Curriculum for
the basic subject at master's level in
IT and Cognition,
the 2013 curriculum

Adjusted 2014 and 2015

Department of Scandinavian Studies and Linguistics
Faculty of Humanities
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Contents

Part 1. Authority, affiliation, prescribed period of study and title

1. Authority

The 2013 curriculum for the basic subject at master's level in IT and Cognition has been drawn up under the authority endowed by section 24 of Executive order no. 814 of June 29th 2014 on bachelor's and master's programmes at universities (the study programme order), Executive order no. 429 of May 10th 2012 on amending of the aforementioned and section 30 of Ministerial Order no. 1520 of 16 December 2013..

2. Affiliation

The master's programme with basic subject in IT and Cognition belongs under the Study Board for the Department of Scandinavian Studies and Linguistics and the Corps of External Examiners of Linguistics, Indo-European Linguistics and IT and Cognition.

3. Prescribed period of study

The basic subject at master's level in IT and Cognition is prescribed to 120 ECTS credits.

4. Title

Graduates from the master's programme with basic subject in IT and Cognition are entitled to use the title Master of Arts (MA) in Information Technology and Cognition. The title in Danish is cand.mag. i it og kognition.

Part 2. Admission requirements

5a. Admission requirements

Applicants must have passed a research-based bachelor's 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's 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).

5b. 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. Non-native speakers of English must pass the TOEFL with a score of 550 (on a paper-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.

5c. Prioritisation of applications for admission

If the number of eligible applicants exceeds the number of places, applicants will be ranked by the Study Board for the Department of Scandinavian Studies and Linguistics 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.

Points will be allocated as follows:

1) 50 points based on a motivational letter.
2) 20 points based on an evaluation of other educational and vocational experience.
3) 20 points based on examination grades achieved on the bachelor's programme.
4) 10 points based on the time taken to complete the bachelor's programme.

Points for examination grades will be allocated on the basis of a grade-point average.

Part 3. Technical requirements pertaining to study

6. Reading texts in a foreign language
English language proficiency is required.

7. Definition of a standard page
Unless otherwise stipulated, a standard page as applied to texts and the submission of take-home assignments, including the master's thesis, corresponds to 2,400 keystrokes, including spaces. When calculating the extent of take-home assignments, notes are included but not cover pages, tables of contents, bibliographies and appendices.
(2) For technical texts, e.g. texts about programming, a standard page consists of 1,550 key-strokes. This also applies to students' written reports, including the master's thesis.
(3) If audio-visual material is submitted, one minute of playing time corresponds to one standard page.

8. Writing and spelling skills
When assessing written take-home assignments, including the master's thesis, the students' writing and spelling skills (as documented in the performance) must be included in the overall assessment of the performance, although the emphasis is on the academic content. Special focus on writing and spelling skills will be evident from the individual subject elements in section 12.

Part 4. Academic profile

9. Purpose of the programme
The purpose of the basic subject at master's level in IT and Cognition is to improve the students' academic knowledge and skills, and to expand upon the theoretical and methodical competencies gained during the bachelor's 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 competencies with a view to specialised vocational objectives, e.g. admission to a PhD programme.

10. Competence profile for the graduate
Competence description
Graduates with basic subject at master's level in IT and Cognition are expected to be able to contribute to developing advanced cognitive technologies, managing large volumes of textual and visual data, and identifying new industrial applications of cognitive technologies. They are also expected

to be qualified for acceptance in PhD programmes where they can contribute to advanced research in language and image processing.

The programme consists of two branches, in language processing and image processing, as well as a line of general courses in cognitive science with a focus on computational modelling. Students will also follow an introductory course in advanced scientific programming and a course in statistical methods for machine learning. Selective courses will be offered in advanced language processing, advanced image processing, advanced machine learning, search and optimization, human computer interaction, or related fields.

Competence targets
On successful completion of the programme, graduates have acquired competencies in:

Knowledge and understanding
- knowledge of recent developments in cognitive science
- knowledge of recent developments in machine learning and data mining
- knowledge of major challenges in user interface design and human computer interaction
- understanding the usefulness of cognitive models for information and communication technology (ICT) industries.

Skills in
- modelling cognitive processes using advanced computational methods including machine learning
- recognising, selecting and applying data mining methods for exploring and analysing large volumes of data, including texts and images
- experience in applying important methods in text and image processing
- programming for scientific experiments and functional prototypes of cognitive systems
- evaluating and comparing models of cognitive processes on large amounts of data
- visualising data and evaluations of methods.

Competencies in
- working in a cross-disciplinary manner with challenging problems at the frontiers of cognitive technology
- analysing practical information management problems and understanding the potential of known methods in machine learning and data mining
- quickly familiarising themselves with, describing and analysing important methods in text and image processing
- applying and disseminating knowledge about cognitive technologies
- dealing with the complexity of human language, vision and cognition
- designing innovative and intelligent ICT using knowledge of language and human cognition
- identifying new applications of cognitive models of interest to research or industry
- carrying out major projects that meet industrial and research standards in an independent and creative manner.

Part 5. Structure of the programme

11. The master's programme with basic subject in IT and Cognition
The master's programme consists of the basic subject that comprises modules of a total of 120 ECTS credits.
(2) The basic subject includes selective subjects of a total of 30 ECTS credits.
(3) The master's thesis is prescribed to 30 ECTS credits and must conclude the programme. The master's thesis must be on an IT and Cognition topic.
(4) At the discretion of the Study Board, the master's thesis may be extended to 60 ECTS credits if it is experimental in nature.

(5) The programme's structured course includes a mobility window of 30 ECTS credits which after application can be used by the student for studying abroad, academic internships, etc.

(6) The structured course of study for the master's programme with basic subject in IT and Cognition is presented in the table below. Italics marks alternatives to the structured course:

Semester	Module (study part)	Subject element (type of subject)	Exam provisions
1.	1: IT and Cognition I (the basic subject) 30 ECTS credits	Cognitive Science I (compulsory and constituent) 7.5 ECTS credits Activity code: HIOK03401E	Oral exam, set subject External 7-point scale
		Scientific Programming (compulsory and constituent) 7.5 ECTS credits Activity code: HIOK03411E	Active student participation Internal by one examiner Pass/Fail
		Vision and Image Processing (compulsory and constituent) 7.5 ECTS credits Activity code: HIOK03421E	Active student participation Internal by one examiner Pass/Fail
		Language Processing I (compulsory and constituent) 7.5 ECTS credits Activity code: HIOK03431E	Active student participation Internal by one examiner Pass/Fail
2.	2: IT and Cognition II (the basic subject) 30 ECTS credits	Cognitive Science II (compulsory and constituent) 7.5 ECTS credits Activity code: HIOK03441E	Oral exam with synopsis, optional subject External 7-point scale
		Language Processing II (compulsory and constituent) 7.5 ECTS credits Activity code: HIOK03451E	Written take-home assignment, set subject Internal by more than one examiner 7-point scale
		Specialization I (compulsory, selective and constituent) 7.5 ECTS credits Activity code: HIOK03461E	Written take-home assignment, optional subject External 7-point scale
		Statistical Methods for Machine Learning (compulsory and constituent) 7.5 ECTS credits Activity code: HIOK03471E	Written take-home assignment, set subject, following active student participation External 7-point scale
3.	3: Advanced IT and Cognition (the basic subject) 30 ECTS credits	Cognitive Science III (compulsory and constituent) 7.5 ECTS credits Activity code: HIOK03481E *And three of the following four:*	Written take-home assignment, optional subject Internal by more than one examiner 7-point scale
		Specialization II (selective and constituent) 7.5 ECTS credits Activity code: HIOK03491E	Written take-home assignment, optional subject External 7-point scale
		Specialization III (selective and constituent) 7.5 ECTS credits Activity code: HIOK03501E	Written take-home assignment, optional subject External 7-point scale

		Project (selective and constituent) 7.5 ECTS credits Activity code: HIOK03511E	Written take-home assignment, optional subject External 7-point scale
		Specialization IV (selective and constituent) *7.5 ECTS credits* *Activity code: HIOK03521E*	Written take-home assignment, optional subject External 7-point scale
4.	4: Master's Thesis (the basic subject) 30 ECTS credits	Master's Thesis (compulsory and constituent) 30 ECTS credits Activity code: HIOK03531E	Written take-home assignment, optional subject, with oral defence External 7-point scale

12. Modules of the basic subject

Module 1: IT and Cognition I
30 ECTS credits

Competency objectives for the module	After completing the module the student will have: Knowledge and understanding of • important concepts in cognitive science relating to human processing of language and images • basic methods in machine learning and linear algebra. Skills in • programming for scientific experiments • modelling cognitive processes using machine learning • linguistic analysis • data visualisation • processing language and images • evaluating language and image processing systems. Competencies in • describing and analysing methods and experiments in text and image processing.

Cognitive Science I (compulsory and constituent)
Kognitionsvidenskab I (obligatorisk og konstituerende)
7.5 ECTS credits
Activity code: HIOK03401E

Academic objectives	The student is able to • explain key concepts, problems and theories in contemporary computational research in cognitive science • present research literature in computational cognitive science in a clear and concise manner.
Type of teaching and working	Lectures.

Exam provisions	**Form of examination:** Oral exam (presentation), set subject.
	Assessment: External exam, 7-point scale.
	Exam language: English.
	Extent: 30 minutes, including grading and feedback. The oral presentation may last up to 10 minutes, followed by 10 minutes of discussion.
	Exam aids: All aids permitted.
	Group exam: The exam can only be taken individually.

Scientific Programming (compulsory and constituent)
Videnskabelig programmering (obligatorisk og konstituerende)
7.5 ECTS credits
Activity code: HIOK03411E

Academic objectives	The student is able to
	• program with linear algebra
	• implement routine procedures relevant to data managing
	• create plots or related visualisations of data
	• implement simple learning algorithms or related algorithms of importance to cognitive technologies.
Type of teaching and working	Lectures and exercise classes.
Exam provisions	**Form of examination:** Active student participation consisting of 4-6 assignments.
	Make-up exam/re-exam: Written take-home assignment, set subject.
	Assessment: Internal exam by one examiner, Pass/Fail. Make-up exam/re-exam: Internal exam by more than one examiner, Pass/Fail.
	Exam language: English.
	Extent: Make-up exam/re-exam: The assignment should describe the attached code and be no longer than 10 standard pages. 10 working days are given for completion of the assignment. The internal examiner provides a problem formulation at least 10 working days before the assignment is due for submission.
	Exam aids: All aids permitted.
	Group exam: The exam can only be taken individually.

Vision and Image Processing (compulsory and constituent)
Visuel kognition og billedprocessering (obligatorisk og konstituerende)
7.5 ECTS credits
Activity code: HIOK03421E

Academic objectives	The student is able to
	• describe common applications of image processing of importance to society
	• describe and apply feature extraction methods and modelling techniques in image processing
	• understand and analyse the main challenges in image processing today
	• implement and evaluate selected methods in image processing.
Type of teaching and working	Lectures and exercise classes.

Exam provisions	*Form of examination:* Active student participation consisting of 4-6 assignments. *Make-up exam/re-exam:* Written take-home assignment, set subject. *Assessment:* Internal exam by one examiner, Pass/Fail. *Exam language:* English. *Extent:* Make-up exam/re-exam: The assignment should describe the attached code and be no longer than 10 standard pages. 10 working days are given for completion of the assignment. The internal examiner provides a problem formulation at least 10 working days before the assignment is due for submission. *Exam aids:* All aids permitted. *Group exam:* The exam can only be taken individually.

Language Processing I (compulsory and constituent)
Natursprogsbehandling I (obligatorisk og konstituerende)
7.5 ECTS credits
Activity code: HIOK03431E

Academic objectives	The student is able to • document knowledge of selected linguistic fields of relevance to language technology, e.g. morphology, syntax, semantics, discourse • understand the main challenges in natural language processing today and the methods applied • document knowledge of common language technology applications of importance to society • implement and evaluate selected methods in language processing.
Type of teaching and working	Lectures or series of seminars.
Exam provisions	*Form of examination:* Active student participation consisting of 4-6 assignments. *Make-up exam/re-exam:* Written take-home assignment, set subject. *Assessment:* Internal exam by one examiner, Pass/Fail. Make-up exam/re-exam: Internal exam by more than one examiner, Pass/Fail. *Exam language:* English. *Extent:* Make-up exam/re-exam: The assignment should describe the attached code and be no longer than 10 standard pages. 10 working days are given for completion of the assignment. The internal examiner provides a problem formulation at least 10 working days before the assignment is due for submission. *Exam aids:* All aids permitted. *Group exam:* The exam can only be taken individually.

Module 2: IT and Cognition II
30 ECTS credits

Competency objectives for the module	After completing the module the student will have: Knowledge and understanding of • recent developments in machine learning and data mining • major developments in user interface design and human computer

interaction
- the usefulness of cognitive models for ICT industries.

Skills in
- using advanced computational methods including machine learning
- recognising, selecting and applying data mining methods for exploring and analysing large volumes of data, including texts and images
- evaluating and comparing models of cognitive processes on large amounts of data
- visualising data and evaluations of methods.

Competencies in
- applying and disseminating knowledge of human language, vision and cognition
- analysing practical information management problems and understanding the potential of known methods in machine learning and data mining.

Cognitive Science II (compulsory and constituent)
Kognitionsvidenskab II (obligatorisk og konstituerende)
7.5 ECTS credits
Activity code: HIOK03441E

Academic objectives	The student is able to • analyse complex problems in computational cognitive science • evaluate data collections, scientific experiments and system architectures • understand and discuss frontier research in solving complex problems.
Type of teaching and working	Lectures or series of seminars.
Exam provisions	***Form of examination:*** Oral exam (presentation) with synopsis, optional sub-ject. ***Assessment:*** External exam, 7-point scale. The synopsis accounts for 50% of the final grade, the oral presentation for 50%. ***Exam language:*** English. ***Extent:*** Synopsis: 3-5 standard pages. Oral exam: 30 minutes, including grading and feedback. The oral presentation may last up to 10 minutes, fol-lowed by 10 minutes of discussion. ***Exam aids:*** All aids permitted. ***Group exam:*** The exam can only be taken individually.

Language Processing II (compulsory and constituent)
Natursprogsbehandling II (obligatorisk og konstituerende)
7.5 ECTS credits
Activity code: HIOK03451E

Academic objectives	The student is able to • demonstrate theoretical insight into natural language processing by identifying problems and solutions in the context of practical applications • apply feature extraction methods and modelling techniques in natural language processing

	• deal with specific challenges arising from processing user-generated content • evaluate systems or system components.
Type of teaching and working	Lectures or series of seminars.
Exam provisions	***Form of examination:*** Written take-home assignment, set subject. ***Assessment:*** Internal exam by more than one examiner, 7-point scale. ***Exam language:*** English. ***Extent:*** 5-15 standard pages. 10 working days are given for completion of the assignment. ***Group exam:*** The exam can be taken individually or as a group exam by 2-3 students but with individual assessment. For group exam, each individual participant's contribution to the assignment must be readily identifiable, and the joint part must not exceed 50% of the total work.

Specialization I (compulsory, selective and constituent)
Specialisering I (obligatorisk, valgfag og konstituerende)
7.5 ECTS credits
Activity code: HIOK03461E

Academic objectives	The student is able to • document a specialization of relevance to cognitive technologies such as image or language processing by describing and analysing advanced topics within image and language processing or related cognitive technologies.
Type of teaching and working	Lectures or series of seminars.
Exam provisions	***Form of examination:*** Written take-home assignment, optional subject. ***Assessment:*** External exam, 7-point scale. ***Exam language:*** English. ***Extent:*** 5-15 standard pages. ***Group exam:*** The exam can be taken individually or as a group exam by 2-3 students but with individual assessment. For group exam, each individual participant's contribution to the assignment must be readily identifiable, and the joint part must not exceed 50% of the total work.

Statistical Methods for Machine Learning (compulsory and constituent)
Statistiske metoder til maskinlæring (obligatorisk og konstituerende)
7.5 ECTS credits
Activity code: HIOK03471E

Academic objectives	The student is able to • document knowledge of advanced probabilistic data modelling and statistical machine learning for pattern recognition • demonstrate experience in implementing and empirically evaluating machine learning algorithms.

Type of teaching and working	Lectures and exercise classes.
Exam provisions	***Form of examination:*** Written take-home assignment, set subject, following active student participation consisting of 3 written take-home assignments during the semester. ***Make-up exam/re-exam:*** Oral exam, set subject. ***Assessment:*** External exam, 7-point scale. The semester assignments are approved by the teacher. ***Exam language:*** English. ***Extent:*** 10 standard pages for each assignment. 10 working days are given for completion of the final assignment. Make-up exam/re-exam: 20 minutes, no preparation time. ***Exam aids:*** All aids permitted. ***Group exam:*** The exam can only be taken individually.

Module 3: Advanced IT and Cognition
30 ECTS credits

Competency objectives for the module	After completing the module the student will have: Knowledge and understanding of • recent developments in cognitive science • recent developments in machine learning and data mining. Skills in • programming for scientific experiments and functional prototypes of cognitive systems • evaluating and comparing models of cognitive processes on large amounts of data. Competencies in • working in a cross-disciplinary manner with challenging problems at the frontiers of cognitive technology, possibly in collaboration with research groups or companies • dealing with the complexity of human language, vision and cognition • designing innovative and intelligent cognitive technologies drawing on knowledge of human cognition.

Cognitive Science III (compulsory and constituent)
Kognitionsvidenskab III (obligatorisk og konstituerende)
7.5 ECTS credits
Activity code: HIOK03481E

Academic objectives	The student is able to • identify, analyse and discuss state-of-the-art problems and methods in computational cognitive science • evaluate complex system architectures • assess their relevance in relation to real-world applications • critically evaluate frontier research in cognitive technologies.

Type of teaching and working	Lectures or series of seminars.
Exam provisions	*Form of examination:* Written take-home assignment, optional subject. *Assessment:* Internal exam by more than one examiner, 7-point scale. *Exam language:* English. *Extent:* 5-15 standard pages. *Group exam:* The exam can be taken individually or as a group exam by 2-3 students but with individual assessment. For group exam, each individual participant's contribution to the assignment must be readily identifiable, and the joint part must not exceed 50% of the total work.

Specialization II (selective and constituent)
Specialisering II (valgfag og konstituerende)
7.5 ECTS credits
Activity code: HIOK03491E

Academic objectives	The student is able to • document a specialization of relevance to cognitive technologies such as image or language processing by describing and analysing advanced topics within image and language processing or related cognitive technologies.
Type of teaching and working	Lectures or series of seminars.
Exam provisions	*Form of examination:* Written take-home assignment, optional subject. *Assessment:* External exam, 7-point scale. *Exam language:* English. *Extent:* 5-15 standard pages. *Group exam:* The exam can be taken individually or as a group exam by 2-3 students but with individual assessment. For group exam, each individual participant's contribution to the assignment must be readily identifiable, and the joint part must not exceed 50% of the total work.

Specialization III (selective and constituent)
Specialisering III (valgfag og konstituerende)
7.5 ECTS credits
Activity code: HIOK03501E

Academic objectives	The student is able to • document a specialization of relevance to cognitive technologies such as image or language processing by describing and analysing advanced topics within image and language processing or related cognitive technologies.
Type of teaching and working	Lectures or series of seminars.
Exam provisions	*Form of examination:* Written take-home assignment, optional subject. *Assessment:* External exam, 7-point scale. *Exam language:* English.

	Extent: 5-15 standard pages. *Group exam:* The exam can be taken individually or as a group exam by 2-3 students but with individual assessment. For group exam, each individual participant's contribution to the assignment must be readily identifiable, and the joint part must not exceed 50% of the total work.

Project (selective and constituent)
Projekt (valgfag og konstituerende)
7.5 ECTS credits
Activity code: HIOK03511E

Academic objectives	The student is able to • identify and formulate a relevant research problem, possibly in collaboration with a company or a research group, as well as a motivated hypothesis • identify new interesting research problems or new methods of interest to research or industry • develop a formal model for testing the main hypothesis • compare the model with relevant related work • implement and evaluate the model empirically • account for the model and the empirical results in a written report.
Type of teaching and working	Supervision.
Exam provisions	*Form of examination:* Written take-home assignment, optional subject. *Assessment:* External exam, 7-point scale. *Exam language:* English. *Extent:* 5-15 standard pages. *Group exam:* The exam can be taken individually or as a group exam by 2-3 students but with individual assessment. For group exam, each individual participant's contribution to the assignment must be readily identifiable, and the joint part must not exceed 50% of the total work.

Specialization IV (selective and constituent)
Specialisering IV (valgfag og konstituerende)
7.5 ECTS credits
Activity code: HIOK03521E

Academic objectives	The student is able to • document a specialization of relevance to cognitive technologies such as image or language processing by describing and analysing advanced topics within image and language processing or related cognitive technologies • display independence and creativity in identifying new applications of cognitive models of interest to research or industry or by designing novel cognitive technologies, drawing on knowledge of human cognition.
Type of teaching and working	Lectures or series of seminars.
Exam provisions	*Form of examination:* Written take-home assignment, optional subject.

	Assessment: External exam, 7-point scale. *Exam language:* English. *Extent:* 5-15 standard pages. *Group exam:* The exam can be taken individually or as a group exam by 2-3 students but with individual assessment. For group exam, each individual participant's contribution to the assignment must be readily identifiable, and the joint part must not exceed 50% of the total work.

Module 4: Master's Thesis
30 ECTS credits

Competency objectives for the module	After completing the module the student will have: Knowledge and understanding of • recent developments in cognitive technologies related to a particular application or methodology. Skills in • formulating research questions in a concise manner • managing and documenting scientific experiments • conducting thorough error analysis • presenting scientific work in a well-structured, clear, focused and pedagogic manner, both orally and in writing. Competencies in • carrying out a major project in an independent and creative manner that meets industrial and research standards.

Master's Thesis (compulsory and constituent)
Speciale (obligatorisk og konstituerende)
30 ECTS credits
Activity code: HIOK03531E

Academic objectives	The student is able to • define one or more problem areas in a way that is relevant to contemporary research or industry • relate to relevant research literature • evaluate hypotheses by methodologically sound empirical experiments, mathematical proofs or clear arguments and theoretical considerations • 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. • 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) • 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 or technical innovation, conceptual clarification, by solving a problem, or by proposing

	new arguments or critique of pre-existing arguments • provide an adequate and accurate summary of the thesis's content and results • present and discuss the thesis at the oral defence.
Type of teaching and working	Supervision.
Exam provisions	***Form of examination:*** Written take-home assignment, optional subject, with summary and oral defence. ***Assessment:*** External exam, 7-point scale. ***Exam language:*** Take-home assignment and oral defence: English. Summary: Danish. ***Extent:*** Take-home assignment: 50-60 standard pages, excluding collated materials and other appendices. Group exam: 2 students: 90-100 standard pages. 3 students: 130-140 standard pages. Summary: ½-1 standard page. Oral defence: 45 minutes, including grading. The student starts with a presentation of 20 minutes, which is followed by approx. 20 minutes of discussion. ***Exam aids:*** All aids permitted. ***Group exam:*** The exam can be taken individually or as a group exam by 2-3 students, with individual assessment. For group exam, each individual participant's contribution to the assignment must be readily identifiable, and the joint part must not exceed 50% of the total work. The subsequent compulsory oral exam is individual.
Special regulations	The grade awarded is for the thesis exam as a whole. The thesis receives an overall grade for the written and oral parts, with the main weighting on the written part. The summary is included in the overall assessment. 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.

Part 6. General exam rules and assessment criteria

13. General exam rules

The rules contained in the Ministerial Order on University Examinations and Grading (the Examination Order) apply to the exams on the basic subject at master's level.
(2) Rules about exams, including registration and withdrawal, are published on
https://intranet.ku.dk/.
(3) Make-up exams and re-exams are held in accordance with the regulations laid down in the Examination Order.
(4) The Study Board sets the exact rules for make-up exams and re-exams, and is empowered to decide that they should take a different form to the original exam (does not apply to the master's thesis)*.
(5) The Study Board 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.
(6) It is the student's responsibility that at least ⅔ (80 ECTS credits) of the master's programme is assessed by the 7-point scale, and at least ⅓ (40 ECTS credits) is assessed externally.

14. Assessment criteria

Assessment takes the form of the 7-point scale or Pass/Fail. The academic objectives for the individual subject elements describe the requirements needed to be fulfilled in order to obtain the grade 12 (twelve).
(2) An exam has been passed if the assessment (at least) 02 (two) or "Pass" is given*.*
(3) All exams within the 120 ECTS credits must be passed for a master's degree to be conferred*.*

Part 7. Study activity and concluding the programme

15. Study activity

Students who are more than 30 ECTS credits delayed compared to the prescribed course of study will be offered guidance.
(2) Students who do not meet the faculty's study activity requirements (cf. the admission order for master's programmes, section 19) may have their enrolment withdrawn. Current study activity requirements are published at https://intranet.ku.dk/.

16. Concluding the programme

Students must complete the programme, including elective master's studies, within three years of their study start (maximum duration of study).
(2) Students who fail to meet the conditions laid out in (1) may have their enrolment withdrawn.

Part 8. Credits and transitional regulations

17. Credits

Students may apply to the Study Board to have subject elements passed in another programme at the same level approved instead of elements from the basic subject at master's level 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 pre-approval from the Study Board*.*
(3) Credit transfers for the master's thesis are not permitted from another completed programme, or from study programmes that do not share the same objectives as the basic subject at master's level in IT and Cognition.
(4) The student is obliged to inform about and apply for credit transfer for previously passed programme elements from unfinished programmes at the same level.
(5) Preapproval to take subject elements at other educational institutions can only be granted if the student at the time of applying for preapproval commits him- or herself to apply for credit transfer for the subject elements in question and send documentation when the subject elements are passed. Furthermore, the student commits him- or herself to inform about changes in the preapproved credit transfer.

18. Transitional regulations

All previous curricula for the basic subject at master's level in IT and Cognition are terminated no later than 1 ½ years after the commencement of this curriculum (cf. section 19), and with that it is no longer possible to take exams according to those curricula.

(2) Exams taken according to previous curricula for the basic subject at master's level in IT and Cognition correspond to the 2013 curriculum as shown in the table below. Passed exams can be transferred to the 2013 curriculum, and the student concludes the programme according to the regulations of this curriculum.

2008 curriculum	ECTS credits	2013 curriculum	ECTS credits
Cognitive Science I	7.5	Cognitive Science I	7.5
Introduction to Programming	7.5	Scientific Programming	7.5
Linguistics *or*	7.5	Language Processing I	7.5
Formal Linguistics	7.5		
Language Technology I	7.5	Language Processing II *or* Specialization I, II, III or IV	7.5
Cognitive Science II	15	Cognitive Science II *and*	7.5
		Cognitive Science III	7.5
Statistics	7.5	Statistical Methods for Machine Learning	7.5
Project	7.5	Project	7.5
Thesis	30	Master's Thesis	30
Data and Algorithms	7.5	Specialization I, II, III or IV	7.5
Experimental Methods	7.5	Specialization I, II, III or IV	7.5
Man-machine Interaction I	7.5	Specialization I, II, III or IV	7.5
Cognitive Psychology I	7.5	Specialization I, II, III or IV	7.5
Logic	7.5	Specialization I, II, III or IV	7.5
Cognitive Psychology II	7.5	Specialization I, II, III or IV	7.5
Adaptive Systems	15	Statistical Methods for Machine Learning *and*	7.5
		Specialization I, II, III or IV	7.5
Man-machine Interaction II	15	Specialization I, II, III or IV *and*	7.5
		Specialization I, II, III or IV	7.5
Language Technology II	15	Specialization I, II, III or IV *and*	7.5
		Specialization I, II, III or IV	7.5

(4) Students who wish to transfer to the new curriculum from previous curricula must pass the compulsory course Vision and Image Processing.

Part 9. Registration for courses and exams

19. Registration for courses and exams

The faculty ensures that the student is registered for courses and exams corresponding to 30 ECTS credits each half year of study/60 ECTS credits each full year of study at the relevant level of study, regardless of whether the student needs to pass exams from previous years of study. Registration for courses and exams is based on the programme's structured course, cf. section 11 (7). Further-more, the Faculty ensures registration for re-exam in the same exam period or immediately there-after if the student does not pass the ordinary exam.

(2) If the number of applicants exceeds the capacity for a subject element, the faculty uses drawing of lots. The Faculty is responsible for ensuring that no students are delayed in their study because of a rejected registration.

(3) Under special circumstances, the Faculty may grant exemptions from (1).

(4) Registration for electives is binding.

(5) The student registers for the third exam attempt unless the subject element is a prerequisite for a following subject element. In this case the Faculty registers for the third exam attempt.

Part 10. Commencement, exemption and approval

20. Commencement

The 2013 curriculum for the basic subject at master's level in IT and Cognition commences September 1st 2013 and is valid to students who are admitted to this programme September 1st 2013 or later.

(2) Section 19 comes into force on 1 September 2015.

21. Exemption

Under special circumstances, the Study Board may grant exemptions from those rules contained in the curriculum that have been set by the Study Board.

22. Approval

The curriculum has been approved by the Study Board for the Department of Scandinavian Studies and Linguistics August 22nd 2012.

The curriculum has been approved by the Dean of the Faculty of Humanities April 24th 2013.

The curriculum has been adjusted by the Faculty of Humanities 27 august 2014.

The curriculum has been adjusted by the Faculty og Humanities 2 July 2015.

Ulf Hedetoft
Dean

/Annette Moe
Director of Studies