<u>Algorithms, Incentives, and Data (10 ECTS)</u>	<u>Advanced Data Management and Analysis (10 ECTS)</u>	Elective 3
4. Sem (Spring)	<u>Thesis (30 ECTS)</u>		

# OR

1. Sem (Fall)	<u>Deep Learning for Visual Recognition (10 ECTS)</u>	<u>Data Visualization (10 ECTS)</u>	<u>Machine Learning (10 ECTS)</u>
2. Sem (Spring)	<u>Cluster Analysis (10 ECTS)</u>	<u>Data Mining (10 ECTS)</u>	Elective 1
3. Sem (Fall)	<u>Algorithms, Incentives, and Data (10 ECTS)</u>	<u>Advanced Data Management and Analysis (10 ECTS)</u>	Elective 2
4. Sem (Spring)	<u>Thesis (30 ECTS)</u>		

# EXAMPLE 2:

Programming  
Languages and Software Security

+

Logic, Semantics and  
Verification

1. Sem (Fall)	<a href="#">Program Analysis (10 ECTS)</a>	<a href="#">Formal Software Verification (10 ECTS)</a>	Elective 1
2. Sem (Spring)	<a href="#">Language-based Security (10 ECTS)</a>	<a href="#">Algorithmic Model Checking (10 ECTS)</a>	Elective 2
3. Sem (Fall)	<a href="#">Advanced Topics in Programming Language Theory (10 ECTS)</a>	<a href="#">Program Logics (10 ECTS)</a>	Elective 3
4. Sem (Spring)	<a href="#">Thesis (30 ECTS)</a>		

# OR

1. Sem (Fall)	<a href="#">Compilation (10 ECTS)</a>	<a href="#">Formal Software Verification (10 ECTS)</a>	Elective 1
2. Sem (Spring)	<a href="#">Language-based Security (10 ECTS)</a>	<a href="#">Algorithmic Model Checking (10 ECTS)</a>	<a href="#">Computability and Logic (10 ECTS)</a>
3. Sem (Fall)	<a href="#">Advanced Topics in Programming Language Theory (10 ECTS)</a>	<a href="#">Program Logics (10 ECTS)</a>	<a href="#">Program Analysis (10 ECTS)</a>
4. Sem (Spring)	<a href="#">Thesis (30 ECTS)</a>		

# EXAMPLE 3:

Human-Computer Interaction

+

Ubiquitous computing  
and Interaction

1. Sem (Fall)	<u>Interactivity and Computer Mediation - Concepts, Theories, Methods, Cases (10 ECTS)</u>	<u>Building the Internet of Things with P2P and Cloud Computing (10 ECTS)</u>	Elective 1
2. Sem (Spring)	<u>Designing Interactive Technologies (10 ECTS)</u>	<u>Augmented Reality (5 ECTS) + Advanced Augmented Reality Project (5 ECTS)</u>	Elective 2
3. Sem (Fall)	<u>Engineering Interactive Technologies (10 ECTS)</u>	<u>Data Visualization (10 ECTS)</u>	Elective 3
4. Sem (Spring)	<u>Thesis (30 ECTS)</u>		

OR

1. Sem (Fall)	<u>Human-Computer Interaction (10 ECTS)</u>	<u>Data Visualization (10 ECTS)</u>	<u>Distributed Systems and Security (10 ECTS)</u>
2. Sem (Spring)	<u>Designing Interactive Technologies (10 ECTS)</u>	<u>Augmented Reality (5 ECTS) + Advanced Augmented Reality Project (5 ECTS)</u>	Elective 1
3. Sem (Fall)	<u>Multimodal Interaction (10 ECTS)</u>	<u>Building the Internet of Things with P2P and Cloud Computing (10 ECTS)</u>	<u>Interactivity and Computer Mediation - Concepts, Theories, Methods, Cases (10 ECTS)</u>
4. Sem (Spring)	<u>Thesis (30 ECTS)</u>		

# EXAMPLE 4:

Algorithmics

+

Cryptology

1. Sem (Fall)	<u>Computational Geometry: Theory and Experimentation (10 ECTS)</u>	<u>Cryptology (10 ECTS)</u>	Elective
2. Sem (Spring)	<u>Randomized Algorithms (10 ECTS)</u>	<u>Cryptologic Protocol Theory (10 ECTS)</u>	<u>Systems Security (10 ECTS)</u>
3. Sem (Fall)	<u>Theory of Algorithms and Computational Complexity (10 ECTS)</u>	<u>Cryptographic Computing (10 ECTS)</u>	Quantum Information Processing (10 ECTS)
4. Sem (Spring)	<u>Thesis (30 ECTS)</u>		

OR

1. Sem (Fall)	<u>Computational Geometry: Theory and Experimentation (10 ECTS)</u>	<u>Cryptology (10 ECTS)</u>	<u>Distributed Systems and Security (10 ECTS)</u>
2. Sem (Spring)	<u>Randomized Algorithms (10 ECTS)</u>	<u>Cryptologic Protocol Theory (10 ECTS)</u> OR <u>Systems Security (10 ECTS)</u>	<u>Optimization (10 ECTS)</u>
3. Sem (Fall)	<u>Theory of Algorithms and Computational Complexity (10 ECTS)</u>	<u>Cryptographic Computing (10 ECTS)</u>	<u>Quantum Information Processing (10 ECTS)</u>
4. Sem (Spring)	<u>Thesis (30 ECTS)</u>		

# EXAMPLE 5:

## Formal Methods for Security

1. Sem (Fall)	<u>Formal Software Verification (10 ECTS)</u>	<u>Cryptology (10 ECTS)</u>	Elective 1
2. Sem (Spring)	<u>Language-based Security (10 ECTS)</u>	<u>Cryptologic Protocol Theory (10 ECTS)</u>	Elective 2
3. Sem (Fall)	<u>Advanced Topics in Programming Language Theory (10 ECTS)</u>	<u>Cryptographic Computing (10 ECTS)</u>	Elective 3
4. Sem (Spring)	<u>Thesis (30 ECTS)</u>		

OR

1. Sem (Fall)	<u>Compilation (10 ECTS)</u>	<u>Cryptology (10 ECTS)</u>	<u>Distributed Systems and Security (10 ECTS)</u>
2. Sem (Spring)	<u>Language-based Security (10 ECTS)</u>	<u>Cryptologic Protocol Theory (10 ECTS)</u>	<u>Computability and Logic (10 ECTS)</u>
3. Sem (Fall)	<u>Advanced Topics in Programming Language Theory (10 ECTS)</u>	<u>Cryptographic Computing (10 ECTS)</u>	<u>Formal Software Verification (10 ECTS)</u>
4. Sem (Spring)	<u>Thesis (30 ECTS)</u>		

# ELECTIVE COURSES

# ELECTIVE COURSES

## APART FROM SPECIALIZATIONS

### Department of Computer Science - apart from specializations

- Bachelor level courses
- [Summer university courses](#)
- [Project work in Computer Science \(5 or 10 ECTS\)](#)
- [Erhvervsprojekt / Vocational Training Project at the Department of Computer Science \(10 ECTS\)](#)

For courses in the summer, see  
<https://studerende.au.dk/en/summeruniversity>

### Courses aimed at high school teaching

Spring

-  • [Informatikkens fagdidaktik \(5 ECTS\)](#)

Fall & Spring

-  • [Praktik som gymnasielærer \(5 ECTS\)](#)

# ELECTIVE COURSES

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## Courses at other AU departments

- Mathematics (Nat)
- Computer Engineering (Tech)
- Digital Design and Information Studies (Arts)

If you fail an exam in an elective course, then that course has become **mandatory!**  
If you have made an erroneous choice of an elective course, please contact us for guidance immediately!

# ELECTIVE COURSES

## MATHEMATICS

### Fall

- Indledende Algebra 1+2 (5+5 ECTS)
  - Introductory algebra – sufficient for basic use in computer science
- Algebra (10 ECTS)
  - Abstract algebra – relevant for more advanced study of Cryptology and advanced Programming Languages (Category Theory)
  - Algebra has Indledende Algebra as a prerequisite
- Mathematical Analysis 1 (10 ECTS)
  - Graph Theory 2 (10 ECTS) (not every year)

### Spring

- Mathematical Statistics (10 ECTS)
- Mathematical Analysis 2 (10 ECTS)
  - Mixed Integer Optimization (10 ECTS) (not every year)
  - Advanced Convex Optimization (10 ECTS) (not every year)

# ELECTIVE COURSES

## COMPUTER ENGINEERING

### Fall

- Embedded Real Time Systems (10 ECTS)
- Modelling of Critical Systems (5 ECTS)
- Wireless Sensor Networks (5 ECTS)

### Spring

- Modelling and Verification (10 ECTS)
- Internet of Things Technology (10 ECTS)
- System Engineering (5 ECTS)
- Explainable Statistical Learning (5 ECTS)

Worried about prerequisites for engineering courses?

- Check course catalogue
- Contact course responsible, or
- Contact program responsible Qi Zhang [qz@ece.au.dk](mailto:qz@ece.au.dk)



# ELECTIVE COURSES

## DIGITAL DESIGN AND INFORMATION STUDIES

### Fall

- Data and Digital Culture (10 ECTS)
-  • Design som kritisk praksis (10 ECTS)

### Spring

-  • Lyd og Interaktion (10 ECTS)
-  • 3D-interaktion (10 ECTS)

Note that courses from Arts require skill academic writing and text analysis in the tradition of humanities.

# STUDY ABROAD



AARHUS  
UNIVERSITY  
DEPARTMENT OF COMPUTER SCIENCE

COMPUTER SCIENCE MASTER'S  
4 APRIL 2024



# MASTER'S DEGREE PROGRAM & STUDY ABROAD

1 <sup>st</sup> Semester	Part of Specialization 1 (20 ECTS)	Part of Specialization 2 (20 ECTS)	Elective (20 ECTS)
2 <sup>nd</sup> Semester			
3 <sup>rd</sup> Semester	Study abroad (30 ECTS) including 10 ECTS within specialization 1 or 2		
4 <sup>th</sup> Semester	Thesis (30 ECTS)		

Or

1 <sup>st</sup> Semester	Specialization 1 (30 ECTS)	Elective (30 ECTS)
2 <sup>nd</sup> Semester		
3 <sup>rd</sup> Semester	Study abroad (30 ECTS)	
4 <sup>th</sup> Semester	Thesis (30 ECTS)	

## MSc program with study abroad semester

- Suffices to have a single specialization
- A specialization may be finished abroad by taking a course within the relevant area
- Recommendation: start by having two specializations, so you can finish these if you do not succeed in going abroad
- Additional information - [www.cs.au.dk/study](http://www.cs.au.dk/study)

# EXTERNAL COLLABORATION AND STUDENT ENTREPRENEURSHIP

# EXTERNAL COLLABORATION

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## Types of collaboration

- Vocational Training Project
- Bachelor's project
- Master's Thesis
- In connection with a specific course

Further information:

<https://studerende.au.dk/en/studies/subject-portals/computer-science/project-collaboration>

## General information regarding collaboration and external partners

- Find a company and a main supervisor from AU who will be part of the project
- Check whether you need additional contracts (Fast Track), NDA's or copyright
- Create a contract for Vocational Training Project via [project generator](#)

# Student Entrepreneurship at CS

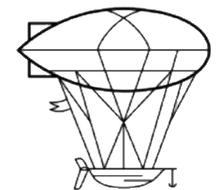
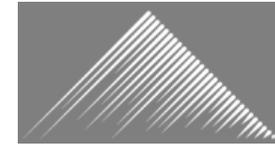
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## HatchIT Lab

- Local student entrepreneurship hub at CS
- Office Space and access to facilities at CS Dept.
- Networking with other CS student startups
- [HatchITlab.au.dk](http://HatchITlab.au.dk)

## The Kitchen AU

- Central AU Entrepreneurship hub
- Funding support
- Business developers and advisors/mentors
- Workshops and events for entrepreneurs
- [Thekitchen.io](http://Thekitchen.io)



ZEPPELINSTUDIO



# HatchIT Lab

## Student Entrepreneurship at CS



**50+**

Student Entrepreneurs



**10+ mio dkk**

Investment and external funding



**50+**

Jobs created

# STUDENT JOBS

[www.cs.au.dk/jobwall](http://www.cs.au.dk/jobwall)  
[www.cs.au.dk/businessclub](http://www.cs.au.dk/businessclub)

 **STIBO SYSTEMS**  
MASTER DATA MANAGEMENT

**.nitor**

  
**TRIFORK**

  
**GRUNDFOS**

 **BEUMERGROUP**

  
**eficode**

 **BETTER COLLECTIVE**

**Vestas**

**SYSTEMATIC**

 **InCommodities**

**Uber**

 **LUXION**  
Advanced Lighting Technology

**bankdata**

**DIS**

 **CRYPTOMATHIC**

  
**RAMBOLL**

  
**Arla**

  
**TRELLEBORG**

  
**QIAGEN**

**TERMA**<sup>®</sup>

  
**INCUBA**

  
**Danish Crown**

 **danske commodities**

  
**LEGO**

**MFT**

**netcompany**

**OK**

 **hummel**

 **EPICO**

 **twoday IT Minds**

**INCUBA**

  
**TECITY AARHUS**

**BESTSELLER**

 **ALEXANDRA INSTITUTE**

**Destination AARhus**

**DigitalLead.**

**Copenhagen Fintech**

# MASTER'S DEGREE PROGRAMME FOR WORKING PROFESSIONALS

- Part-time option spanning four years for employed individuals
- The degree programme for working professionals mirrors the ordinary full-time master's degree programme

## Admission requirements

1. Meet the academic admission requirements. The requirements for the degree programme for working professionals are the same as the two-year master's degree programme.
2. Have a documented contract of employment with a public or private employer stating that the applicant is employed in a relevant job alongside their studies for no less than 25 hours a week on average (prescribed annual hours) and based on a relevant bachelor's. Alternatively, you must be an entrepreneur and run an academically relevant independent business with revenue and income-generating activities.

# PRACTICAL INFORMATION



AARHUS  
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DEPARTMENT OF COMPUTER SCIENCE

COMPUTER SCIENCE MASTER'S  
4 APRIL 2024



# CONTRACTS

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## Study Contract

- Complete the contract before signing up for the first course(s)
  - Also in case of temporary admission
  - You may only sign up for courses mentioned in your contract
- Revise at semiannual interviews in April and October
  - You will receive an email invitation
  - You will have a friendly chat with Andreas and Søren

## Project Work Contract

- In addition to signing up for a project work / vocational training project (erhvervsprojekt) you must also make a contract

## Thesis Contract

- Fill out at start of thesis work

All contracts are created through: <http://kontrakt.nattech.au.dk/>

### Steps:

1. Decide on course for the coming semester
2. Submit a master contract and have it approved
3. Register for course before the deadline



# SIGNING UP FOR COURSES

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## Sign up

- May 1-5 for courses in the Fall
- November 1-5 for courses in the Spring
- Advance approval of credit transfer is needed for courses from outside Nat-Tech,
  - Outside AU: see <https://studerende.au.dk/en/studies/subject-portals/computer-science/rules-and-guidelines/credit-transfer>.
  - Outside Nat-Tech, but inside AU: see <https://studerende.au.dk/en/studies/subject-portals/computer-science/rules-and-guidelines/enrolment-in-a-credit-module>.
  - Apply well in advance!
  - Advance approval of credit transfer is no guarantee that you will be admitted to the course!

For courses in the summer, see  
<https://studerende.au.dk/en/summeruniversity>

## Schedule for elective courses

- Watch out for collisions
- You may find the schedule for courses offered by the Department of Computer Science at <https://timetable.au.dk/>

# ADVICE

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- If you follow the recommended program of study (30 ECTS per semester), take courses in the correct order (the Box Diagrams) and pass all courses at the ordinary exam or at the first scheduled re-exam then you need not worry about the study progress reform.
- If you fall behind or do not pass a course at the latest by the first reexamination, then contact [ua@cs.au.dk](mailto:ua@cs.au.dk) or the student counselor for advice and guidance on your individual study program as soon as possible. The earlier you reach out the better.
- You have a max study time, if you do not complete your master's program within six months after the prescribed time you are automatically signed out of the study program / out of the university <https://studerende.au.dk/en/studies/subject-portals/computer-science/rules-and-guidelines/maximum-duration-of-study>.
- If you fail an exam in an elective course, then that course has become **mandatory**. If you have made an erroneous choice of an elective course, please contact [ua@cs.au.dk](mailto:ua@cs.au.dk) or the student counselor for guidance immediately!

# STUDENT COUNSELOR

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## Nikolaj Beck Mikkelsen

- [www.cs.au.dk/vejleder](http://www.cs.au.dk/vejleder)
- [Studievejledning4.nat-tech@au.dk](mailto:Studievejledning4.nat-tech@au.dk)

## Possible topics

- Change of study program, delay, leave of absence, withdrawal.
- Illness.
- Study regulations
- Selecting supplementary subjects.





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