



AALBORG UNIVERSITET

# **STUDIEORDNINGEN FOR KANDIDATUDDANNELSEN I SERVICE SYSTEM DESIGN, 2017**

CAND.SCIENT.  
KØBENHAVN

MODULER SOM INDGÅR I STUDIEORDNINGEN

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# SERVICES AS INTERACTION

**2019/2020**

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

### LEARNING OBJECTIVES

#### KNOWLEDGE

Students who complete the module will obtain the following qualifications

- Must be able to understand time and interaction related issues in specific service cases
- Must be able to apply appropriate methods and tools to organise sequences of events and interactions in a service
- Must be able to Understand technological, material, social and cultural aspects relating to design of services and interaction

#### SKILLS

Students who complete the module will obtain the following qualifications

- Must be able to analyse the products' interplay with users and take into consideration and account for the contextual circumstances that necessitate a particularly active behaviour and analysis.
- Must be able to carry out an analysis of problem areas relating to the design of the interaction between products and their users.
- Must be able to synthesise technical, time and interaction related, social and cultural aspects into a design proposal.

#### COMPETENCES

Students who complete the module will obtain the following qualifications

- Must be able to design products and services integrating technical and user aspects through proposal-making (synthesis) and assess their integration.
- Must be able to adequate competences to present the project and the process in a professionally appropriate way by applying relevant media and techniques

#### TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3

## EXAM

### EXAMS

Name of exam	Services for Interaction
Type of exam	Written or oral exam Exam format: In accordance with the current Joint Programme Regulations and directions on examination from the Study Board for Media Technology:

	Oral (based on a presentation and discussion of a project) or written (in the form of a project/process report) examination with internal censor. The assessment is performed in accordance with the 7-point scale.
ECTS	15
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Service som interaktion
Module code	MSNSSDM1171
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	15
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design

# USER EXPERIENCE DESIGN FOR SERVICE INTERACTION

2019/2020

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

This course trains students to research, analyse, prototype and conceptualise design considering all system aspects including the social and cultural contexts of use. The course gives a comprehensive knowledge about user involvement in the design process, going beyond traditional methods such as usability lab testing.

Experience prototyping techniques and interaction design methods will be introduced with the aim of better understanding and representing the different levels of interaction within a service. The objectives are realised by presenting methods and tools in a case based framework and through the students' active participation in workshops and assignments.

## LEARNING OBJECTIVES

### KNOWLEDGE

Students who complete the course module will obtain the following qualifications:

- **Knowledge** about the system design methods including the social and cultural contexts of use.
- **Knowledge** about ethnographic study methods for user behaviour research
- **Knowledge** about advanced qualitative research methods involving both design, data collection, data analysis and reporting.
- **Knowledge** about validity and reliability within qualitative methods
- **Knowledge** about interaction design methods

### SKILLS

Students who complete the course module will obtain the following qualifications:

- **Apply** the taught methods to solve concrete design problems.
- Able to **evaluate** and compare and apply the methods for a specific design problem.
- **Understand** user analysis and organise data from and interaction in a way that can be used in the design process (synthesis).
- **Apply** knowledge to facilitate the design process involving users in real-life contexts.
- **Apply** personas and scenario based design methods in different contexts for facilitating both different user types and system descriptions.
- **Apply** data into specific strategies for implementation taken different stakeholders into consideration.

### COMPETENCES

Students who complete the course module will obtain the following qualifications:

- Ability to choose the appropriate methods to suit different dimensions of a design problem at different stages in the process and the pitfalls of each approach (**synthesis**)
- **Understanding** the strengths and weaknesses of methods.

## TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3

## EXAM

### EXAMS

Name of exam	User Experience Design for Service Interaction
Type of exam	Written or oral exam Individual oral (based on presentation and discussion) or written (based on a report) examination with internal censor. The assessment is performed in accordance with the 7-point scale.
ECTS	5
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

### FACTS ABOUT THE MODULE

Danish title	Brugeroplevelse af serviceinteraktion
Module code	MSNSSDM1172
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

### ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design

# DESIGNING PRODUCT SERVICE SYSTEMS

2019/2020

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

This module will introduce design thinking and service design and provide knowledge and methodological tools to analyse existing services and to develop new services. The course will provide an overview of analytical methods to understand and integrate user's needs, design methods to control and organise time and interaction-based elements of a services and representation techniques that can be used to communicate with the various actors involved in a service system.

### LEARNING OBJECTIVES

#### KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- **Understand** the foundations of design thinking as a learning approach
- **Understand** the nature and characteristics of services
- **Understand** and be able to explain differences and analogies between products and services in relation to the design process
- **Understand** the structure of a service in relation to its time, experience and interaction factors
- **Understand** the nature and characteristics of the interaction between service providers, technologies and users in a service encounter

#### SKILLS

Students who complete the module will obtain the following qualifications:

- **Capability to apply** the design thinking approach to real problems
- **Capability to apply** adequate analytical and interpretation tools to integrate users' needs and support users' participation in the design process
- Ability to design a service, its structure, components and actors (**synthesis**)
- Ability to organise sets of operations, sequence of events, interactions and material evidences in a service (**synthesis**)
- **Capability to apply** adequate representation techniques to communicate the structure of the service to people with different knowledge and technical/cultural background

#### COMPETENCES

Students who complete the module will obtain the following qualifications:

- Ability to select and **apply** an appropriate approach to the analysis and the design of a service.

#### TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to Chapter 3.

## EXAM

### EXAMS

Name of exam	Designing Product Service Systems
Type of exam	Written or oral exam Individual oral (based on presentation and discussion) or written (based on a report) examination with internal censor. The assessment is performed in accordance with the 7-point scale.
ECTS	5
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Design af produkt-servicesystemer
Module code	MSNSSDM1173
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design



# PROGRAMMING FOR SERVICES

2019/2020

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module will introduce the basic concepts of programming needed to understand and to work with the most used applications in interaction design and with digital devices that can be used for service platforms.

### LEARNING OBJECTIVES

#### KNOWLEDGE

Students who complete the course module will obtain the following qualifications:

- **Understand** integrated development environments
- **Understand** recursive functions
- **Understand** types, declarations, expressions and statements
- **Understand** the complexity of a program
- **Understand** libraries and the concept of linking

#### SKILLS

Students who complete the course module will obtain the following qualifications:

- Design an event-driven interactive interface, e.g., a simple app or a touch-point of a service and integrate external libraries (**application**)
- Interpret and analyze a basic program
- Work out the complexity of a program (**understanding**)
- Explain how to use algorithms, functions and data for solving problems (understanding)

#### COMPETENCES

- Evaluate (**analysis**) existing code, judge its design and recommend changes
- Evaluate and select the right platform to be used for supporting a specific service application

#### TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to Chapter 3

## EXAM

### EXAMS

Name of exam	Programming for Services
Type of exam	Written or oral exam In accordance with the current Joint Programme Regulations and directions on examination from the Study Board for Media Technology: Individual oral (based on presentation and discussion) or written (based on a report) examination with internal censor. The assessment is performed in accordance with the 7-point scale.
ECTS	5
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale

Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Programming for service
Module code	MSNSSDM1174
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
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# SERVICES AS SYSTEMS

2019/2020

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The objective of this project module is to give hands-on experience on the design of a complex service on the basis of a modular platform, in which actors and competences are clearly identified, organizational and interaction aspects are planned and user participation is planned and supported.

### LEARNING OBJECTIVES

#### KNOWLEDGE

Students who complete the project module will obtain the following qualifications:

- Must be able to **understand** the nature and structure of distributed system
- Must be able to **organise**, explain and discuss the role, capabilities and relevance of different components/actors in a product service system (**synthesis**)

#### SKILLS

Students who complete the project module will obtain the following qualifications:

- Must be able to plan and describe competences of different components/actors in a modular service architecture and to organise them appropriately (**synthesis**)
- Must be able to **apply** techniques that support the participation of actors with different backgrounds, skills and culture
- Must be able to integrate technical and human components on a service platform (**synthesis**)

#### COMPETENCES

Students who complete the project module will obtain the following qualifications:

- Must be able to plan adequate systemic structures for the organisation of services (**synthesis**)
- Must be expert in planning and supporting collaboration, participation and integration of different components in a service system (**synthesis**)

#### TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3

## EXAM

### PREREQUISITE FOR ENROLLMENT FOR THE EXAM

- The module adds to the knowledge obtained in the 1st semester.

### EXAMS

Name of exam	Services as Systems
Type of exam	Written or oral exam Oral (based on a presentation, video, prototypes and discussion of a project) or written (based on a project/process report) examination with external censor. The assessment is performed in accordance with the 7-point scale.

ECTS	15
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	External examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Services som systemer
Module code	MSNSSDM2171
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	15
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
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Faculty	Technical Faculty of IT and Design

# TECHNOLOGICAL AND ORGANIZATIONAL TRENDS IN SERVICE DESIGN

2019/2020

## PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

The module adds to the knowledge obtained in the 1st semester.

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The objective of this model is to introduce a higher level of complexity in the design of services that allows for the definition of modular systems and service platforms in both IT-based and physical services. In this model, students will develop an understanding of all the technical and non-technical elements that are needed to provide successful services and operate a service architecture.

## LEARNING OBJECTIVES

### KNOWLEDGE

Students who complete the course module will obtain the following qualifications:

- **Understand** the key technologies behind social networking, search engines, organisation of content and user-generated tagging
- **Understand** the IT infrastructure needed to support living services
- **Understand** the concepts of "service architecture"
- **Analyse**, explain and discuss methods for managing systemic components of services: user involvement, complex interaction among the stakeholders, personalization, context of use, etc.
- **Analyse** drivers and barriers for introduction of new ICT services from a technology, user and market perspective
- **Understand** the concept of modularisation of products and services
- **Understand** and explain the potential benefits of modularisation, in respect to personalisation of service
- **Apply** techniques and tools to control key technologies behind social networking, search engines, organisation of content and user-generated tagging

### SKILLS

Students who complete the course module will obtain the following qualifications:

- Classify services and outline the requirements that a given service imposes on networks and terminals (**analysis**)
- **Understand** and **apply** user-centred service development and stakeholder analysis in setting up the requirements specification for a service
- Be able to **analyse** and evaluate various dimensions of modular products and services
- Be able to position modular products and services in a specific business context (**analysis**).
- Be able to **apply** different concepts and theories to specific cases

### COMPETENCES

Students who complete the course module will obtain the following qualifications:

- **Analyse** and design (**synthesis**) a realistic ICT or physical service (on a conceptual level) to address an identified user need and discuss the service architecture needed to realise the proposed service
- Demonstrate **understanding** through application in exercises and cases of:
  - Various types of products and services
  - Various organizations characterized by differences in maturity and size

## TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3

## EXAM

### PREREQUISITE FOR ENROLLMENT FOR THE EXAM

- The module adds to the knowledge obtained in the 1st semester.

## EXAMS

Name of exam	Computing Infrastructure Management
Type of exam	Written or oral exam Individual oral (based on presentation and discussion) or written (based on a report) examination with internal censor. The assessment is performed in accordance with the 7-point scale.
ECTS	5
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Teknologiske og organisatoriske trends i service design
Module code	MSNSSDM2175
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
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# USER PARTICIPATION AND SOCIAL INNOVATION

2019/2020

## PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

The module adds to the knowledge obtained in the 1st semester.

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The purpose of this module is to provide students with advanced knowledge and methods to interact with users and involve them in a process of co-design and participation. In this module, exercises and theoretical reflections will also be proposed to analyse and evaluate design action on innovation in specific social contexts. The students will learn to use methods and techniques from different disciplinary contexts and adapt them in order to stimulate and support users' participation and the interpretation of their needs, behaviour and attitudes in relation to their social and cultural context.

## LEARNING OBJECTIVES

### KNOWLEDGE

Students who complete the course module will obtain the following qualifications:

- **Understand** the potential of methods and tools deriving from different disciplines for the development of a design process
- **Knowledge** about theories and practice of innovation in social contexts
- Extensive **knowledge** about participatory design and co-design theories and methodological approach
- **Understand** the relevance of participatory design approach on specific applications of services in the public and private sector
- **Understand** the implications and characteristics of innovation processes in open and distributed systems

### SKILLS

Students who complete the course module will obtain the following qualifications:

- **Apply** advanced knowledge about user centred techniques to support users' co-creation and participation
- Support user participation by developing prototypes (**synthesis**) that simulate and provide evaluation elements on user interaction and participation
- **Apply** specific methods and tools to engage with users
- Develop design strategies that take into account specific socio-technical contexts (**synthesis**)
- **Evaluate** the social-technical implications of design intervention in social contexts

### COMPETENCES

Students who complete the course module will obtain the following qualifications:

- Plan and develop user-oriented design activities in relation to a specific design task and context (**synthesis**)
- Plan users involvement and participation in the design process (**synthesis**)

### TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3.

## EXAM

### EXAMS

Name of exam	User Participation and Social Innovation
Type of exam	Written or oral exam Individual oral (based on presentation and discussion) or written (based on a report) examination with internal censor. The assessment is performed in accordance with the 7-point scale.
ECTS	5
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

### FACTS ABOUT THE MODULE

Danish title	Brugerinvolvering og social innovation
Module code	MSNSSDM2173
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

### ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design



# SERVICES REPRESENTATION AND PROTOTYPING

2019/2020

## PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

The module adds to the knowledge obtained in the 1st semester.

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The purpose of this module is to provide students with advanced knowledge of techniques and tools to represent non-functional aspects of services such as time sequences, interactions and experiences. The students will learn how to use narrative, visual and multimodal techniques to communicate nature and characteristics of services and how to use rapid prototyping techniques to represent specific service touch points and experiences.

## LEARNING OBJECTIVES

### KNOWLEDGE

Students who complete the course module will obtain the following qualifications:

- **Knowledge** about different levels, qualities and perceptions of experience in services
- **Understand** advanced representation techniques to represent experience in a service
- Extensive and advanced **knowledge** about storytelling and narrative techniques
- Some **knowledge** about video editing and video sketching techniques
- **Knowledge** of basic paradigms on embedded systems and sensors technology
- Some **knowledge** about video editing and video sketching techniques

### SKILLS

Students who complete the course module will obtain the following qualifications:

- **Apply** narrative techniques to represent service experiences
- **Apply** appropriate modality of interaction with users according to the level of their involvement in the service and the context of use
- **Apply** video sketching as a fast and rich representation technique
- **Apply** Human Machine Interaction and rapid prototyping techniques to materialize service touch-points and to create tangible service representations
- **Capability** to convert human input into data output
- **Apply** methods to test experience qualities such as usability, sociability, likeability, etc. in services

### COMPETENCES

Students who complete the course module will obtain the following qualifications:

- Involve users and reflect on their role in relation to the co-design of services and experiences
- Represent experience-related aspects in services (**synthesis**)
- Manage and process data in relation to the design of experience in services (**synthesis**)

## TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3.

## EXAM

### EXAMS

Name of exam	Services Representation and Prototyping
Type of exam	Written or oral exam Individual oral (based on presentation/videos and discussion) or written (based on a report) examination with internal censor. Assessment: pass/fail.
ECTS	5
Permitted aids	With certain aids: See semester description.
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Services, repræsentation og prototyping
Module code	MSNSSDM2174
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design

# PROJECT-ORIENTED WORK IN A COMPANY

2019/2020

## PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

The module adds to the knowledge obtained in the 2nd semester.

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The purpose of this project module is to give the students the opportunity to have a *hands-on* experience in service design with a company or an organisation. The project can be developed as an internship at the company or through cooperation between the student, the university, and the company.

### LEARNING OBJECTIVES

#### KNOWLEDGE

Students who complete the project module will obtain the following qualifications:

- Must have practical, conceptual and professional **knowledge** that qualify the role and value of service design practice
- Must have knowledge and relevant professional, business related and organizational issues that are relevant for the design practice

#### SKILLS

Students who complete the project module will obtain the following qualifications:

- Must be able to **understand** and engage with a professional environment in relation to service design assignments
- Must be able to **analyse, understand** and **synthesise** strategic issues in design practice on the basis of the knowledge acquired in the previous courses

#### COMPETENCES

Students who complete the project module will obtain the following qualifications:

- Must be able to manage and solve (**synthesis**) systemic tasks related to service design in cross-disciplinary teams in a company, design studio or similar

#### TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3.

## EXAM

### EXAMS

Name of exam	Project-Oriented Work in a Company
Type of exam	Oral exam based on a project Oral on basis of a submitted Company Stay Report. Assessment: pass/fail.
ECTS	25
Permitted aids	With certain aids: See semester description.

Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Projekt i samarbejde med virksomhed
Module code	MSNSSDM3171
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	25
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design

# STRATEGY AND BUSINESS IN SERVICES

2019/2020

## PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

The module adds to the knowledge obtained in the 2nd semester.

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The purpose of this module is to provide advanced knowledge on theories and methodological tools to analyse and suggest appropriate and innovative business models for service companies. The module will focus on theories of entrepreneurship with emphasis on innovative business models for product-service systems. Theories and methodological tools will be applied to specific cases.

## LEARNING OBJECTIVES

### KNOWLEDGE

Students who complete the course module will obtain the following qualifications:

- **Knowledge** about theories and methods for business development
- **Knowledge** about theories of innovation and entrepreneurship
- **Understand** and explain the key linkages between the different theories

### SKILLS

Students who complete the course module will obtain the following qualifications:

- **Understand** and explain the link between different design elements of business models: customer value, organisation, technology and financial issues
- Appropriately and critically, **apply** innovation and business developments theories and methodologies in the analysis of market trends and business models
- Combine knowledge on service systems and technology with business development and business potential (**synthesis**)

### COMPETENCES

Students who complete the course module will obtain the following qualifications:

- Appropriately select and use business models in different business areas needed to realise the proposed service (**synthesis**)
- Select and use creative and design-driven perspectives for the development of innovative services, up to the development of appropriate business plans (**synthesis**)

## TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3.

## EXAM

### EXAMS

Name of exam	Strategy and Business in Services
Type of exam	Written or oral exam

	Individual oral (based on a presentation and discussion) or written (a report) examination with internal censor. The assessment is performed in accordance with the 7-point scale.
ECTS	5
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Strategi og forretning i servicesektoren
Module code	MSNSSDM3173
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design

# THEORETICAL ELABORATION OF A TOPIC OR A CASE

2019/2020

## PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

The module adds to the knowledge obtained in the 2nd semester.

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The purpose of this module is to give the student the opportunity to reflect and elaborate on the theoretical and methodological knowledge acquired in the previous modules, possibly applying this knowledge to a specific study area, a business sector or a case.

### LEARNING OBJECTIVES

#### KNOWLEDGE

Students who complete the project module will obtain the following qualifications:

- Must be able to **analyse**, define and frame a relevant subject for investigation and research within the area of design of product service systems
- Must be able to **understand** and account for relevant theoretical positions and related methodologies pertaining to the chosen subject

#### SKILLS

Students who complete the project module will obtain the following qualifications:

- Must be able to **synthesise** the research problem, taking into account the interdependency between type of knowledge wanted, the possible methods of investigation and type of data produced
- Must be able to observe, analyse and interpret designers' behaviour in specific social technical contexts

#### COMPETENCES

Students who complete the project module will obtain the following qualifications:

Must be able to plan and carry out research of a chosen subject and have the capacity to describe the chosen problem in a theoretical and methodological framework as well as to draw conclusions of own analysis of the results (**synthesis**)

### TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3.

## EXAM

### EXAMS

Name of exam	Theoretical Elaboration of a Topic or a Case
Type of exam	Written or oral exam Oral (based on a presentation, video, prototype and discussion of a project) or written (based on a project/process report) examination with internal censor. The assessment is performed in accordance with the 7-point scale.

ECTS	25
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Teoretisk uddybelse af et emne eller sag
Module code	MSNSSDM3172
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	25
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design



# MASTER'S THESIS

2019/2020

## PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

The module adds to the knowledge obtained in the 1st, 2nd, and 3rd semester.

## CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

In the Master's thesis the student has to demonstrate the acquisition of competences, skills and knowledge that allow him/her to master the profession of service design. The student will work on a theme chosen together with the supervisor and possibly an external company or organisation.

### LEARNING OBJECTIVES

#### KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must have **knowledge** about the possibilities to apply appropriate methodological approaches to specific study areas
- Must have **knowledge** about design theories and methods that focus on the design of advanced and complex product-service systems

#### SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to work independently, to identify major problem areas (**analysis**) and adequately address problems and opportunities (**synthesis**)
- Must demonstrate the capability of **analysing**, designing and representing innovative solutions
- Must demonstrate the ability to **evaluate** and address (**synthesis**) major organisational and business issues emerging in the design of a product-service system

#### COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to master design and development work in situations that are complex, unpredictable and require new solutions (**synthesis**)
- Must be able to independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility (**synthesis**)
- Must have the capability to independently take responsibility for own professional development and specialisation (**synthesis**)

#### TYPE OF INSTRUCTION

See general description of the types of instruction described in the introduction to chapter 3.

## EXAM

### EXAMS

Name of exam	Master's Thesis
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Type of exam	Oral exam based on a project Oral (based on the project report, a presentation, discussion as well as e.g. video, prototypes and discussion) or written (a project/process report) examination with external censor. The assessment is performed in accordance with the 7-point scale.
ECTS	30
Permitted aids	With certain aids: See semester description.
Assessment	7-point grading scale
Type of grading	External examination
Criteria of assessment	The criteria of assessment are stated in the Examination Policies and Procedures

## FACTS ABOUT THE MODULE

Danish title	Kandidatspeciale
Module code	MSNSSDM4171
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	30
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	<a href="#">Claus Brøndgaard Madsen</a>

## ORGANISATION

Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	Technical Faculty of IT and Design