



AALBORG UNIVERSITET

# **2018: REGULATIONS AND CURRICULUM FOR THE MASTER'S PROGRAMME IN INFORMATION TECHNOLOGY (INFORMATION STUDIES), CPH**

MASTER OF SCIENCE (MSC) IN INFORMATION  
TECHNOLOGY  
COPENHAGEN

MODULES INCLUDED IN THE CURRICULUM

## TABLE OF CONTENTS

Professional Inquiry 2018/2019 .....	3
User Practice, User Analysis and Pilot Studies 2018/2019 .....	5
ICT Based Data Collection and Analysis 2018/2019 .....	8
Elective Course A 2018/2019 .....	10
Development and Design of ICT 2018/2019 .....	12
ICT for Learning, Knowledge and Content Management 2018/2019 .....	15
Elective Course B 2018/2019 .....	17
Research Methodology 2018/2019 .....	19
Information Studies in Practice 2018/2019 .....	21
Master's Thesis 2018/2019 .....	24
Digital Collaboration 2018/2019 .....	27
Data Preparation and Understanding 2018/2019 .....	29
Data Analytics and Visualization 2018/2019 .....	31
Social Analytics in Context 2018/2019 .....	33

# PROFESSIONAL INQUIRY

**2018/2019**

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module comprises the development and phrasing of empirical inquiry for the purpose of enabling students to formulate research questions and scientific problems within the field of informatics. This will form the basis of the problem based project work and inquiries to be carried out during the course of the informatics study programme.

### LEARNING OBJECTIVES

#### KNOWLEDGE

In this module students will acquire knowledge of:

- the connections and differences between empirical inquiry and research questions based on informatics
- the connection between research questions and the theory of science in the organisation of scientific research
- theory of science within the field of informatics

#### SKILLS

In this module students will acquire skills in:

- describing empirical inquiry
- translating empirical inquiry into a scientific research question within the field of informatics
- combining a scientific research question with the theoretical basis of its investigation.

#### COMPETENCES

In this module students will acquire competences in:

- preparing scientific research based on personal enquiry
- taking a reflective approach to the basis of scientific inquiry
- engaging in disciplinary collaboration on scientific problem formulation

## EXAM

### EXAMS

Name of exam	Professional Inquiry
Type of exam	Written exam

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

	<p>The assignment paper must demonstrate that the student fulfils the objectives for the module stated above. Alternatively, the examination may be completed by satisfactory and active participation in the module, i.e. a minimum of 80% attendance and completion of set tasks.</p> <p>On the basis of the module, students will respond to one or a number of questions and assignments within the subject area of the module. The assignment paper must not exceed eight pages, and it must be prepared individually.</p>
ECTS	5
Assessment	Passed/Not Passed
Type of grading	Internal examination

## FACTS ABOUT THE MODULE

Danish title	Professionel henvendelse
Module code	KAINFOS181
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertlöv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# USER PRACTICE, USER ANALYSIS AND PILOT STUDIES

**2018/2019**

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Through the module, students will acquire knowledge, skills and competences in relation to the areas of user analysis and pilot studies with particular emphasis on user analysis and pilot studies in relation to the development of ICT for supporting work, knowledge and learning processes.

The module will introduce students to user analysis, user-system interaction and pilot studies within the fields of ICT innovation, design and development, which are areas of core competence within the field of informatics. This includes acquisition and application of knowledge on digital practice, organisational culture, digital culture and cognitive, conative and emotive aspects of the undertaking of user analyses and pilot studies with a view to qualifying operational processes and organisational change.

The module comprises teaching within the following areas:

- user practice, user analysis and pilot studies – theory of science and theory
- data collection and analysis methods
- user practice, user analysis and pilot studies in specific domains

Academic supervision will be offered in connection with the problem oriented project work.

## LEARNING OBJECTIVES

### KNOWLEDGE

In this module students will acquire knowledge of:

- theory and methods as regards the understanding of human practice and more specifically user practice in relation to technology use at the highest international level
- digital culture and practice, cultural and social phenomena related to ICT use
- cognitive, conative and emotive aspects of ICT use
- the structuring of user analyses and pilot studies directed towards various domains and processes within work life, learning and knowledge sharing.

### SKILLS

In this module students will acquire skills in:

- assessing strategies and methods for user analyses and pilot studies on the basis of the needs of the study and knowledge of the disciplinary theories and methods.
- choosing suitable strategies and methods for user analyses and pilot studies directed towards various domains
- data collection and analysis as regards user analysis and pilot studies

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

- communicating user analyses and pilot studies to peers and others.

**COMPETENCES**

In this module students will acquire competences in:

- taking an analytical, reflective and critical approach to the preconditions for user analyses and pilot studies
- taking an analytical, reflective and critical approach to user analyses and pilot studies
- engaging in disciplinary and interdisciplinary collaboration on user analyses and pilot studies, with a professional approach
- identifying own learning needs and structuring own learning in relation to the subject area of user analysis for pilot studies.

**EXAM**

**EXAMS**

Name of exam	User Practice, User Analysis and Pilot Studies
Type of exam	<p>Oral exam based on a project</p> <p>The examination is a conversation between the student(s) and the examiner and external examiner based on a project report produced individually or in a group. The project report/written work will be considered the shared responsibility of the group. Students will be examined and assessed on the basis of the entire project report, and one combined grade will be awarded each student for the project report and the oral performance.</p> <p>Literature foundation: Minimum 1000 standard pages supervisor approved, self-selected literature related to the project.</p> <p>The project report: the total number of pages must be no less than 15 pages and no more than 20 pages per student in a project group, and 30 pages if written individually.</p> <p>Duration of examination: 20 minutes per student and 10 minutes per group for assessment and announcement of result, although no longer than a total of two hours. 30 minutes in total for individual examinations.</p>
ECTS	15
Assessment	7-point grading scale
Type of grading	External examination
Criteria of assessment	<p>The project report and the conversation must demonstrate that the student fulfils the objectives for the module stated above.</p> <p>In the evaluation of the examination performance, the grade 12 will only be awarded for an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses.</p> <p>Any re-examinations will be held on the basis of a revised project report.</p>

## FACTS ABOUT THE MODULE

Danish title	User Practice, User Analysis and Pilot Studies
Module code	KAINFOS182
Module type	Project
Duration	1 semester
Semester	Autumn 7. semester
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertlöv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# ICT BASED DATA COLLECTION AND ANALYSIS

**2018/2019**

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module will introduce students to ICT based data collection and analysis offering a number of opportunities to obtain vast amounts of data on the use of for example Web based ICT solutions with relative ease. These opportunities call for fundamental consideration of options and problems, including ethical concerns on the significance of the potentially extensive mappings of individual user behaviour. During the course of the module, students will engage in ICT based data collection and analysis for the support of ICT user analyses and pilot projects.

The module comprises courses and exercises within the following areas:

- theory and method within ICT based data collection and analysis
- tools for ICT based data collection and analysis

Literature foundation: Minimum 1000 standard pages supervisor approved, self-selected literature related to the project.

## LEARNING OBJECTIVES

### KNOWLEDGE

In this module students will acquire knowledge of:

- theories and methods at the highest international level as regards qualitative and quantitative oriented data collection and analysis in relation to user analyses and pilot studies
- ICT systems for data collection and analysis in relation to user analyses and pilot studies
- principles, including ethical principles, for managing ICT systems for data collection and analysis in relation to user analyses and pilot studies.

### SKILLS

In this module students will acquire skills in:

- assessing and selecting a method for qualitative and quantitative oriented data collection and analysis in relation to user analyses and pilot studies
- selecting, configuring and adapting ICT systems for qualitative and quantitative oriented data collection and analysis in relation to user analyses and pilot studies
- communicating methods for ICT based data collection and analysis to peers and laymen
- communicating results on ICT based data collection and analysis to peers and laymen.

### COMPETENCES

In this module students will acquire competences in:



## 2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

- taking an analytical, reflective and critical approach to qualitative and quantitative oriented data collection and analysis in relation to user analyses and pilot studies
- engaging in interdisciplinary collaboration on ICT based data collection and analysis in relation to user analyses and pilot studies
- identifying own learning needs and structuring own learning in relation to the subject area of ICT based data collection and analysis in relation to user analyses and pilot studies.

## EXAM

### EXAMS

Name of exam	ICT Based Data Collection and Analysis
Type of exam	Written exam The examination is a three-day take-home assignment on a set topic. On the basis of the module, students will respond to one or a number of questions and assignments within the subject area of the module. The assignment paper must not exceed eight pages, and it must be prepared individually.
ECTS	5
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	In the evaluation of the examination performance, the grade 12 will only be awarded for an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses.

## FACTS ABOUT THE MODULE

Danish title	ICT Based Data Collection and Analysis
Module code	KAINFOS183
Module type	Course
Duration	1 semester
Semester	Autumn 7. semester
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertlöv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

## ELECTIVE COURSE A

2018/2019

### CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

In this module, classes will be offered within a central subject related to the discipline of the elective course.

#### LEARNING OBJECTIVES

##### KNOWLEDGE

By the end of the module, the student will have acquired knowledge of:

- Theories and methods of particular relevance for the subject area of the elective course
- Scientific issues within the subject area of the elective course

##### SKILLS

By the end of the module, the student will have acquired skills in:

- selecting appropriate scientific methods and tools within the area of the module
- assessing and choosing between appropriate scientific theories, methods and tools and, on this basis, discussing analysis and/or solution models within the subject area of the elective course.

##### COMPETENCES

By the end of the module, the student will have acquired competences in:

- applying theoretical and methodological knowledge which is relevant for understanding and solving the issues of the elective course.

## EXAM

### EXAMS

Name of exam	Elective
Type of exam	Written exam The examination is a three-day take-home assignment in which the student answers the subject-related question(s) posed in the assignment and solves tasks based on the discipline of the module. The written part of the examination must not exceed 8 pages and must be prepared by students individually.  The written assignment will be assessed by the examiner alone. If the examiner awards a fail grade, the assignment will also be assessed by a second internal examiner.  Replacement: The test may be replaced by satisfactory participation in the module activities, including the completion of tasks and exercises set during the course.
ECTS	5
Assessment	Passed/Not Passed

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

Type of grading	Internal examination
Criteria of assessment	The take-home assignment must demonstrate that the student meets the disciplinary objectives described above. In order for a student to achieve a pass result in the examination, they must demonstrate satisfactory fulfilment of the objectives of the module.

## ADDITIONAL INFORMATION

Specific descriptions of elective are always updated on the website:  
<https://www.kdm.aau.dk/studiehaandbog/uddannelsen/kandidat/valgfaag/>

## FACTS ABOUT THE MODULE

Danish title	Valgfag A
Module code	KAKDMVME18A
Module type	Course
Duration	1 semester
Semester	Autumn 7. semester
ECTS	5
Language of instruction	Danish and English
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# DEVELOPMENT AND DESIGN OF ICT

**2018/2019**

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module will introduce students to design of ICT directed towards organisational practice or another professional practice as an additional core activity in the practice field of informatics.

The module comprises teaching within the following areas:

- system design with particular emphasis on information architecture and interaction design
- user-driven system development and system development methods in theory and practice
- formal models for preparing and communicating design solutions (for example blueprints, UML etc.)
- information theory and understanding of information with a view to reflecting on the scientific theoretical basis of design work

Academic supervision will be offered in connection with the problem oriented project work.

## LEARNING OBJECTIVES

### KNOWLEDGE

In this module students will acquire knowledge of:

- the theory of science, theory and methods of system development
- user-driven techniques and tools
- organisational change and organisational culture in relation to system development and system design pertaining to ICT
- information architecture and usability
- formalisation and categorisation as regards formal models for the preparation, visualisation and communication of design solutions.

### SKILLS

In this module students will acquire skills in:

- assessing strategies and methods for system development and system design on the basis of user needs and/or customer needs and knowledge of the disciplinary theories and methods.
- choosing suitable strategies and methods for system development and system design directed towards various domains

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

- data collection and analysis as regards system development and system design
- applying formal models for the preparation and communication of system development and system design
- communicating system development and system design to peers and others.

**COMPETENCES**

In this module students will acquire competences in:

- taking an analytical, reflective and critical approach to the preconditions for system development and system design
- taking an analytical, reflective and critical approach to system development and system design
- engaging in disciplinary and interdisciplinary collaboration on system development and system design, with a professional approach
- identifying own learning needs and structuring own learning in relation to the subject area of system development and system design.

**EXAM**

**EXAMS**

Name of exam	Development and Design of ICT
Type of exam	<p>Oral exam based on a project The examination is a conversation between the student(s) and the examiner and external examiner based on a project report produced individually or in a group. The project report/written work will be considered the shared responsibility of the group. Students will be examined and assessed on the basis of the entire project report, and one combined grade will be awarded each student for the project report and the oral performance.</p> <p>Literature foundation: Minimum 1250 standard pages supervisor approved, self-selected literature related to the project.</p> <p>The project report: total number of pages must be no less than 15 pages and no more than 20 pages per student in a project group, and 30 pages if written individually.</p> <p>Duration of examination: 20 minutes per student and 10 minutes per group for assessment and announcement of result, although no longer than a total of two hours. 30 minutes in total for individual examinations.</p> <p>At oral group examinations, the examination must be conducted in such a way that individual assessment of each individual student's performance is ensured.</p> <p>Any re-examinations will be held on the basis of a revised project report.</p>
ECTS	20

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

Permitted aids	All written and all electronic aids
Assessment	7-point grading scale
Type of grading	External examination
Criteria of assessment	<p>The project report and the conversation must demonstrate that the student fulfils the objectives for the module stated above.</p> <p>In the evaluation of the examination performance, the grade 12 will only be awarded to students who give an excellent performance and demonstrate that they have fulfilled the above objectives exhaustively or with only few insignificant omissions.</p>

## FACTS ABOUT THE MODULE

Danish title	Development and Design of ICT
Module code	KAINFOS185
Module type	Project
Duration	1 semester
Semester	Spring 8. semester
ECTS	20
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# ICT FOR LEARNING, KNOWLEDGE AND CONTENT MANAGEMENT

**2018/2019**

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module will introduce students to the management and adaptation of systems for learning, knowledge and content management in order to enable students to act independently when needing to adapt systems, implement prototypes and implement more complete solutions on the basis of the adaptation and combination of components.

The module comprises courses and exercises within the following areas:

- systems for learning, knowledge and content management
- use and adaptation of systems for learning, knowledge and content management.

## LEARNING OBJECTIVES

### KNOWLEDGE

In this module students will acquire knowledge of:

- theory and methods at the highest international level as regards ICT systems for learning, knowledge and content management
- ICT systems for learning, knowledge and content management

### SKILLS

In this module students will acquire skills in:

- assessing, selecting and applying methods for learning, knowledge and content management
- selecting, configuring and adapting ICT systems for learning, knowledge and content management
- communicating methods and solutions for ICT for learning, knowledge and content management to peers and others.

### COMPETENCES

In this module students will acquire competences in:

- taking an analytical, reflective and critical approach to selecting, adapting and applying ICT systems for learning, knowledge and content management
- engaging in interdisciplinary collaboration on selecting, adapting and applying ICT systems for learning, knowledge and content management
- identifying own learning needs and structuring own learning in relation to selecting, adapting and applying ICT systems for learning, knowledge and content management.

## EXAM

### EXAMS

Name of exam	ICT for Learning, Knowledge and Content Management
Type of exam	Written exam The examination is a three-day take-home assignment on a set topic. On the basis of the module, students will respond to one or a number of questions and assignments within the subject area of the module. The assignment paper must not exceed eight pages, and it must be prepared individually.
ECTS	5
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	In the evaluation of the examination performance, the grade 12 will only be awarded to students for an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses.

## FACTS ABOUT THE MODULE

Danish title	ICT for Learning, Knowledge and Content Management
Module code	KAINFOS186
Module type	Course
Duration	1 semester
Semester	Spring 8. semester
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities



## ELECTIVE COURSE B

2018/2019

### CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

In this module, classes will be offered within a central subject related to the discipline of the elective course.

#### LEARNING OBJECTIVES

##### KNOWLEDGE

By the end of the module, the student will have acquired knowledge and understanding of:

- Theories and methods of particular relevance for the subject area of the elective course
- Scientific issues within the subject area of the elective course

##### SKILLS

By the end of the module, the student will have acquired skills in:

- selecting appropriate scientific methods and tools within the area of the module
- assessing and choosing between appropriate scientific theories, methods and tools and, on this basis, discussing analysis and/or solution models within the subject area of the elective course.

##### COMPETENCES

By the end of the module, the student will have acquired competences in:

- applying theoretical and methodological knowledge which is relevant for understanding and solving the issues of the elective course.

## EXAM

### EXAMS

Name of exam	Elective
Type of exam	Written exam The examination is a three-day take-home assignment in which the student answers the subject-related question(s) posed in the assignment and solves tasks based on the discipline of the module. The written part of the examination must not exceed 8 pages and must be prepared by students individually.  Replacement: The test may be replaced by satisfactory participation in the module activities, including the completion of tasks and exercises set during the course.
ECTS	5
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	The take-home assignment must demonstrate that the student meets the disciplinary objectives described above. In order for a student to achieve a pass result in the examination, they must demonstrate satisfactory fulfilment of the objectives of the module.

The written assignment will be assessed by the examiner alone. If the examiner awards a fail grade, the assignment will also be assessed by a second internal examiner.

## ADDITIONAL INFORMATION

Specific descriptions of elective are always updated on the website:

<https://www.kdm.aau.dk/studiehaandbog/uddannelsen/kandidat/valgfag/>

## FACTS ABOUT THE MODULE

Danish title	Valgfag B
Module code	KAKDMVME18B
Module type	Course
Duration	1 semester
Semester	Spring 8. semester
ECTS	5
Language of instruction	Danish and English
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# RESEARCH METHODOLOGY

2018/2019

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

In the module students will learn to plan large and complex research studies independently and on the basis of information studies. Emphasis will be on the student's independent identification and description of the research object, and on the student's reflections on various methodological approaches for the implementation of the research study, including quantitative and qualitative approaches.

The module comprises virtual courses, seminars and supervision within the following area:

- research design

## LEARNING OBJECTIVES

### KNOWLEDGE

In this module students will acquire knowledge of:

- disciplinary paradigms and scientific methods
- the correlation between theory of science, scientific methods and choice of theory in scientific research studies

### SKILLS

In this module students will acquire skills in:

- structuring subject specific research studies and research projects, including choice of research object, method and theory
- assessing the consequences of various methodological and theoretical approaches to subject specific studies and research projects

### COMPETENCES

In this module students will acquire competences in:

- structuring subject specific studies and research projects in specific contexts in practice
- working independently and engaging in professional collaboration as regards the structuring of subject specific studies and research projects, with a professional approach.

## EXAM

### EXAMS

Name of exam	Research Methodology
--------------	----------------------

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

Type of exam	<p>Written exam</p> <p>The examination is a take-home assignment in which the student/s will explain the design of a large subject specific study within the disciplinary area of the programme, on the basis of the module, however the actual study will not be carried out. The student/s will choose the topic, and the submission deadline will be set by the Study Board.</p> <p>The written assignment may be prepared in groups of up to three students. The written assignment paper must not exceed eight pages if written individually, ten pages if written in groups of two, and twelve pages if written in groups of three students.</p>
ECTS	5
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	<p>In the evaluation of the examination performance, the assessment of 'pass' will be awarded to students who demonstrate that they have fulfilled the above objectives to a satisfactory extent.</p> <p>The assignment paper will be evaluated by the examiner; in case of a fail grade, the assignment paper will also be evaluated by another internal examiner.</p>

## FACTS ABOUT THE MODULE

Danish title	Research Methodology
Module code	KAINFOS188
Module type	Course
Duration	1 semester
Semester	Autumn 9. semester
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertlöv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# INFORMATION STUDIES IN PRACTICE

**2018/2019**

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The theme of the module is the practical reality of information studies. The main component of the module is a three-to-four-month practice oriented work placement, where students collaborate on solving an issue on the basis of Information Studies in a relevant company, organisation or institution. The idea is for students to develop a knowledge and understanding of the concrete work reality that this programme is directed towards. The work practice will be elucidated in a written report on the basis of the theory and methods of the entire study programme.

As part of the practice oriented work placement, students are expected to carry out an interview with their company, organisation or institution. The interview must elucidate the company, organisation or institution's need for the student's knowledge, skills and competences. The interview will be included in the report as an appendix and also as part of the report in the shape of a brief, edited summary.

In exceptional circumstances, the Study Board may approve that the practice oriented project is not undertaken at a company or organisation, but at the University in the shape of a constructed case directed towards implementing knowledge within Information Studies in practice.

The module also comprises:

- a halfway evaluation and an evaluation when the practice oriented work placement has been completed
- a virtual learning course during the practice oriented semester comprising presentation techniques, negotiation techniques, business communication etc.

Academic supervision will be offered and the teaching will be organised as a practice oriented work placement.

## LEARNING OBJECTIVES

### KNOWLEDGE

In this module students will acquire knowledge of:

- theory and methods of Information Studies in practice with particular emphasis on the interface of theory and methods on the one hand and the cultural, organisational and/or technological complexity of the application area on the other hand
- the actual work situation towards which the programme is directed
- communication and collaboration practices within the field of informatics
- competence requirements of the discipline in work contexts.

### SKILLS

In this module students will acquire skills in:

- working in practice on the basis of informatics, including applying strategies and methods for user analysis, pilot studies, system development and system design
- assessing issues and solutions within the field of informatics in practice, on the basis of theories and methods for user analysis, pilot studies, system development or system design

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

- communicating knowledge within informatics to peers and laypeople
- managing themselves in work contexts with a view to identifying issues pertaining to skills and competences.

**COMPETENCES**

In this module students will acquire competences in:

- taking an analytical, reflective and critical approach to the preconditions for user analysis, pilot studies, system development or system design in practice
- taking an analytical, reflective and critical approach to user analysis, pilot studies, system development or system design in practice
- engaging in disciplinary and interdisciplinary collaboration on user analysis, pilot studies, system development or system design in practice, with a professional approach
- identifying own learning needs and structuring own learning in relation to the subject area of user analysis, pilot studies, system development or system design in practice.

**EXAM**

**EXAMS**

Name of exam	Information Studies in Practice
Type of exam	<p>Oral exam based on a project The examination is a conversation between the student(s) and the examiner based on a project report produced individually or in a group. The project report/written work will be considered the shared responsibility of the group. Students will be examined and assessed on the basis of the entire project report, and one combined grade will be awarded each student for the project report and the oral performance.</p> <p>Literature foundation: Minimum 500 standard pages supervisor approved, self-selected literature related to the project.</p> <p>The project report: total number of pages must be no less than 15 pages and no more than 20 pages per student in a project group, and 30 pages if written individually.</p> <p>Duration of examination: 20 minutes per student and 10 minutes per group for assessment and announcement of result, although no longer than a total of two hours. 30 minutes in total for individual examinations.</p> <p>Any re-examinations will be held on the basis of a revised project report.</p>
ECTS	25
Assessment	7-point grading scale
Type of grading	Internal examination

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

Criteria of assessment	<p>The project report and the conversation must demonstrate that the student fulfils the objectives for the module stated above.</p> <p>In the evaluation of the examination performance, the grade 12 will only be awarded for an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses.</p>
------------------------	--

## FACTS ABOUT THE MODULE

Danish title	Information Studies in Practice
Module code	KAINFOS189
Module type	Project
Duration	1 semester
Semester	Autumn 9. semester  Internship
ECTS	25
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# MASTER'S THESIS

## 2018/2019

### CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The Master's thesis module comprises preparation of a Master's thesis on a subject which the student is free to select from within the disciplinary framework of the programme. The thesis may be written as either a theoretically, methodologically or analytically oriented thesis, or it may be oriented towards practical and constructive ICT solutions on the basis of theory and method.

The topic of the Master's thesis must be approved by the Study Board. The topic must be presented to the Study Board in the shape of a synopsis comprising a preliminary problem formulation, argumentation for the relevance of the topic and for the theoretical and methodological points of departure, a preliminary bibliography and time schedule, including a submission deadline.

The module includes a number of thesis seminars. Additionally, students will be offered expert thesis supervision in relation with their problem oriented thesis work.

### LEARNING OBJECTIVES

#### KNOWLEDGE

In the Master's thesis module, the student will acquire knowledge of:

- the theories, methods and technologies of the selected subject area at the highest international level
- research ethics and understanding of the implications of research work
- the theory of science of the selected thesis topic

#### SKILLS

In the Master's thesis module, the student will acquire skills in:

- applying methods, theories and technologies pertaining to a specific issue within the academic area
- creating an independent and systematic overview of relevant existing knowledge within the topic of the thesis
- independently selecting approaches pertaining to the topic of the thesis on the basis of theory of science, theory, methods, analysis, design and/or technology, and substantiating these academic choices and priorities
- applying, further developing and critically reflecting on relevant theories, methods and technologies pertaining to the topic of the thesis

#### COMPETENCES

In the Master's thesis module, the student will acquire competences in:

- critical reflection on the disciplinary area pertaining to the chosen topic of the thesis
- independent and systematic search for knowledge, choosing and explaining this choice and planning and undertaking the research of the topic of the thesis
- arguing for choices as regards the applied theories, methods and technologies as well as choices as regards any empirical material and/or design aspects
- structuring and communicating the acquired knowledge in a suitable manner as regards content and language register to an academic audience within the disciplinary field of the programme.

### EXAM

#### EXAMS

Name of exam	Master's Thesis
--------------	-----------------



2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

Type of exam	<p>Oral exam based on a project The examination will be conducted as a conversation between the student(s) and the examiner and external examiner on the basis of a Master's thesis prepared by one or a number of students.</p> <p>The Master's thesis will be considered the shared responsibility of the group. The Master's thesis and the conversation must demonstrate that each student fulfils the objectives for the module stated above as regards knowledge, skills and competences.</p> <p>The Master's thesis, including a one-two page summary in a foreign language (see below), forms the basis of the examination and assessment, and a combined grade will be awarded for the Master's thesis and the oral performance.</p> <p>Summary: A summary of no less than one page and no more than two pages in Danish or English must be included.</p> <p>Literature foundation: Minimum 2000 standard pages supervisor approved, self-selected literature related to the Master Thesis.</p> <p>Total number of pages: The extent of The Master's thesis must follow the current rules at The Faculty of Humanities.</p> <p>Normal duration of examination: 45 minutes; if two students, 75 minutes; and if three students, 100 minutes.</p>
ECTS	30
Assessment	7-point grading scale
Type of grading	External examination
Criteria of assessment	<p>The examination must substantiate that each student fulfils the objectives for the module.</p> <p>In the evaluation of the examination performance, the grade 12 will only be awarded for an excellent performance displaying a high level of command of all aspects of the relevant material, with no or only a few minor weaknesses.</p>

## FACTS ABOUT THE MODULE

Danish title	Master's Thesis
Module code	KAINFOS1814
Module type	Project
Duration	1 semester
Semester	Spring 10. semester
ECTS	30
Language of instruction	English

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# DIGITAL COLLABORATION

2018/2019

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The course offers an overview of digital sociality and governance, presenting issue such as Smart Cities and Big Data in a larger societal context. During the course, students are provided with an understanding of how digital collaboration may be instigated and to what purpose. Drawing on collaboration with external partners, students will learn about the opportunities and challenges with data-driven, collaborative projects in various social and organizational contexts.

### LEARNING OBJECTIVES

#### KNOWLEDGE

In this module students will acquire knowledge of:

- The current landscape of digital collaboration in and between various public and private organizations.
- Theoretical approaches to digital, data-driven knowledge collaboration
- The values and opportunities of data-driven collaboration projects as well as their challenges for various stakeholders

#### SKILLS

In this module students will acquire skills in:

- Identifying areas where data-driven collaboration projects can add to existing value propositions
- Crafting digital collaborative set-ups
- Critically discuss and reflect on digital collaborations and their outcomes for various types of stakeholders

#### COMPETENCES

In this module students will acquire competencies in:

- Designing and discussing collaborative strategies in the context of relevant data project topics
- Professionally engaging in, assessing and reflecting on data-driven knowledge collaborations
- Independently continuing one's individual competency development within digital collaborations

## EXAM

### EXAMS

Name of exam	Digital Collaboration
Type of exam	Written exam The examination is a portfolio submitted in steps during the term, comprising contributions from the students set by the examiner on the basis of the course module. The examination portfolio will be prepared individually by the student and must not exceed 10 pages. The examination portfolio will be evaluated by an internal examiner. A second internal examiner will be included in case of an assignment is given a failed assessment.
ECTS	5
Assessment	7-point grading scale
Type of grading	Internal examination

Criteria of assessment	The examination must demonstrate that the student can fulfil the objectives outlined above regarding knowledge and understanding, skills and competencies.
------------------------	--

## FACTS ABOUT THE MODULE

Danish title	Digital Collaboration
Module code	KAINFOS1810
Module type	Course
Duration	1 semester
Semester	Autumn 9. semester
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities

# DATA PREPARATION AND UNDERSTANDING

2018/2019

## MODULETS INDHOLD, FORLØB OG PÆDAGOGIK

The course provides students with an understanding of relevant data formats and methods for harvesting large-scale data about user behaviour, interaction, and/or opinions. More specifically, the course is focused on digital, online traces of user behaviour and how to identify, collect, prepare, and make sense of such data. Students are prompted to reflect on the scope and feasibility of different research designs, including their data requirements and the implications for data processing and ethics.

### LÆRINGSMÅL

#### VIDEN

In this module students will acquire knowledge of:

- Data formats
- Methods for collecting and processing data
- Legal and ethical principles related to (online) data harvesting and usage.

#### FÆRDIGHEDER

In this module students will acquire skills in:

- Asking data-driven questions about research problems
- Identifying, comparing, and selecting relevant techniques for collecting data about user behavior, interaction, and/or opinions
- Constructing relevant data sets
- Explaining the data set's construction, limitations and potential use cases.

#### KOMPETENCER

In this module students will acquire competences in:

- Relating theories and methods to real-world cases
- Evaluating the practical and ethical dimensions of a data-driven project in relation to specific research designs
- Taking an analytical, reflective and critical approach to the identification, harvesting, preparation, and understanding of relevant research data.

## EKSAMEN

### PRØVER

Prøvens navn	Data Preparation and Understanding
Prøveform	Skriftlig Duration of examination: 4 hours. The exam is evaluated by an internal examiner.  A second internal examiner will be included in case of an assignment is given a failed assessment.  The course is evaluated in an online test and graded as pass/fail.

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

	Duration of examination: 4 hours. The exam is evaluated
ECTS	5
Bedømmelsesform	Bestået/ikke bestået
Censur	Intern prøve
Vurderingskriterier	The examination must demonstrate that the student can fulfil the objectives outlined above regarding knowledge and understanding, skills and competencies.

## FAKTA OM MODULET

Engelsk titel	Data Preparation and Understanding
Modulkode	KAINFOS1811
Modultype	Kursus
Varighed	1 semester
Semester	Efterår 9. semester
ECTS	5
Undervisningssprog	Engelsk
Undervisningssted	Campus Aalborg
Modulansvarlig	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Studienævn	Studienævnet for Kommunikation og Digitale Medier
Institut	Institut for Kommunikation og Psykologi
Fakultet	Det Humanistiske Fakultet

# DATA ANALYTICS AND VISUALIZATION

2018/2019

## MODULETS INDHOLD, FORLØB OG PÆDAGOGIK

The course provides an understanding of different analytical strategies and their implications for data modelling, including descriptive and predictive approaches. It also provides hands-on experience with different data visualization techniques and their analytical contributions.

### LÆRINGSMÅL

#### VIDEN

In this module students will acquire knowledge of:

- Descriptive analytics, such as social network analysis and dimensionality reduction
- Predictive analytics, such as regression and machine learning
- Techniques for data visualization.

#### FÆRDIGHEDER

In this module students will acquire skills in:

- Conducting data-driven analysis
- Conducting participatory data design with users
- Identifying, comparing, and selecting relevant techniques for describing and analyzing data about user behavior, interaction, and/or opinions
- Selecting the optimal data visualization techniques for describing and analyzing digital trace data.

#### KOMPETENCER

In this module students will acquire competences in:

- Applying analytical tools to real-world cases
- Taking an analytical, reflective and critical approach to the analysis, visualization, and interpretation of collected research data.

## EKSAMEN

### PRØVER

Prøvens navn	Data Analytics and Visualization
Prøveform	<p>Mundtlig Internal individual oral exam in "Data Analytics &amp; Visualization". Students must submit a blog post with relevant data visualization and narration. Textual narration should be adapted to the format of a blog post and may not exceed 1000 words regardless of group size.</p> <p>Students may submit the blog post individually or in groups of max. 3 students.</p> <p>Duration of examination: 15 minutes per student and 5 minutes for assessment and announcement of result.</p> <p>20 minutes in total for individual examinations.</p>

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

ECTS	5
Bedømmelsesform	7-trins-skala
Censur	Intern prøve
Vurderingskriterier	The examination must demonstrate that the student can fulfil the objectives outlined above regarding knowledge and understanding, skills and competencies

## FAKTA OM MODULET

Engelsk titel	Data Analytics and Visualization
Modulkode	KAINFOS1812
Modultype	Kursus
Varighed	1 semester
Semester	Efterår 9. semester
ECTS	5
Undervisningssprog	Engelsk
Undervisningssted	Campus Aalborg
Modulansvarlig	<a href="#">Ole Ertløv Hansen</a>

## ORGANISATION

Studienævn	Studienævnet for Kommunikation og Digitale Medier
Institut	Institut for Kommunikation og Psykologi
Fakultet	Det Humanistiske Fakultet



# SOCIAL ANALYTICS IN CONTEXT

2018/2019

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module social analytics in context comprises preparation of a project concerning digital collaboration and contains data preparation and data analytics. The project must be carried out in collaboration with an organization or community.

### LEARNING OBJECTIVES

#### KNOWLEDGE

In this module students will acquire knowledge of:

- Dataset construction and data harvest, including its technical, ethical and legal implications
- Data relevant problems in organizations, including their relation to organizational culture and the wider ecology of methods available in the organization
- Data driven research designs and their implications for data needs and analysis.

#### SKILLS

In this module students will acquire skills in:

- Formulating data-driven questions that make sense in context, taking available data, existing knowledge practices and the strategic situation of the organization into account.
- Carrying out relevant data analysis
- Producing relevant data visualizations
- Narrating methods and findings in ways that make sense to the organization

#### COMPETENCES

In this module students will acquire competences in:

- The management of a data project, including its different stages, components and participants
- The translation of data projects into real world cases and contexts.

## EXAM

### EXAMS

Name of exam	Social Analytics in Context
Type of exam	<p>Oral exam based on a project</p> <p>The examination is a conversation between the student(s) and the examiner based on a project report produced individually or in a group. The project report/written work will be considered the shared responsibility of the group. Students will be examined and assessed on the basis of the entire project report, and one combined grade will be awarded each student for the project report and the oral performance.</p> <p>Literature foundation: Minimum 500 standard pages supervisor approved, self-selected literature related to the project.</p> <p>The project report: the total number of pages must be no less than 10 pages and no more than 15 pages per student in a project group, and 20 pages if written individually.</p>

2018: Regulations and curriculum for the master's programme in Information Technology (Information Studies), CPH

	<p>Duration of examination: 15 minutes per student and 5 minutes per group for assessment and announcement of result. 20 minutes in total for individual examinations.</p> <p>At oral group examinations, the examination must be conducted in such a way that individual assessment of each individual student's performance is ensured.</p>
ECTS	10
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	<p>The project report and the conversation must demonstrate that the student fulfils the objectives for the module stated above.</p> <p>In the evaluation of the examination performance, the grade 12 will only be awarded to students who give an excellent performance and demonstrate that they have fulfilled the above objectives exhaustively or with only few insignificant omissions.</p> <p>Any re-examinations will be held on the basis of a revised project report.</p>

## FACTS ABOUT THE MODULE

Danish title	Social Analytics in Context
Module code	KAINFOS1813
Module type	Project
Duration	1 semester
Semester	Autumn 9. semester
ECTS	10
Language of instruction	English
Location of the lecture	Campus Aalborg
Responsible for the module	<a href="#">Ole Ertlov Hansen</a>

## ORGANISATION

Study Board	Study Board of Communication and Digital Media
Department	Department of Communication and Psychology
Faculty	The Faculty of Humanities