



AALBORG UNIVERSITET

**CURRICULUM FOR THE MASTER'S
PROGRAMME IN
TECHNO-ANTHROPOLOGY - 2012 -
AALBORG**

MASTER OF SCIENCE (MSC)
AALBORG

MODULES INCLUDED IN THE CURRICULUM

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EXPERT CULTURES AND RESPONSIBLE TECHNOLOGY

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Bachelor's degree.

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- explain the principles and methods used in the development of a specific technology in a specific technological organisation
- explain the qualitative research methods to examine expert cultures
- describe ethical approaches

SKILLS

- develop a proposal for responsible technology design
- identify the codes and rituals of an expert culture in a selected technology context
- portray the conceptual landscape of innovation and responsibility in a chosen technology context
- investigate and analyse the drivers and barriers for responsible technological innovation, including guidelines for responsible design, corporate social responsibility and stakeholder involvement
- undertake ethical analysis of a specific technology

COMPETENCES

- critically reflect on own analysis
- take individual responsibility for, and regularly document own professional and interdisciplinary development and specialisation.

TYPE OF INSTRUCTION

The module will be implemented as a problem-based and project-oriented work within the module's overall framework. The project work is supported by one or more supervisors.

EXAM

EXAMS

Name of exam	Expert Cultures and Responsible Technology
Type of exam	Oral exam based on a project
ECTS	15
Assessment	7-point grading scale
Type of grading	External examination

Criteria of assessment	Are described in the Framework Provisions.
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FACTS ABOUT THE MODULE

Danish title	Ekspertkulturer og ansvarlig teknologi
Module code	TBITANK12101
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	15
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
Faculty	Technical Faculty of IT and Design

ORGANISATIONAL CULTURE: EXPERTISE, INNOVATION AND RESPONSIBILITY

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Bachelor's degree.

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- reproduce theoretical positions to characterise organisational cultures
- explain how organisational cultures surround and affect experts' work with technological and / or cultural innovation
- describe the development of responsible innovative processes in organisations, including theoretical concepts such as expertise, power, learning, ethics and design as an integral part of technology development

SKILLS

- select and apply theories and concepts of organisational culture, including those regarding power, learning, ethics and design in relation to analysis, implementation and evaluation of technological and cultural innovation in organisations

COMPETENCES

- independently organise technological and cultural innovations in organisations that include cultural considerations
- lead and manage technological and cultural innovation.

TYPE OF INSTRUCTION

Teaching is a combination of lectures, teacher initiated workshops and case specific study circles.

EXAM

EXAMS

Name of exam	Organisational Culture: Expertise, Innovation and Responsibility
Type of exam	Oral exam
ECTS	5
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	Are described in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Organisationskulturer: ekspertise, innovation og ansvarlighed
Module code	TBITANK12102
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
Faculty	Technical Faculty of IT and Design

RESPONSIBLE AND INNOVATIVE KNOWLEDGE PRODUCTION

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Bachelor's degree.

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- explain how discourses, institutions and professions have historically shaped the conceptual landscape of innovative and responsible knowledge production
- identify and explain different theories relevant for analysis and discussion of responsible and innovative technology
- explain the role of technological experts in innovative and responsible knowledge production

SKILLS

- draw connections between responsibility and innovation
- analyse and evaluate cases dealing with responsible and innovative knowledge production

COMPETENCES

- transfer knowledge and skills achieved in the module to suggest concrete responsible and innovative solutions to different kinds of problems
- disseminate obtained knowledge to other researchers.

TYPE OF INSTRUCTION

Teaching is a combination of lectures, group assignments, individual presentations and study groups.

EXAM

EXAMS

Name of exam	Responsible and Innovative Knowledge Production
Type of exam	Active participation/continuous evaluation
ECTS	5
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	Are described in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Ansvarlig og innovativ vidensproduktion
Module code	TBITANK12103
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
Faculty	Technical Faculty of IT and Design

ANTHROPOLOGY-BASED PRODUCT DEVELOPMENT

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Pass in "Expert Cultures and Responsible Technology (project)" (first semester).

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- present theories that shed light on the interplay between product development / product evaluation and selected user groups
- explain methods and principles for development or evaluation of products
- present theories and methods for analysis of products' cultural influences
- identify and explain relevant ethnographic research methods (e.g., narrative method, phenomenological method or grounded theory) of relevance to a specific product development or product evaluation task

SKILLS

- independently develop and carry out an ethnographic study design that can contribute with knowledge relevant to the development or evaluation of a technological product
- reflect on the meaning and consequences of own ethnographic study of product development or product evaluation
- disseminate own and others' research findings

COMPETENCES

- incorporate anthropological analysis through interdisciplinary collaboration in product development or evaluation
- reflect on issues of product liability and potential ethical dilemmas that arise during product development or implementation.

TYPE OF INSTRUCTION

The module will be implemented as a problem-based and project-oriented work within the module's overall framework. The project work is supported by one or more supervisors.

EXAM

EXAMS

Name of exam	Anthropology-based Product Development
Type of exam	Written and oral exam
ECTS	15
Assessment	7-point grading scale
Type of grading	External examination
Criteria of assessment	Are described in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Antropologi baseret produktudvikling
Module code	TBITANK12201
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	15
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
Faculty	Technical Faculty of IT and Design

PRODUCT DEVELOPMENT: VALUE-SENSITIVE DESIGN, USER-DRIVEN INNOVATION, TECHNOLOGY-BASED SERVICE OR SCIENTIFIC ADVICE

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Bachelor's degree.

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- present principles and methods for developing value-sensitive design, user-driven innovation, technology-based service or research-based advice
- explain participatory methods and theoretical schools developed to support design, innovation and consultancy within the techno-scientific field
- identify philosophy of science approaches that support critical reflections regarding value sensitive design, user-driven innovation, technology-based service or research-based consultancy

SKILLS

- problematise how to perform design, innovation or research based advice consulting for the natural and technical scientific field, taking into account uncertainty, socio-cultural categories as well as power, politics and ethics.

COMPETENCES

- communicate complex problems and their potential solutions related to value sensitive design, user-driven innovation, technology-based service or research-based advice both verbally and in writing.

TYPE OF INSTRUCTION

Lectures, student presentations and written communication tasks.

EXAM

EXAMS

Name of exam	Product development: Value-sensitive Design, User-driven Innovation, Technology-based Service or Scientific Advice
Type of exam	Written and oral exam
ECTS	5
Assessment	Passed/Not Passed
Type of grading	Internal examination

Criteria of assessment	Are described in the Framework Provisions.
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FACTS ABOUT THE MODULE

Danish title	Produktudvikling: værdifølsomt design, brugerdriven innovation, teknologibaseret service eller forskningsbaseret rådgivning
Module code	TBITANK12202
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
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MAPPING CONTROVERSIES

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Bachelor's degree.

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Contemporary democracy frequently finds itself confronted with highly unstable forms of knowledge around which there exists no clear guide. Controversies rooted in the techno-political entanglements of science and society seem increasingly resilient to conventional political process and cannot simply be settled by 'the facts'.

How do we handle and engage with complex knowledge controversies? And what new forms of 'democratic equipment' might be of use in that enterprise? The course enables students to make practical use of a series of new web-based research tools and map out complex controversial issues in an easily accessible manner.

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- explain theories about situations in which uncertainties are rendered more complex by the intervention of social or natural scientific knowledge
- explain theories about the intermediate stages through which scientific or technical knowledge acquires authority

SKILLS

- apply a range of digital/qualitative research tools such as web crawls or bibliometric surveys to trace out the way in which issues become controversial
- use dynamic visualisation tools to map controversies in an accessible manner
- produce a website that enables the wider public to engage with a controversy and interrogate its makeup
- work collaboratively with large amounts of heterogeneous data

COMPETENCES

- approach the interplay between science and politics from a practical perspective
- adopt a pragmatist view of claims to expertise
- provide a democratic instrument to aid the public engagement with science.

TYPE OF INSTRUCTION

The course involves students in collaborative research projects requiring them to make use of one or more digital methods to map out a controversy of their choosing. The goal is to make it available and explorable by a general public through an online platform like a webpage or a blog. Students can either bring their own case material from another course or choose one when they start (although this will have to be done from day one). The course is structured as a combination of introductory lectures, group work and a series of practicums which will introduce the students to new tools and methods while exploring controversies from the hands-on perspective of trying to map them out.

EXAM

EXAMS

Name of exam	Mapping Controversies
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Type of exam	Oral exam
ECTS	5
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	Are described in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Kortlægning af kontroverser
Module code	TBITANK12203
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
Faculty	Technical Faculty of IT and Design

FIELD WORK

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Pass in Anthropology-Based Product Development (project) (second semester).

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

This module is offered in both a 20 ECTS and 30 ECTS version.

The goal of this module is to gain experience in anthropological field work and apply theoretical and methodological knowledge, skills and competencies, so that the anthropological field work contributes to developing a specific technological product or process, or to the evaluation of a specific technological product or process. The student has to be able to conduct the field work independently, generate knowledge from this work and demonstrate skills to disseminate the field work insights and how this could inform product / process development or product / process testing. The project has to discuss how the research approach ensures validity and reliability (in consideration of the used research methods) and demonstrate how anthropological field work is relevant to product / process development or product / process testing. The project will be based in a public, private or grassroots organisation specific to product / process development or testing.

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- identify methods and theories that support design and implementation of anthropological fieldwork
- explain the methods of anthropological fieldwork, including participant observation and the use of field notes and interviews
- explain the classic and newer ideas in anthropological analysis and dissemination, including, for example various ethnographic and narrative approaches
- explain anthropological knowledge production in a theoretical perspective

SKILLS

- plan and carry out anthropological fieldwork
- liaise anthropological fieldwork to technological product / process development or testing
- liaise anthropological practice with theoretical insight specific to technological product / process development or testing

COMPETENCES

- on the basis of fieldwork assess practical problems associated with technological product / process development or testing
- assess potentials and limitations of various anthropological approaches, including those related to the validity and reliability of anthropological methods as well as to the ethical dimensions of anthropological field work
- evaluate how anthropological theories and methods can help create new practices in scientific and technological research and development
- coordinate fieldwork.

TYPE OF INSTRUCTION

The module will be implemented as problem-based and project-oriented work within the module's overall framework. The project work is supported by one or more supervisors.

EXAM

EXAMS

Name of exam	Field Work
Type of exam	Oral exam based on a project
ECTS	20
Assessment	7-point grading scale
Type of grading	External examination
Criteria of assessment	Are described in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Feltstudie
Module code	TBITANK12301
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	20
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
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REFLECTION AND IT TOOLS SUPPORTING ANALYSIS OF QUALITATIVE EMPIRICAL MATERIAL

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Pass in Anthropology-Based Product Development (project) (second semester)

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- present technology-based tools and web applications appropriate to document and analysis empirical material
- explain the use of self-reflection methods and theories in research work
- explain the different theoretical and methodological approaches relevant to understanding their own role in the implementation of anthropological studies

SKILLS

- evaluate potential technology-based tools and web applications for the purpose of collecting and analysing empirical material in anthropological studies
- use technology-based tools and web applications in the analysis of a concrete anthropological study
- apply selected theories and principles - including portfolio tools - to reflect on processes of anthropological fieldwork
- apply relevant theories and theoretical positions to examine their own role in examining anthropological work

COMPETENCES

- use technology-based and portfolio tools to study and document, analysis and reflect on concrete anthropological studies
- communicate findings using technology-based and portfolio tools
- reflect on their own role as investigator/researcher in all phases of the anthropological study.

TYPE OF INSTRUCTION

The module will be implemented as a lecture series at the beginning of the semester with a focus on theoretical and methodological aspects. Then it continues as a series of virtual tutorials and web-based workshops.

EXAM

EXAMS

Name of exam	Reflection and IT Tools Supporting Analysis of Qualitative Empirical Material
Type of exam	Written exam The assessment is based on 1) a documentation of how empirical data was collected, analysed and presented during the fieldwork using technology-based and portfolio tools, and 2) a 5-page essay that presents and discusses the basis of theoretical perspectives in order to demonstrate the students' understanding of their own role in an anthropological study.

ECTS	10
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	Are described in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Refleksion og IT-støttet empirihåndtering
Module code	TBITANK12302
Module type	Course
Duration	1 semester
Semester	Autumn The course is only offered if a sufficient number of students enroll (see also section 5.1).
ECTS	10
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
Faculty	Technical Faculty of IT and Design

MASTER'S THESIS

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

Pass in all prior modules.

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Students who complete this module can:

LEARNING OBJECTIVES

KNOWLEDGE

- explain anthropological study design and analysis
- identify and reproduce theories of either responsible technological innovation and production or technological expert cultures
- identify and explain the link between technology and its normative assumptions and implications
- identify interdisciplinary scientific problems in the intersection between technology and culture

SKILLS

- conduct an anthropological study and analysis on the relationship between technology and its underpinning social, cultural, organisational, institutional and ethical assumptions and implications, and critically evaluate these connections
- connect technological insight and anthropological study design and analysis, and on an interdisciplinary basis design new, responsible and innovative solutions
- translate and implement solutions to concrete actions
- communicate the results of their own anthropological research and analysis to experts, political, administrative and economic stakeholders and to the general public

COMPETENCES

- handle ethical dilemmas within the techno-anthropological field
- manage work and development situations that are complex, unpredictable and require new analysis and solutions
- independently initiate and lead interdisciplinary collaboration and assume professional responsibility
- independently take responsibility for, and regularly demonstrate, their own professional and interdisciplinary development and specialisation.

TYPE OF INSTRUCTION

The module will be implemented as problem-based and project-oriented work within the module's overall framework. The project work is supported by one or more supervisors.

EXAM

EXAMS

Name of exam	Master's Thesis
Type of exam	Oral exam based on a project
ECTS	30
Assessment	7-point grading scale

Type of grading	External examination
Criteria of assessment	Are described in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Kandidatspeciale
Module code	TBITANK12401
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	30
Language of instruction	English
Empty-place Scheme	Yes
Location of the lecture	Campus Aalborg, Campus Copenhagen
Responsible for the module	Lars Kørnøv Botin , Anne Marie Kanstrup

ORGANISATION

Study Board	Studyboard for Techno-Anthropology and Sustainable Design
Department	Department of Planning
Faculty	Technical Faculty of IT and Design