

Curriculum for the Master's Programme in IT and Cognition The 2008 Curriculum

**Studieordning for kandidatuddannelsen i
It og Kognition,
2008-ordningen**

Amended 2010

**Faculty of Humanities
Department of Scandinavian Studies and Linguistics
University of Copenhagen**

**Det Humanistiske Fakultet
Institut for Nordiske Studier og Sprogvidenskab
Københavns Universitet**

Part 1 Authority

The curriculum for the Master's Programme in IT and Cognition, the 2008 Curriculum, has been drawn up under the authority endowed by:

- 67 of Ministerial Order no. 338 of 6 May 2004 on Bachelor and Master's programmes at universities (the Study Programme Order),
- 33 of Ministerial Order no. 867 of 19 August 2004 on university examinations (the Exam Order) and
- 37 of Ministerial Order no. 52 of 28 January 2009 on admission, etc. for Bachelor and Master's programmes at universities (the Admission Order).

Part 2 Purpose and structure

1. Prescribed period of study

The Master's Programme in IT and Cognition is a two-year full-time study programme prescribed to 120 ECTS credits. It comprises 120 ECTS credits of elements basic to the programme, including the thesis, which is based on the subjects covered by the programme.

(2) European Credit Transfer System (ECTS) credits stipulate the study time prescribed for completion of a course. 60 ECTS credits correspond to one year of full-time study or 1,650 working hours.

2. Purpose

The purpose of the Master's Programme is to improve the students' academic knowledge and skills, and to expand upon the theoretical and methodical competences gained during the Bachelor Programme. Students gain greater independence and academic immersion via advanced elements in the subject area's disciplines and methods, including training in scientific work and methodology. Students are afforded the opportunity to develop and refine their competences with a view to specialised vocational objectives, e.g. admission to a PhD programme.

Part 3 Admission requirements and enrolment

3. Admission requirements

In order to be admitted to the Master's Programme in IT and Cognition, the student must have passed a Danish Bachelor programme.

(2) The University is also empowered to grant admission to the IT and Cognition programme to applicants whose qualifications are assessed to be equivalent to a Danish Bachelor programme. Applicants must have passed a (Danish or foreign) research-based programme that complies with the following requirements in terms of scope and content:

- 1) the programme must be prescribed to min. 180 ECTS credits
- 2) the programme must include a Bachelor project/thesis prescribed to min. 10 ECTS credits

- 3) the programme must have an academic focus and progression (constituent subject elements prescribed to min. 90 ECTS credits).

3 b. Language Requirements

In order to ensure that all students have the necessary academic command of English to complete the programme, applicants need to submit proof of English language proficiency.

English Language Requirements

Non-native speakers of English must pass the TOEFL with a score of 550 (on a paper-based test) / 213 (computer-based test) / 80 (Internet-based test) or the University of Cambridge IELTS with a score of 6.0, or provide equivalent documentation, before commencing their studies. Students who have passed English at level B in the Danish upper-secondary school are exempt from this requirement.

The Faculty of Humanities Institution Code for the TOEFL is 3312.

Danish Language Requirements

The programme is taught in English; there are no Danish language requirements.

3 c. Prioritisation of applications for admission

If the number of eligible applicants exceeds the number of places, applicants will be ranked according to a list of priorities. This prioritisation will be based on a holistic evaluation. Points will be awarded on the basis of objective criteria as well as an individual assessment.

(2) Points will be allocated as follows:

- 1) 40 points based on motivation
- 2) 25 points based on an evaluation of the relevance of the Bachelor programme
- 3) 15 points based on an evaluation of other educational and vocational experience
- 4) 15 points based on examination grades achieved on the Bachelor programme
- 5) 10 points based on the time taken to complete the Bachelor programme.

(3) Points for examination grades will be allocated on the basis of a grade-point average, which will be calculated on the basis of all of graded activities undertaken during the Bachelor programme. Points are given for average grades higher than C: 10 points are given for an average B, and 15 for an average A.

(4) Points for the duration of the Bachelor programme are allocated as follows: 10 points if it took four years or less; five points if it took five years; and 0 points if it took any longer, except in exceptional circumstances (e.g. illness or leave of absence).

4. Enrolment

Students admitted to the Master's Programme in IT and Cognition on or after 1 September 2008 must follow this curriculum.

(2) Enrolment on a study programme means that the student in question is covered by the rights and obligations stipulated for that programme. Enrolment entitles the student to sit examinations set as part of the programme. The student is personally responsible for matriculating properly.

Part 4

Technical requirements pertaining to study

5. Reading texts in (a) foreign language(s)

Students must be able to read texts in English.

6. The concept of the ‘standard page’

Unless otherwise stipulated, the concept of the standard page as applied to texts and the submission of take-home assignments/theses corresponds to 2,400 keystrokes, including spaces. When calculating the scope of take-home assignments, notes are included but not cover pages, bibliographies and appendices.

(2) If audio-visual material is submitted, one minute of playing time corresponds to one standard page.

(3) For technical texts, e.g. texts about programming, a standard page consists of 1,550 keystrokes.

7. Writing and spelling skills

When assessing written take-home assignments, the students’ writing and spelling skills (as documented in the work submitted) must be included in the overall assessment of the piece of work concerned.

Part 5

Title and competence profile

8. Title

Graduates from the Master’s Programme are entitled to use the title *cand.mag. i It og Kognition*, or Master of Arts in IT and Cognition.

9. Competence profile for a Master’s graduate

IT and Cognition is an interdisciplinary Master’s programme based on three disciplines: psychology, computer science and language technology/linguistics. The purpose of the programme is to train graduates who possess both technical skills and an understanding of human cognitive abilities, i.e. human beings’ ability to communicate and interact with their physical surroundings, computers and each other. Through a combination of cognition subjects, technical subjects and ancillary courses, graduates acquire deep theoretical and interdisciplinary insight that qualifies them to work on the development of innovative technologies and to use information technology in several areas of the labour market (e.g. the media, telecommunication, experience and learning industries) in which advanced information technology is developed based on a deep understanding of stakeholders’ behaviour and their ability to communicate and interact.

Graduates possess interdisciplinary and specific academic knowledge, skills and competences. The interdisciplinary aspect consists, first and foremost, of the two subject elements *Cognitive Science I* and *II*, which are compulsory, and which aim to equip students with insight into cognitive science as an interdisciplinary field of research. The interdisciplinary aspect is also supported by a number of subjects that recur in several elements of the constituent disciplines.

Cognitive Science I and *II* provide students with a broad understanding of cognitive science – including its historical development, the results achieved and its future potential. They also learn to work independently on problems within cognitive science at an advanced level. The two subject elements are closely linked to *Cognitive Psychology*, by means of which students gain insight into the psychological dimension of cognitive science and learn to formulate questions and hypotheses that can be studied using computer science or by experimental means. The focus of *Linguistics* is on

one particular area of cognition, i.e. language. Students learn to analyse linguistic utterances and to understand the cognitive processes that underlie the production and comprehension of language.

Logic for Cognition Studies equips students with the competences to map out the formal structure and complexity of cognitive phenomena and improves their ability to use the formal logic that is fundamental to computer-science modelling. Similar competences are built up in *Formal Linguistics* in relation to the formal processing of linguistic phenomena.

The subject elements *Quantitative Research Methods* and *Experimental Methodology* are ancillary courses, which teach students to implement and evaluate quantitative empirical and experimental studies, both of which are highly important in cognitive science.

The subject elements *Man-machine Interaction I* and *II* present an important application of cognitive science. Students learn about the principles of user-friendliness, i.e. to what extent a computer system underpins its users' work in an effective and comfortable manner; how user-friendly systems are designed; and how to evaluate user-friendliness.

Finally, *Introduction to Computer Science; Data and Algorithms for Cognition Studies; Adaptive Systems* and *Language Technology I* and *II* teach general expertise in computer science and language technology, as well as how to model cognitive phenomena using a computer. By acquiring an understanding of the potential and limitations inherent in computer models of cognition, the graduates build up competences in the development and use of advanced information technology and enhance their understanding of actual cognitive phenomena.

On successful completion of the programme, graduates have acquired competences in:

- describing and explaining the most important theoretical approaches for understanding cognitive phenomena and the ability to relate critically to this knowledge
- implementing and evaluating empirical studies of human cognitive functions
- analysing and formalising linguistic processes
- applying formal methods to cognitive phenomena
- constructing computer models that explain or simulate cognitive abilities – including linguistic processes
- evaluating these types of models
- designing user-friendly systems and evaluating user interfaces
- applying cognition-research methodology in specific situations.

In general, graduates will have achieved a high academic standard, both in the individual disciplines covered by IT and Cognition and in the interdisciplinary aspects. The students also further develop their personal qualities, e.g. their ability to:

- communicate effectively
- work independently and in teams
- quickly familiarise themselves with new tasks and methods
- search for and apply knowledge from different sources
- present results both orally and in writing
- provide feedback on their peers' work.

Part 6 Structure of the programme

10. During the first and second semesters, the choice of subject elements is mainly determined by the students' qualifications.

The subject element *Cognitive Science I*, which runs during the first semester, is compulsory for all students. All students are also required to take *Introduction to Computer Science* and *Data and Algorithms for Cognition Studies*, although students who already have the relevant computer-science skills may be exempted from one or both courses and instead be offered a choice of optional subject elements. Bachelors in Computer Science are automatically exempted from both *Introduction to Computer Science* and *Data and Algorithms for Cognition Studies*.

All students must take *Language Technology I* in the second semester. However, those who successfully completed a similar subject during their Bachelor programmes will be exempted and allowed to take another course instead.

Depending on the students' background and qualifications, there are therefore at least three possible combinations of subjects available in the first and second semesters:

Psychology/linguistics

A combination specially designed for Bachelors of Computer Science or other students who already possess the necessary computer-science knowledge but who need to develop expertise in psychology, linguistics and language technology.

Cognitive Science I and *Language Technology I* are compulsory subject elements in the first two semesters.

Recommended subject elements are *Man-machine Interaction I*, *Linguistics* and *Experimental Methodology* in the first semester; and *Cognitive Psychology I*, *Formal Linguistics* and either *Quantitative Research Methods* or *Logic for Cognition Studies* in the second semester.

Computer science/linguistics

A combination specially designed for Bachelors of Psychology who have already taken courses in the area of cognitive psychology and who need to develop expertise in computer science, linguistics and language technology.

Cognitive Science I, *Introduction to Computer Science*, *Data and Algorithms for Cognition Studies* and *Language Technology I* are compulsory subject elements in the first two semesters.

Recommended subject elements are *Linguistics* or *Man-machine Interaction I* in the first semester; and *Formal Linguistics*, *Logic for Cognition Studies* and *Quantitative Research Methods* in the second semester.

Psychology/computer science

A combination specially designed for Bachelors of the humanities and others who already possess significant linguistic knowledge and who need to develop expertise in computer science, psychology and statistics.

Cognitive Science I, *Introduction to Computer Science*, *Data and Algorithms for Cognition Studies* and *Language Technology I* are compulsory subject elements in the first two semesters.

Recommended subject elements are *Man-machine Interaction I* or *Experimental Methodology* in the first semester; and *Cognitive Psychology I* and either *Quantitative Research Methods* or *Logic for Cognition Studies* in the second semester.

The programme is also open to other Bachelors not listed above. The three combinations mentioned are only suggestions for the first two semesters. What is important is that the students choose combinations based on their qualifications.

In the third semester, *Cognitive Science II*, which is compulsory for all, may be combined with either two subject elements prescribed to 7.5 ECTS credits each, or one element prescribed to 15 ECTS credits.

10b. Master of Arts in IT and Cognition

The Master of Arts in IT and Cognition comprises three modules in the first three semesters, each prescribed to 30 ECTS credits.

(2) The programme includes 120 ECTS credits of constituent subject elements, including the thesis. Of these, 22.5 ECTS credits must comprise the compulsory courses *Cognitive Science I* and *II*. The other subject elements are selected from the subjects covered by the programme.

(3) The programme concludes with a thesis prescribed to 30 ECTS credits. The thesis must be on an IT and Cognition topic.

(4) The overall course of study is presented in the table below:

Module	Title	ECTS credits	Semester	Form of examination	Assessment	Grading	Type of subject
Module 1	IT and Cognition I	30	First	-	-	-	-
Subject-element code 47680321-01	Cognitive Science I	7.5	First	Set oral exam with preparation time	The 7-point scale	External examiner appointed by the Ministry	Constituent and compulsory
Subject-element code 47680322-01	Introduction to Computer Science	7.5	First	Active class participation	Pass/Fail	Internal	Constituent
Subject-element code 47680323-01	Data and Algorithms for Cognition Studies	7.5	First	Active class participation	Pass/Fail	Internal	Constituent
Subject-element code 47690325-01	Linguistics	7.5	First	Active class participation	Pass/Fail	Internal	Constituent and elective
Subject-element code 47680326-01	Experimental Methods	7.5	First	Free project report with active class participation	Pass/Fail	Internal	Constituent and elective
Subject-element code 47680332-01	Man-machine Interaction I	7.5	First	Set project report with active class participation	The 7-point scale	Internal	Constituent and elective
Module 2	IT and Cognition II	30	Other	-	-	-	-
Subject-element code 47680327-01	Language Technology I	7.5	Other	Set project report	The 7-point scale	Internal	Constituent
Subject-element code 47680324-01	Cognitive Psychology I	7.5	Other	Set written exam at the university	Pass/Fail	Internal	Constituent and elective
Subject-element code 47680329-01	Formal Linguistics	7.5	Other	Set written exam at the university	The 7-point scale	Internal	Constituent and elective
Subject-	Quantitative	7.5	Other	Set written exam	The 7-point	Internal	Constituent

element code 47680330-01	Research Methods			at the university	scale		and elective
Subject- element code 47680331-01	Logic for Cognition Studies	7.5	Other	Free oral exam with synopsis	The 7-point scale	Internal	Constituent and elective
Module 3	Advanced IT and Cognition	30	Third	-	-	-	-
Subject- element code 47680333-01	Cognitive Science II	15	Third	Free oral exam with synopsis	The 7-point scale	External examiner appointed by the Ministry	Constituent and compulsory
Subject- element code 47680328-01	Cognitive Psychology II	7.5	Third	Set oral exam with preparation time	The 7-point scale	External examiner appointed by the Ministry	Constituent and elective
Subject- element code 47680338-01	Project	7.5	Third	Free project report	The 7-point scale	External examiner appointed by the Ministry	Constituent and elective
Subject- element code 47680334-01	Adaptive Systems	15	Third	Free oral exam with active class participation	The 7-point scale	External examiner appointed by the Ministry	Constituent and elective
Subject- element code 47680335-01	Man-machine Interaction II	15	Third	Free project report	The 7-point scale	External examiner appointed by the Ministry	Constituent and elective
Subject- element code 47680336-01	Language Technology II	15	Third	Free project report with oral exam	The 7-point scale	External examiner appointed by the Ministry	Constituent and elective
Module 4	Thesis	30	Fourth	-	-	-	-
Subject- element code 47680337-01	Thesis	30	Fourth	A: Free paper with oral defence B: Report with oral defence	The 7-point scale	External examiner appointed by the Ministry	Constituent and compulsory

11. The programme modules

Module 1: IT and Cognition I

30 ECTS credits

Competence targets for the module	<p>The objective of Module I is to provide students from varied academic backgrounds – in computer science, psychology and the humanities – with a short, general introduction to cognitive science via the subject element <i>Cognitive Science I</i>, as well as to develop or further develop their knowledge of the individual subjects within the cognitive sciences.</p> <p>In the computer-science part of the module, students learn about data structures and programming. They acquire theoretical knowledge and practical competences relevant to artificial intelligence and modelling. They also learn about methods used in the design and evaluation of user interfaces. The subject element <i>Linguistics</i> aims to equip students with the skills to perform grammatical analyses, and to provide them with knowledge of the cognitive processes associated with understanding and producing language. Finally, <i>Experimental Methods</i> enables students to develop knowledge and skills in experimental studies.</p>
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Cognitive Science I (constituent and compulsory)

Subject-element code 47680321-01

7.5 ECTS credits

Competence targets for the subject element	<p>The objective is to provide students with a general introduction to cognitive science as an independent but interdisciplinary area of research, along with a general understanding of the subject's historical development and how the different subjects on the programme complement each other. On this basis, students will be able to relate to key issues, methodologies and research findings in cognitive science, and will learn to position the programme's more specific elements in relation to the subject area as a whole.</p>
Academic targets	<p>Students are able to:</p> <ul style="list-style-type: none">• explain key concepts, problems and theories in cognitive science• account, on a general level, for the historical development of the subject and how the various disciplines that make up the programme contribute to the subject area as a whole.
Forms of teaching and working	<p>The course takes the form of class instruction. Most classes are taught by a lecturer from one of the disciplines, but teachers from other subjects contribute when relevant.</p>
Syllabus	<p>The syllabus consists of 400 standard pages of relevant scientific literature, e.g. textbook extracts and representative scientific articles, and is determined by the lecturer in collaboration with the students.</p>

Exam provisions	<p>Form of examination: Set oral presentation with preparation, followed by a dialogue between the examinee and the examiner.</p> <p>Form of assessment: The 7-point scale</p> <p>Examination language: English or Danish</p> <p>Grading: External examiner appointed by the Ministry</p> <p>Scope: The student selects a question at random. After 30 minutes' preparation, the student accounts for and responds to the question in a presentation lasting up to 10 minutes. The examiner may pose supplementary questions based on the syllabus submitted for up to 10 minutes. The examination lasts a total of 30 minutes, including grading and feedback.</p> <p>Study aids: All study aids are permitted during the preparation.</p> <p>Group tests: The test can only be taken individually.</p>
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Introduction to Computer Science (constituent)

Subject-element code 47680322-01

7.5 ECTS credits

Competence targets for the subject element	<p>The objective is to provide insight into the way computers represent and process information, as well as to provide the students with practical knowledge of the construction, testing and documentation of programmes to an extent that enables them to independently deal with problems, the solution to which may run to up to approx. five pages of programme text.</p>
Academic targets	<p>The examinee must document knowledge of data structures, algorithms and programming by:</p> <ul style="list-style-type: none"> • analysing problems in their own area of expertise and expressing them and their solutions in the programming language studied on the course (on a scale corresponding to up to approx. five pages of programme text) • demonstrating the ability to independently acquire expertise in other programming languages, with reference to the general principles studied on the course • understanding advanced computer-science problems that require basic knowledge of data processing and programming.
Forms of teaching and working	<p>A combination of class instruction and exercises (2+2 hours per week).</p>
Syllabus	<p>The syllabus consists of 400 standard pages, typically including a textbook on the selected programming language as well as the lecturer's notes and assignments. The syllabus is set by the lecturer in collaboration with the students.</p>

Exam provisions	<p>Form of examination: Active class participation</p> <p>Make-up examination(s) or resit(s): Set written project</p> <p>Form of assessment: Pass/Fail</p> <p>Examination language: English or Danish</p> <p>Grading: Internal</p> <p>Scope: Students must pass 4–6 compulsory assignments during the course. These consist of small programming assignments, the solution to which requires up to about five pages of programme text. For make-up examination(s) or resit(s): 25–30 standard pages, which corresponds approximately to the volume of programme text to be submitted as part of the ordinary examination’s compulsory assignments.</p> <p>Study aids: All study aids are permitted.</p> <p>Group tests: The test can only be taken individually.</p>
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Data and Algorithms for Cognition Studies (constituent)
Subject-element code 47680323-01
7.5 ECTS credits

Competence targets for the subject element	The objective is to provide students with a general introduction to more advanced computer-science problems and solutions than those touched upon in <i>Introduction to Computer Science</i> . This enables them to develop the computer-science tools necessary for modelling cognitive phenomena and processes.
Academic targets	The examinee must document knowledge of selected data structures and algorithms by: <ul style="list-style-type: none"> • analysing problems from their own area of expertise and selecting algorithms and data structures appropriate for solving the problems • evaluating the problems’ complexity • understanding advanced computer-science problems that require basic knowledge of databases and algorithms.
Forms of teaching and working	A combination of class instruction and exercises (2+2 hours per week). As far as possible, the compulsory assignments are taken from tangible problems in cognitive science.
Syllabus	The syllabus consists of 400 standard pages from a textbook and from the lecturer’s notes and assignments, and is set by the lecturer in collaboration with the students.
Exam provisions	<p>Form of examination: Active class participation</p> <p>Make-up examination(s) or resit(s): Set written project</p> <p>Form of assessment: Pass/Fail</p> <p>Examination language: English or Danish</p> <p>Grading: Internal</p> <p>Scope: Students must pass 4–6 compulsory assignments during the course. These consist of small programming assignments, the solution to which requires up to about five pages of programme text. For make-up examination(s) or resit(s): 25–30 standard pages, which corresponds approximately to the volume of programme text to be submitted as part of the</p>

	ordinary examination's compulsory assignments. Study aids: All study aids are permitted. Group tests: The test can only be taken individually.
Special regulations	Basic computer-science skills equivalent to <i>Introduction to Computer Science</i> are required.

Linguistics (constituent and elective subject)

Subject-element code 47680325-01

7.5 ECTS credits

Competence targets for the subject element	On passing the examination, students are capable of conducting grammatical analyses of sentences and understanding the background for these analyses. The students also possess knowledge of the most important research results about the cognitive processes associated with having to produce and understand words and utterances.
Academic targets	Students are able to: <ul style="list-style-type: none"> • analyse sentences and constituent parts thereof, and their functions • analyse usage situations using basic pragmatic terminology • shed light on processes in and problems related to language comprehension and production.
Forms of teaching and working	Class instruction with active involvement of students through exercises and take-home assignments.
Syllabus	The syllabus consists of 500 standard pages.
Exam provisions	Form of examination: Active class participation Make-up examination(s) or resit(s): Set written project Form of assessment: Pass/Fail Examination language: English or Danish Grading: Internal Scope: During the semester, students must submit and pass 4–6 smaller assignments of 2–4 standard pages. For make-up examination(s) or resit(s): The project assignment consists of 4–6 assignments and must amount to 20–25 standard pages Study aids: All study aids are permitted. Group tests: The test can only be taken individually.

Experimental Methods (constituent and elective subject)

Subject-element code 47680326-01

7.5 ECTS credits

Competence targets for the module	On passing the examination, students are capable of formulating hypotheses that can be empirically verified by means of experimental methods. The students will also have knowledge of examples of classic cognitive science studies.
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Academic targets	<p>Students are able to:</p> <ul style="list-style-type: none"> • master experimental methodology, including collating and analysing data • express results in scientific form in reports based on their own empirical data • critically evaluate empirical results from scientific articles.
Forms of teaching and working	<p>Classes include conducting exemplary experimental exercises. The exemplary exercises include reviews of:</p> <ul style="list-style-type: none"> • selected experiments in cognitive science; • experimental methodology • experiment design • data collation • analysis of own data. <p>The teaching takes the form of class instruction with exercises. Guidance is given in connection with documentation and reporting on exercises.</p>
Syllabus	<p>The syllabus is 500 standard pages and is set by the lecturer in collaboration with the students.</p>
Exam provisions	<p>Form of examination: Free written project report with active class participation Make-up examination(s) or resit(s): Free written project followed by compulsory written test at the University. Form of assessment: Pass/Fail Examination language: English or Danish Grading: Internal Scope: During the course, the student must submit and pass 4–6 compulsory assignments of two standard pages each, which are to be answered individually (active class participation). In addition to these compulsory assignments, students must submit a free project assignment. For make-up examination(s) or resit(s): Compulsory written test: five hours; a written project assignment, as per the ordinary test. The assignment corresponds to approx. 10 standard pages for one student, approx. 15 standard pages for two students, and approx. 18 standard pages for three students. Study aids: All study aids are permitted. Group tests: The test can be taken as a group examination by two or three students but with individual assessment. For group tests, each individual participant's input must be readily identifiable, and the joint part must not exceed 50% of the total work. For make-up examination(s) or resit(s): The written test can only be taken individually. The same provisions apply to the project assignment as to the ordinary test.</p>

Man–machine Interaction I (constituent and elective subject)

Subject-element code 47680332-01

7.5 ECTS credits

Competence targets for the subject element	<p>The objective is to provide students with an introduction to the key concepts and problems in the subject area human–machine interaction. Through a combination of lectures and exercises, students learn about user-friendliness, how user-friendly systems are designed and the evaluation of user interfaces.</p>
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Academic targets	Students are able to: <ul style="list-style-type: none"> • identify and discuss key concepts and issues in man–machine interaction.
Forms of teaching and working	The teaching consists of a combination of lectures, exercises, individual study and compulsory assignments.
Syllabus	Approximately 700 standard pages of relevant scientific literature, determined by the lecturer.
Exam provisions	<p>Form of examination: Compulsory written project report with active class participation</p> <p>Make-up examination(s) or resit(s): Compulsory written project assignment</p> <p>Form of assessment: The 7-point scale</p> <p>Examination language: English or Danish</p> <p>Grading: Internal</p> <p>Scope: 5-7 compulsory assignments during the course (2–5 pages each) and a one-week exam assignment (approx. 10 pages). The compulsory assignments are included as appendices in the exam assignment and the subsequent assessment. For make-up examination(s) or resit(s): Compulsory written project assignment of 25–30 pages.</p> <p>Study aids: All study aids are permitted.</p> <p>Group tests: The test can only be taken individually.</p>

Module 2: IT and Cognition II
30 ECTS credits

Competence targets for the module	<p>The objective of Module 2 is to build on the knowledge gained by the students in Module I, and to introduce other key subjects in cognitive science. By the end of the second semester, the students have encountered all of the subjects covered by the Master’s programme and have gained wide theoretical knowledge and IT competences at a level that enables them to devote their second year to specialisation and thesis writing.</p> <p>In <i>Cognitive Psychology I</i>, students start to develop an understanding of selected concepts and methods in cognitive psychology. The students also further develop their linguistic expertise. In <i>Formal Linguistics</i>, they learn about the formal analysis of complex linguistic phenomena and communicative processes. In <i>Language Technology</i>, they learn to implement language technology solutions in one or more relevant programming languages. Another objective of both subject elements – and of the subject element <i>Logic for Cognition Studies</i>, which is introduced in the second semester – is to improve the students’ ability to analyse problems and use formal methods. In <i>Quantitative Research Methods</i>, another new subject, students learn to apply statistical methods to the cognitive field.</p>
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Language Technology I (constituent)

Subject-element code 47680327-01

7.5 ECTS credits

Competence targets for the subject element	The course provides the student with insight into computational linguistics and language technology concepts, problems, theoretical methodology and practical solutions. The student also acquires competences in implementing language technology modules in one or more appropriate programming languages, based on existing language technology tools and software packages and with the aid of the programming languages acquired in <i>Introduction to Computer Science</i> and <i>Data and Algorithms for Cognition Studies</i> .
Academic targets	Students are able to: <ul style="list-style-type: none">• demonstrate theoretical insight into language technology by identifying problems and solutions in core areas of the subject• independently design and implement simple language technology solutions in one of the programming languages covered• account for the model solutions chosen using academically correct argumentation and terminology.
Forms of teaching and working	The form of teaching is a combination of class instruction and exercises.
Syllabus	The syllabus consists of 400 standard pages of relevant scientific literature, mainly from a textbook, and is determined by the lecturer in collaboration with the students. When selecting the textbook, account must be taken of the course's computational linguistics aspects as well as its programming content.
Exam provisions	<p>Form of examination: Compulsory written project assignment. The project consists of responding to one or more problems formulated by the examiner three weeks before the assignment is due for submission.</p> <p>Form of assessment: The 7-point scale</p> <p>Examination language: English or Danish</p> <p>Grading: Internal</p> <p>Scope: The submission consists of a report of 15–20 standard pages plus the relevant programme. The programme documentation must be enclosed as an attachment.</p> <p>Study aids: All study aids are permitted.</p> <p>Group tests: The test can be taken as a group examination by two or three students, with individual assessment. Assignments done by a group of two people must be 25–30 standard pages. Assignments done by three people must be 35–40 standard pages. For group tests, each individual participant's input must be readily identifiable. Their performance is assessed individually. The joint part must not exceed 50% of the total work.</p>
Special regulations	Basic computer-science skills equivalent to <i>Introduction to Computer Science</i> are required, as well as knowledge of general linguistics corresponding to <i>Linguistics</i> .

Cognitive Psychology I (constituent and elective subject)

Subject-element code 47680324-01

7.5 ECTS credits

Competence targets for the subject element	<p>The objective is that students acquire knowledge of and develop competences in theoretical and empirical cognitive psychology, in particular about human consciousness and cognition, including perception (including sensory perception), attention, learning and motivation.</p> <p>On passing the examination, students are capable of applying theories, concepts and research results from academic literature to the identification, analysis and discussion of topics such as:</p> <ul style="list-style-type: none"> • cognition, perception, attention, learning and motivation • cognitive processes in problems related to human-machine interaction and the computer modelling of cognitive processes • the relationship between cognitive and neural processes.
Academic targets	<p>Students are able to:</p> <ul style="list-style-type: none"> • master the subject of cognitive psychology, its historical development and basic methodology, including methods for the study of brain structures and functions.
Forms of teaching and working	<p>The teaching consists of a complete unit comprising lectures and seminars.</p>
Syllabus	<p>800 standard pages of compulsory literature, including 100 standard pages of research articles from international journals.</p>
Exam provisions	<p>Form of examination: Compulsory written test at the University Form of assessment: Pass/Fail Examination language: English or Danish Grading: Internal. Scope: Two hours. The student is presented with five or six questions and answers three of them. Study aids: All study aids are permitted. Group tests: The test can only be taken individually.</p>

Formal Linguistics (constituent and elective subject)

Subject-element code 47680329-01

7.5 ECTS credits

Competence targets for the subject element	<p>The objective is that students acquire knowledge of methods for formal analysis of complex linguistic phenomena and communicative processes.</p>
Academic targets	<p>Students are able to:</p> <ul style="list-style-type: none"> • master key concepts and methods in formal linguistics • conduct correct and comprehensive formal analysis of linguistic phenomena.

Forms of teaching and working	Class instruction
Syllabus	The syllabus consists of 500 standard pages of relevant scientific literature, and is determined by the lecturer in collaboration with the students.
Exam provisions	<p>Form of examination: Compulsory written test at the University</p> <p>Form of assessment: The 7-point scale</p> <p>Examination language: English or Danish</p> <p>Grading: Internal</p> <p>Scope: The exam consists of 5–10 questions. Answers must be based on the syllabus. Students have four hours to complete the exam.</p> <p>Study aids: All study aids are permitted.</p> <p>Group tests: The test can only be taken individually.</p>
Special regulations	Knowledge of general linguistics at a level corresponding to the subject element <i>Linguistics</i> is a prerequisite.

Quantitative Research Methods (constituent and elective subject)

Subject-element code 47680330-01

7.5 ECTS credits

Competence targets for the subject element	On passing the examination, students are capable of evaluating the relevance of statistical techniques in relation to empirical studies; conducting and interpreting advanced statistical analyses in research; and critically evaluating research literature that includes advanced statistical procedures.
Academic targets	<p>Students are able to:</p> <ul style="list-style-type: none"> • master the statistical methods covered by the syllabus for the subject • evaluate the relevance of statistical methods in relation to the various empirical studies • conduct and interpret advanced statistical analyses.
Forms of teaching and working	<p>The teaching takes the form of class instruction conveying knowledge and competence in the use of quantitative research methods. It includes:</p> <ul style="list-style-type: none"> • a review of the syllabus, supplemented by topical research examples • practical exercises in statistical programmes. <p>The classes address the following main themes:</p> <ul style="list-style-type: none"> • factorial analysis of variance • multiple regression analyses, including logistical regression • log-linear models.
Syllabus	The syllabus is 500 standard pages and is set by the lecturer.

Exam provisions	<p>Form of examination: Compulsory written test at the University</p> <p>Form of assessment: The 7-point scale</p> <p>Examination language: English or Danish</p> <p>Grading: Internal</p> <p>Scope: The exam consists of 8–12 main questions. Answers must be based on the syllabus. Students have three hours to complete the exam.</p> <p>Study aids: Written aids and a calculator are permitted. Students are not allowed to use computers.</p> <p>Group tests: The test cannot be taken as a group test.</p>
Special regulations	It is a prerequisite that students have participated in the subject element <i>Experimental Methods</i> or have corresponding qualifications.

Logic for Cognition Studies (constituent and elective subject)

Subject-element code 47680331-01

7.5 ECTS credits

Competence targets for the subject element	The primary objective is to improve the students' ability to analyse problems using formal methods. Logic is fundamental both to the design of technological applications and to theoretical studies of cognition. Knowledge of key logical concepts is therefore a prerequisite for the students' development in this field.
Academic targets	Students are able to <ul style="list-style-type: none"> • master key concepts in at least one main type of logic • apply relevant logic in the context of a cognitive science problem.
Forms of teaching and working	The course takes the form of class instruction with active participation. Students are asked to perform various tasks.
Syllabus	The syllabus for the exam consists of approx. 400 standard pages of relevant scientific literature, including at least four scientific articles. Approx. 100 of the 400 standard pages must be original literature sourced by the students.
Exam provisions	<p>Form of examination: Free oral presentation with synopsis</p> <p>Form of assessment: The 7-point scale. The synopsis accounts for 50% of the final grade, the presentation for 25% and the opposition 25%.</p> <p>Examination language: English or Danish</p> <p>Grading: Internal</p> <p>Scope: Students submit a written synopsis of max. four pages. The synopsis is presented for the whole class at a seminar. Each student must also act as an opponent for another student. The student presentation lasts max. 15 minutes. The opponent speaks for max. 10 minutes and the student has max. 5 minutes in which to present a defence. The synopsis must therefore be made available to the examinee, the examiner and opponent. The examiner decides in advance who the opponent will be.</p> <p>Study aids: All study aids are permitted.</p> <p>Group tests: The test can only be taken individually.</p>
Special regulations	<i>Data and Algorithms for Cognition Studies</i> or equivalent knowledge is a

	prerequisite.
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Module 3: Advanced IT and Cognition

30 ECTS credits

Competency targets for the module	Module 3 consists of the subject element <i>Cognitive Science II</i> , a number of specialist subjects and a project. Students choose one or two subject elements in addition to <i>Cognitive Science II</i> , depending on the scope of the subjects. <i>Cognitive Science II</i> delves deeper into some of the problems and methods in the area that the students studied during their first semester, and focuses on topical issues with vocational or research relevance. The project teaches students to concentrate on a small, specific study. All of the subject elements address advanced problems, and the students learn to relate critically and independently to the academic methodology. The subject elements also provide inspiration for the choice of thesis topic (see the specific competence targets for the individual subject elements below).
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Cognitive Science II (constituent and compulsory)

Subject-element code 47680333-01

15 ECTS credits

Competence targets for the subject element	<p><i>Cognitive Science II</i> delves deeper into some of the problems and methods in the area studied in <i>Cognitive Science I</i>, and prepares students for the thesis. Rather than the historical and epistemological perspective of <i>Cognitive Science I</i>, the focus is on topical research subjects and future developments. Methods from the various disciplines that make up the programme are incorporated, but the main focus is on the cognitive aspects. Discussions and a review of relevant practical applications are also incorporated as far as possible.</p> <p>The objective of the subject element is to provide students with the opportunity to work independently on problems within the cognitive sciences at an advanced level. This implies a mastery of relevant terminology and methods, understanding the relevance of cognitive science in relation to practical applications, and the ability to critically evaluate relevant literature. It also aims to prepare students for their thesis by providing them with an opportunity to work in its subject area in the third semester.</p>
Academic targets	<p>Students are able to:</p> <ul style="list-style-type: none"> • identify and discuss key and current problems and methods in cognitive science • assess their relevance in relation to real-world applications • critically evaluate relevant literature.
Forms of teaching and working	The course takes the form of class instruction and can be offered as a partnership between lecturers from the various disciplines involved. Project subjects proposed by relevant companies may also be incorporated into the teaching and may form the basis for the exam synopsis.

Syllabus	The syllabus consists of 800 standard pages of relevant scientific literature, e.g. excerpts from books and articles. Students put together their own syllabus, which must be approved by the lecturer.
Exam provisions	<p>Form of examination: Free oral presentation with synopsis</p> <p>Form of assessment: The 7-point scale. The synopsis counts for approx. 1/3 of the total grade, and the oral presentation for approx. 2/3.</p> <p>Examination language: English or Danish</p> <p>Grading: External examiner appointed by the Ministry</p> <p>Scope: Three weeks before the exam, students submit a 4–6-page synopsis on a subject relevant to the syllabus. The student then gives an oral presentation based on the synopsis. The examiner may ask questions about the presentation, as well as about other subjects within the specified syllabus. The examination lasts a total of 45 minutes, including grading and feedback. The presentation may last up to 10 minutes.</p> <p>Study aids: No study aids are allowed for the oral examination.</p> <p>Group tests: The test can only be taken individually.</p>
Special regulations	Prerequisites for this subject element are basic knowledge of cognitive science corresponding to the subject element <i>Cognitive Science I</i> ; knowledge of cognitive psychology corresponding to <i>Cognitive Psychology I</i> ; and statistical knowledge corresponding to <i>Quantitative Research Methods</i> .

Cognitive Psychology II (constituent and elective subject)

Subject-element code 47680328-01

7.5 ECTS credits

Competence targets for the subject element	<p>The objective is that students acquire knowledge and develop competences in theoretical and empirical cognitive psychology, e.g. human consciousness and cognition, including memory, knowledge and the representation thereof, thinking, problem-solving, language, and the relationship between cognition, emotion and intelligence.</p> <p>Students are capable of using theories, concepts and research results from the academic literature to identify, analyse and discuss topics such as:</p> <ul style="list-style-type: none"> • cognition, memory, knowledge and the representation thereof, thinking, problem-solving, language, the relationship between cognition, emotion and intelligence, and the relationship between cognition and consciousness • cognitive processes in the problems addressed by areas such as human-machine interaction and the computer modelling of cognitive processes • the relationship between cognitive and neural processes. <p>Students are capable of, in a methodical manner:</p> <ul style="list-style-type: none"> • formulating hypotheses and research questions relevant to cognitive psychology; • communicating the subject matter in teaching situations • participating in subject-specific and interdisciplinary research.
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Academic targets	Students are able to: <ul style="list-style-type: none"> • explain advanced topics within cognitive psychology • analyse, discuss and put into perspective relevant problems and methods.
Forms of teaching and working	The teaching consists of a complete unit comprising lectures and seminars. The objective of the lectures is to: <ul style="list-style-type: none"> • exemplify research and its applications • forge interdisciplinary and unifying links between the subject's individual topics • position cognitive psychology in a historical and general psychological context. The primary objective of the seminar teaching is: <ul style="list-style-type: none"> • to review the syllabus • to provide a theoretical overview of the syllabus • to facilitate group- and discussion-based classes.
Syllabus	800 standard pages of compulsory literature, including 100 standard pages of research articles published in international journals.
Exam provisions	<i>Form of examination:</i> Compulsory oral presentation with synopsis <i>Form of assessment:</i> The 7-point scale <i>Examination language:</i> English or Danish <i>Grading:</i> External examiner appointed by the Ministry <i>Scope:</i> The student draws two questions at random from the syllabus. For each question, the test takes the form of a short, five-minute presentation, followed by 10 minutes of discussion. The exam lasts 45 minutes, including 15 minutes for grading and feedback. The student is entitled to 15 minutes' preparation time before the exam. <i>Study aids:</i> All study aids are permitted during the preparation. <i>Group tests:</i> The test can only be taken individually.
Special regulations	<i>Cognitive Psychology I</i> must be passed before or at the same time as <i>Cognitive Psychology II</i> .

Project (constituent and elective subject)

Subject-element code 47680338-01

7.5 ECTS credits

Competence targets for the subject element	The objective is to teach students to work in a focused, independent and research-oriented manner on a small project that involves modelling a cognitive phenomenon or part of a phenomenon, and then implementing and testing the model.
Academic targets	Students are able to: <ul style="list-style-type: none"> • formulate a hypothesis about the modelling of a cognitive phenomenon

	<ul style="list-style-type: none"> • develop a formal model for testing this hypothesis • compare the model with existing theoretical and/or empirical explanations • implement and test (parts) of the hypothesis on a computer • account for the methods chosen and the results in a written report.
Forms of teaching and working	The course is based on the students running a project. The work can be individual or organised in project groups of 2–3 people. The teaching takes the form of project supervision.
Syllabus	The syllabus varies according to the chosen topic, but primarily consists of scientific articles. Students are also expected to source original literature related to their topic. In total, the syllabus is approx. 300 standard pages. The syllabus is approved by the lecturer.
Exam provisions	<p>Form of examination: Free project report with associated programme</p> <p>Form of assessment: The 7-point scale</p> <p>Examination language: English or Danish</p> <p>Grading: External examiner appointed by the Ministry</p> <p>Scope: A report of 15–20 standard pages plus the associated programme. The programme documentation must be enclosed as an attachment.</p> <p>Study aids: All study aids are permitted.</p> <p>Group tests: The project can be prepared in groups of up to three students (for two people: 25–30 standard pages; three people: 35–40 standard pages). For group tests, each individual participant’s input must be readily identifiable. Performance is assessed individually. The joint part must not exceed 50% of the total work.</p>

Adaptive Systems (constituent and elective subject)

Subject-element code 47680334-01

15 ECTS credits

Competence targets for the subject element	<p><i>Adaptive Systems</i> introduces the interdisciplinary computer-science areas computer vision, robotics, pattern recognition and machine learning, and builds on the expertise acquired on the courses <i>Introduction to Computer Science, Data and Algorithms for Cognition Studies</i> and <i>Quantitative Research Methods</i>. The course serves as a framework that provides the lecturers with an opportunity to select specific topics depending on their research interests and the students’ needs.</p> <p>The focus is on the use of existing software packages that enable students to concentrate on the core principles in the topics mentioned above.</p> <p>Students acquire the theory and tools to be able to work on cognitive science issues, independently and in a research-oriented manner, from a computer-science perspective.</p>
Academic targets	<p>Students are able to:</p> <ul style="list-style-type: none"> • explain and discuss the principles of computer vision, machine learning and the control of autonomous and mobile agents • demonstrate competence in working creatively on these topics in a research-oriented manner.

Forms of teaching and working	A combination of class instruction and individual supervision.
Syllabus	The syllabus consists of 400 standard pages from a textbook and the lecturer's notes and assignments.
Exam provisions	<p>Form of examination: Free oral presentation with synopsis and active class participation</p> <p>Make-up examination(s) or resit(s): Compulsory written test at the University followed by free oral presentation, as in the ordinary test. The exam is based on solving the compulsory written test.</p> <p>Form of assessment: The 7-point scale, based on the oral exam</p> <p>Examination language: English or Danish</p> <p>Grading: External examiner appointed by the Ministry</p> <p>Scope: Free oral exam: 30 minutes, including grading. There is no preparation. Active class participation: submission and approval of 4–6 assignments during the course. These consist of tangible programming assignments (to be done individually). Before the start of the examination, students select a compulsory assignment, which will form the basis of the exam. Students are expected to demonstrate their solutions during the examination. For make-up examination(s) or resit(s): Written test: Five hours. Oral test: As per the ordinary exam.</p> <p>Study aids: No study aids are permitted.</p> <p>Group tests: The test, including the assignments, can only be taken individually.</p>
Special regulations	Students are required to possess expertise equivalent to <i>Introduction to Computer Science, Data and Algorithms for Cognition Studies</i> and <i>Quantitative Research Methods</i> .

Man–machine Interaction II (constituent and elective subject)

Subject-element code 47680335-01

15 ECTS credits

Competence targets for the subject element	<p>The objective is for students to work in-depth with a topic within man–machine interaction. The students write a project about an empirical study chosen from a range of current research issues in man–machine interaction. The range varies according to the lecturers' research interests. Ideas from industry may also provide inspiration for the students' choice of project, as at least some of the potential projects must be rooted in substantive and practical realistic contexts. The students, under supervision and based on in-depth studies of relevant academic literature, select, design, implement, analyse and report back on their study.</p> <p>The subject element seeks to teach students to work independently and in a research-oriented manner within the field of man-machine interaction. Students have the opportunity to apply experience from previous subject elements (e.g. <i>Quantitative Research Methods</i>, <i>Experimental Methods</i>, <i>Man–machine Interaction I</i>) in a practical and challenging context. Another</p>
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	objective is to prepare students for a possible thesis on man–machine interaction.
Academic targets	Students are able to: <ul style="list-style-type: none"> • discuss and put into perspective research results from the subject area of their project • design a robust and interesting empirical study • analyse the study and draw valid conclusions.
Forms of teaching and working	Class instruction, which initially focuses on helping students to choose a subject and a method of study. Later, the instruction will support the design and analysis of the students’ studies.
Syllabus	The syllabus varies according to the individual topics selected, but consists primarily of scientific articles and supplementary literature on empirical methods of study. Students are also expected to source original literature related to their topic. In total, the syllabus is approx. 400 standard pages. The syllabus is approved by the lecturer.
Exam provisions	<p>Form of examination: Free written project assignment</p> <p>Form of assessment: The 7-point scale</p> <p>Examination language: English or Danish</p> <p>Grading: External examiner appointed by the Ministry</p> <p>Scope: Approximately 30 standard pages. The project is documented in a form and to an extent that is relevant to the problem chosen, e.g. it may combine a traditional project report, an article, an interactive presentation and a programme.</p> <p>Study aids: All study aids are permitted.</p> <p>Group tests: Depending on the range of topics, the project may be carried out in groups of up to four students (two people: 40 standard pages; three people: 50 standard pages; four people: 60 standard pages). For group tests, each individual participant’s input must be readily identifiable. Performance is assessed individually. The joint part must not exceed 50% of the total work.</p>
Special regulations	Prerequisites for taking the course are <i>Man-machine Interaction I</i> , <i>Quantitative Research Methods</i> and <i>Experimental Methods</i> .

Language Technology II (constituent and elective subject)

Subject-element code 47680336-01

15 ECTS credits

Competence targets for the subject element	<p>The objective is to introduce students to language technology problems and applications in the cognitive area. The course constitutes a framework for specific study topics based on the teacher’s research interests and the students’ needs.</p> <p>The course looks at solution models that are based on different methods and which use both descriptive and machine-learning techniques.</p> <p>The course aims to provide students with knowledge of language-related problems and solutions in complex systems and interfaces that incorporate</p>
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	language technology and in which cognitive aspects are central. Examples include knowledge systems, multimodal interfaces and dialogue systems.
Academic targets	Students are able to: <ul style="list-style-type: none"> • explain cognitive and language technology problems theoretically and methodically • develop language technology models for complex systems, including knowledge systems, multimodal interfaces and dialogue systems.
Forms of teaching and working	A combination of class instruction, exercises and project supervision, during which students have the opportunity to discuss possible topics for their project. Students may also enter into co-operation with companies that are willing to formulate relevant problems.
Syllabus	A syllabus of approx. 800 standard pages of relevant scientific literature is submitted for the examination. It is drawn up by the student and approved by the teacher.
Exam provisions	<p>Form of examination: Free written project assignment with compulsory oral exam.</p> <p>Free written project assignment: The topic for the project is formulated personally by the student and approved by the examiner three weeks before submission. The submission consists of a report plus the relevant programme. The programme documentation must be enclosed as an attachment.</p> <p>Compulsory oral exam: The student starts the test with a presentation of the project assignment. Students are allowed to use a computer during the test and may choose to present their programmes. The presentation is followed by a discussion between the examiner and the examinee, the aim of which is to further clarify issues related to the project assignment and other topics covered by the syllabus.</p> <p>Form of assessment: The 7-point scale</p> <p>Examination language: English or Danish</p> <p>Grading: External examiner appointed by the Ministry</p> <p>Scope: The project assignment consists of a report of 15–20 standard pages plus the relevant programme. The programme documentation must be enclosed as an attachment.</p> <p>The oral exam lasts 45 minutes, including grading. The student's presentation lasts approx. 5–10 minutes. The rest of the time is spent on extrapolation and discussion. The oral exam is always individual.</p> <p>Study aids: All study aids are permitted while drawing up the project assignment. For the oral exam, students may use notes and/or an electronic presentation. No other study aids are allowed in the oral exam.</p> <p>Group tests: The written assignment can be taken as a group test with individual assessment. A group may consist of 2–3 people.</p> <p>Assignments done by a group of two people must be 25–30 standard pages. For three people, it must be 35–40 standard pages. For group tests, each participant's input must be readily identifiable. Performance</p>

	<p>is assessed individually. The joint part must not exceed 50% of the total work.</p> <p>The compulsory oral exam is always individual, and is based on individual questions from the project assignment.</p>
Special regulations	<p>As a prerequisite, students must possess basic computer-science skills corresponding to <i>Introduction to Computer Science</i> and <i>Data and Algorithms for Cognition Studies</i>; knowledge of basic language technology corresponding to <i>Language Technology I</i>; and knowledge of formal linguistics and logic corresponding to the subject elements <i>Formal Linguistics</i> and <i>Logic for Cognition Studies</i>.</p>

Module 4: Thesis
30 ECTS credits

Competence targets for the module	<p>The final module consists of the thesis, which is designed to document the student's attainment of the programme's objectives through the use, study and dissemination of specialised knowledge in IT and Cognition. The thesis also proves that the students have attained general competences in carrying out a major project in an independent and creative manner, and in formulating themselves precisely and accurately, both orally and in writing.</p>
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Thesis (constituent and compulsory)
Subject-element code 47680337-01
30 ECTS credits

Academic targets	<p>The thesis and subsequent defence document the student's attainment of the objectives of the programme through the use, study and dissemination of specialised knowledge.</p> <p>Examinees will:</p> <ul style="list-style-type: none"> • master the academic terminology relevant to the topic, as well as the use of notes, citations, references, punctuation, spelling conventions, tables of contents and bibliographies, in line with the subject's standard practice • master the subject's relevant theories, interpretations, schools, points of view, etc. • conduct literature searches in accordance with the accepted methods for the subject, e.g. databases, encyclopaedias, handbooks, etc. • define one or more problem areas in a way that is relevant to the research and to current academic discussions • process the problem areas fully within the thesis framework, in a way that displays the skills and competences necessary to write a Master's thesis, including making use of new international research literature • document and argue for the claims, theses and conclusions put forward, e.g. by referring to sources or by clear arguments and theoretical considerations • communicate the topic's issues in a well-structured, clear, focused and pedagogic manner appropriate to the target audience (students at Master's thesis level without prior knowledge of the area covered)
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	<ul style="list-style-type: none"> • communicate in a conceptually and linguistically consistent manner that ensures that the claims, theses, arguments and conclusions are consistent both with each other and in relation to the thesis's underlying assumptions • display independence, e.g. by contributing to conceptual innovation, conceptual clarification, clarification of a problem, by solving a problem, or by proposing new arguments, points of view and critique of pre-existing arguments or viewpoints • provide an adequate and accurate summary of the thesis's content and results • present and discuss the thesis at the oral defence.
Forms of teaching and working	<p>The subject of the thesis must normally be within the academic area covered by the curriculum. The thesis topic is agreed between the student and a supervisor. One or more supervisors may be assigned to the thesis project, one of who, the principal supervisor, must be affiliated to the programme. The principal supervisor also acts as the examiner and is responsible for ensuring professional quality. Following discussion between the student and the principal supervisor, an agreement is entered into on definition and approval of the thesis topic. The other supervisor(s) may be drawn from other programmes at the University of Copenhagen, from external companies or from other higher education institutions. All supervisors must be approved by the Board of Studies. The agreed thesis topic must also be approved by the Board of Studies.</p> <p>Instruction is provided in the form of supervision.</p> <p>Students are also able to include a project-oriented internship as part of this subject element. At the start of the project work, the student, principal supervisor and contact person at the internship site draw up a contract that describes the objective of the project and determines the framework for the student's specific tasks.</p>
Syllabus	There are no specific syllabus requirements.
Exam provisions	<p>Form of examination A: Free, written take-home assignment with oral defence</p> <p>Form of assessment A: The 7-point scale. In their assessment, the internal and external examiners write a joint statement about the Master's thesis. This statement is presented to the student at the latest one week before the oral defence. After the oral defence, the statement may be revised. The grade awarded is for the thesis examination as a whole. The thesis receives an overall grade for the written and oral part, with the main weighting on the written part.</p> <p>Examination language A: The thesis can be written in English or Danish. The oral exam may also be in English or Danish.</p> <p>Grading A: External examiner appointed by the Ministry</p> <p>Scope A: 100 standard pages, excluding collated materials and other appendices.</p> <p>For group tests, the corresponding figures are max. 160 standard pages (two students) and max. 210 standard pages (three students).</p> <p>The oral defence lasts 45 minutes, including grading. The student starts with a presentation of approx. 10 minutes, which is followed by approx. 20 minutes of discussion.</p>

	<p>Study aids A: All study aids are permitted.</p> <p>Group tests A: The test can be taken as a group examination by two or three students, with individual assessment. In group tests, each participant's contribution must in itself constitute a distinct entity that can be assessed separately. The joint part must not exceed 50% of the total work. The subsequent compulsory oral exam is always individual and based on the report.</p> <p>Form of examination B: Free written take-home assignment in the form of a report with oral defence</p> <p>Form of assessment B: The 7-point scale. In their assessment, the internal and external examiners write a joint statement about the Master's thesis. This statement is presented to the student at the latest one week before the oral defence. After the oral defence, the statement may be revised. The grade awarded is for the thesis examination as a whole. The thesis receives an overall grade for the written and oral part, with the main weighting on the written part.</p> <p>Examination language B: The thesis can be written in English or Danish. The oral exam may also be in English or Danish.</p> <p>Grading B: External examiner appointed by the Ministry</p> <p>Scope B: The report contains two elements:</p> <ol style="list-style-type: none"> 1) A report of the actual project-oriented process, including work assignments (5–10 standard pages) 2) A theoretical part (60–80 standard pages, excluding collated material and other appendices) in which the students relate their specialised knowledge of IT and Cognition to their practical experience. <p>The oral defence lasts 45 minutes, including grading. The student starts with a presentation of approx. 10 minutes, followed by approx. 20 minutes of discussion.</p> <p>Study aids B: All study aids are permitted.</p> <p>Group tests B: The test can only be taken individually.</p>
<p>Special regulations</p>	<p>The Head of Studies in the Department of Scandinavian Studies and Linguistics approves the subject for the thesis and a plan for supervision, and sets a deadline for submission.</p> <p>The thesis must be accompanied by a summary of ½–1 standard page. The summary is included in the assessment. If the thesis is written in Danish, the summary must be in English.</p> <p>If several students work on a collective submission, each individual's contribution must constitute a distinct entity that is readily identifiable and capable of being assessed separately. The joint part must not exceed 50% of the total work.</p>

Part 7
Regulations for credits and equivalence

12. Students may apply to the Board of Study to have subject elements passed in another programme at the same level approved instead of elements from the Master's Programme in IT and Cognition.

(2) If students wish to take subject elements forming part of other study programmes at the same level, they must seek prior approval from the Board of Studies.

(3) Credit transfers for the thesis are not permitted from another completed programme, or from study programmes that do not share the same objectives as the Master's Programme in IT and Cognition.

13. Examinations taken under previous curricula for IT and Cognition are equivalent to the new curriculum, as stipulated below. Passed examinations can be transferred to the new Master's curriculum, and students may finish the programme in compliance with the rules in the new curriculum.

(2) All subject elements under the 2007 curriculum in IT and Cognition are equivalent to the 2008 curriculum.

Part 8 Examinations and assessment criteria

14. The rules contained in the Ministerial Order on University Examinations apply to the examinations on the Master's Programme.

15. Rules about examinations, including registration and withdrawal, are published on the Faculty website: www.hum.ku.dk.

16. Examinations must be taken in the same language in which the teaching was conducted, unless the Board of Study stipulates otherwise.

17. Make-up exams and resits are held in accordance with the regulations laid down in the Exam Order.

(2) The Board of Studies sets the exact rules for make-up exams and resits, and is empowered to decide that they should take a different form to the original exam.

18. Assessment takes the form of the 7-point scale or Pass/Fail. The academic targets for the individual subject elements describe Grade A.

(2) An examination has been passed if the assessment E or 'Passed' is given.

(3) All examinations within the 120 ECTS credits must be passed for a Master's degree to be conferred.

19. The Board of Studies may stipulate precise rules for special exam conditions for students who are able to document a need for them, for example due to reduced physical or mental functions.

Part 9 Study activity and concluding the programme

20. Students who do not actively study for a half-year will be offered advice.

(2) Students who do not pass examinations corresponding to 30 ECTS credits for a period of two consecutive years (cf. the Admission Order, 37) may have their registration withdrawn.

(3) Requirements for study activity on the Master's Programme correspond to the University's rules for study activity.

- 21.** Students must complete the programme within three years of commencing studies.
(2) Students who fail to meet the conditions laid out in (1) will have their registration withdrawn.
(3) The Board of Study sets the exact rules for concluding the programme.

Part 10

Exemption and other regulations

- 22.** The curriculum and all rules, targets and frameworks stipulated in compliance with it are published on the Faculty website: www.hum.ku.dk.
- 23.** Under special circumstances, the Board of Studies may grant exemptions from those rules contained in the curriculum that have been set by the Board of Studies.
- 24.** Students who opt to put together their own Master's Programme are personally responsible for ensuring that 2/3 of the programme (80 ECTS credits) is assessed with grades and by internal examiners, and that at least 1/3 (40 ECTS credits) is assessed by (an) external examiner(s) appointed by the Ministry.
(2) Students who opt to put together their own Master's Programme are personally responsible for ensuring that it fulfils the requirements for the composition of the programme in terms of types of subjects and elective studies, cf. 1.

Part 11

Commencement and transitional regulations

- 25.** This curriculum comes into force on 1 September 2008, and is valid for students who enrol on the Master's Programme on or after that date, cf. 4 (1).
- 26.** Examinations under the curricula issued in compliance with the Ministerial Order on Humanities Programmes (1995) will be held for the last time in summer 2011, with the exception of *konferens* programmes, which will be held for the last time in 2012.
(2) Students on the Master's curricula mentioned in (1) who have not passed the Master's Programme by summer 2011 will be transferred to the 2008 curriculum.
(3) Students who have passed exams in compliance with previous curricula may transfer credits for those exams, cf. 13 (2).

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Kirsten Refsing
Dean

Annette Moe
Director of Studies