MASTER'S DEGREE PROGRAM
IT PRODUCT DEVELOPMENT

AARHUS
UNIVERSITY
DEPARTMENT OF COMPUTER SCIENCE

IT PRODUCT DEVELOPMENT MASTER'S
28 SEPTEMBER 2023

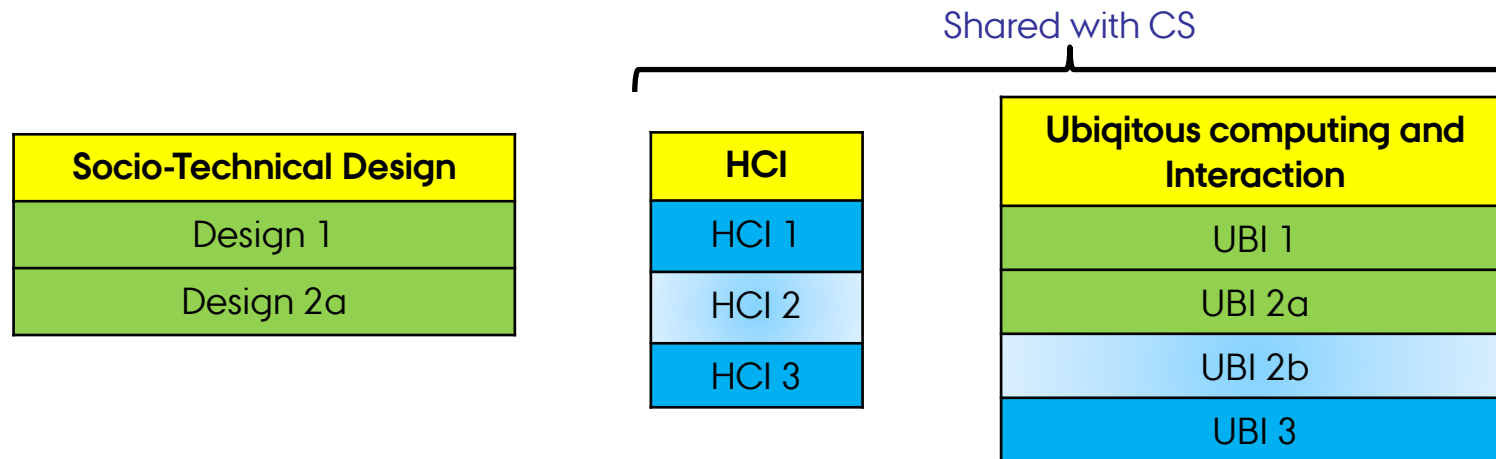SOLIDUM PETIT IN PROFUNDIS · UNIVERSITAS ARHUSIENSIS ·

MASTER'S DEGREE PROGRAM

1. Structure of the Master's Degree Program
   I. Box diagram
   II. Specializations
   III. Elective courses
2. Study abroad
3. Admission
4. External Collaboration
5. Practical information

Link to current slides: www.cs.au.dk/study

IT PRODUCT DEVELOPMENT MASTER'S

1st sem (Fall)	Elective (10 ECTS)	UBI 1 (10 ECTS)	Design 1 (10 ECTS)
2nd Sem (Spring)		UBI 2a (5 ECTS)	Design 2a (5 ECTS)
	Innovation Project (20 ECTS)		
3rd Sem (Fall)	Study abroad / elective courses (30 ECTS)		
4th Sem (Spring)	Thesis (30 ECTS)		

- Program must include all ☐ courses
- Program must include at least one of HCI 1, HCI 3, UBI 3 ☐

Shared with CS

Socio-Technical Design
- Design 1
- Design 2a

HCI
- HCI 1
- HCI 2
- HCI 3

Ubiqitous computing and Interaction
- UBI 1
- UBI 2a
- UBI 2b
- UBI 3

SPECIALIZATIONS

HUMAN-COMPUTER INTERACTION

1st Sem (Fall)	Interactivity and Computer Mediation – Concepts, Theories, Methods, Cases (10 ECTS)	OB
2nd Sem (Spring)	Designing Interactive Technologies (10 ECTS)	NE
3rd Sem (Fall)	Multimodal Interaction (10 ECTS) (not in 2023) Engineering Interactive Technologies (10 ECTS)	EH MW

- Semesters are independent – can be taken in any order

Collaboration and Computer-Human Interaction

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

Ubiqitous Computing and Interaction

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

SOCIO-TECHNICAL DESIGN

1st sem (Fall)	Social and Aesthetic Interaction Design (10 ECTS)	PGK
2nd Sem (Spring)	Designing Wearables (5 ECTS)	MP

- Semesters are independent – can be taken in any order

Socio-Technical Design
- Majken Kirkegård Rasmussen
- Minna Pakanen
- Peter Gall Krogh

UBIQITOUS COMPUTING AND INTERACTION

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

- Semesters are independent – can be taken in any order

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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)
Human-Computer Interaction	Human-Computer Interaction
Socio-Technical Design	Physical Computing
Ubiqitous Computing and Interaction	Distributed Systems and Security

ELECTIVE COURSES

ELECTIVE COURSES

Department of Computer Science - apart from specializations

- Bachelor level courses
- Project Work in IT Product Development (5 or 10 ECTS)
- Erhvervsprojekt / Vocational Training Project at the Department of Computer Science (10 ECTS)

Arts

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

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

Tech

- Embedded Real Time Systems (10 ECTS)

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!

STUDY ABROAD

MASTER'S DEGREE PROGRAM & STUDY ABROAD

1st sem (Fall)	Elective (10 ECTS)	UBI 1 (10 ECTS)	Design 1 (10 ECTS)
2nd Sem (Spring)		UBI 2a (5 ECTS)	Design 2a (5 ECTS)
	Innovation Project (20 ECTS)		
3rd Sem (Fall)	Study abroad (30 ECTS)		
4th Sem (Spring)	Thesis (30 ECTS)		

MSc program with study abroad semester

- If your elective course in the 1st semester is from the HCI or UBI specializations, then there is no requirements on your study abroad courses.

- Otherwise, you have to take an HCI or UBI course when abroad. It need not be a course that is identical to an AU course. It suffices with a course within the area of HCI or UBI.

- Additional information - www.cs.au.dk/study

ADMISSION

ADMISSION

- 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
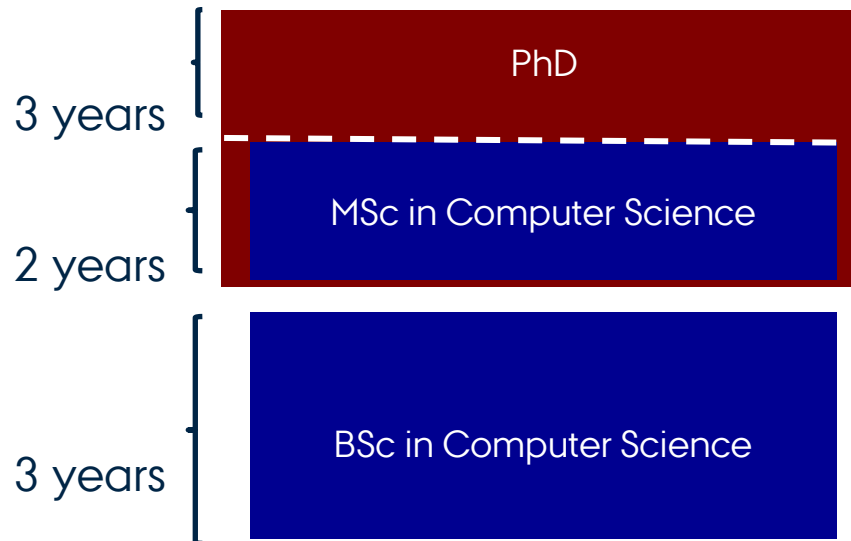 - Making a study program (contract) does not suffice
- https://kandidat.au.dk/optagelse/ansoegning/

TEMPORARY ADMISSION

- If you lack X<30 ECTS in your bachelor, you may for a 6 months period take 30-X ECTS courses to be part of your future Master's Program

- No temporary admission if you still lack a mandatory course and you have failed it twice!

- Never delay (re)examination in a mandatory course!

- This might have SU-related consequences!

- 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

3 years | PhD

2 years | MSc in Computer Science

3 years | BSc in Computer Science

EXTERNAL COLLABORATION AND STUDENT ENTREPRENEURSHIP

EXTERNAL COLLABORATION

Types of collaboration

- Vocational Training Project

- Bachelor's project

- Master's Thesis

- In connection with a specific course

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

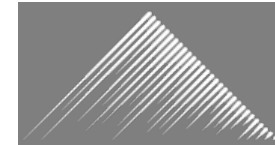- Create a contract for Vocational Training Project via projectgenerator

Student Entrepreneurship at CS

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

The Kitchen AU
- Central AU Entrepreneurship hub
- Funding support
- Business developers and advisors/mentors
- Workshops and events for entrepreneurs
- Thekitchen.io

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
www.cs.au.dk/businessclub

PRACTICAL INFOMATION

CONTRACTS

Study Contract

- Complete before signing up for first course in Master's Program
  - 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

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/

IMPORTANT RULES

- 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 us for advice and guidance on your individual study program.

- If you ignore this advice and believe that "it will be fine", it may have serious consequences!

- 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 us for guidance immediately!

STUDENT COUNSELOR

Maja Skovgård Nielsen

- www.cs.au.dk/vejleder

Possible topics

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

YOU CAN HAVE INFLUENCE!

Education Committee

Develop the study program and the course

- http://cs.staff.au.dk/boards-and-committees/education-committee/

Office Committee

Develop the study environment, student offices and campus

- http://cs.staff.au.dk/boards-and-committees/office-committee/