STUDIEORDNING FOR KANDIDATUDDANNELSEN I SERVICE SYSTEM DESIGN, 2023

CAND.SCIENT.
KØBENHAVN

MODULER SOM INDGÅR I STUDIEORDNINGEN

INDHOLDSFORTEGNELSE

SERVICES AS INTERACTION

2023/2024

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The objective of this project module is to give hands-on experience on designing the interaction between the service provider and the user, taking into account the relation between front stage experience and back stage organisation.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain:

- knowledge about methods and tools to organise sequences of events and interactions in a service
- knowledge about the technological, material, social and cultural aspects related to the design of services

SKILLS

Students who complete the module will be able to:

- synthesise technical, social and cultural requirements into a design proposal
- critically select and evaluate relevant components in the context in which they operate

With respect to Problem-Based Learning students will be able to:

- produce a project report according to norms of the area, take into consideration relevant literature, apply correct terminology and convey the research-based foundation, problem and results of the project orally and in writing in a coherent manner, including the relationship between the problem formulation, the project's realization and its conclusions
- evaluate and select relevant literature, scientific methods and models and other tools for application in the project work, and evaluate the project's problem area in a relevant scientific context

COMPETENCES

Students who complete the module will be able to:

- present through reports and/or other artefacts the design process and its outcome to a client

With respect to Problem-Based Learning students will be able to:

- plan, execute and manage complex research and/or development tasks, and assume a professional responsibility for carrying out, potentially cross-disciplinary, collaborations
- assume responsibility for own scientific development

TYPE OF INSTRUCTION

See general description of the types of instruction are described in § 17.

EXAM

EXAMS

Name of exam	Services as Interaction
Type of exam	Oral exam based on a project
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	MSNSSDM1231
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	15
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

USER EXPERIENCE DESIGN FOR SERVICE INTERACTION

2023/2024

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

This course trains students to research, analyse, conceptualise and prototype user experiences for services 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 and giving the means to better understand and represent 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:

- knowledge about qualitative research methods involving design, data collection, data analysis and reporting
- knowledge about methods and tools to analyse, ideate, prototype and evaluate a given service experience

SKILLS

Students who complete the course module will be able to:

- design, plan and execute a thorough user research
- qualify a user experience in relation to the service specification

COMPETENCES

Students who complete the course module will be able to:

- choose the appropriate methods that suit different dimensions of a design problem at different stages
- keep a user centred perspective along the whole design process

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	User Experience Design for Service Interaction
Type of exam	Written or oral exam
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	MSNSSDM1232
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

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

DESIGNING PRODUCT SERVICE SYSTEMS

2023/2024

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

This module will introduce system 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 the context and its systemic aspects, design methods to control and orchestrate time and organisational elements of a service and representation techniques that can be used to communicate with the various actors involved in a service system and support their participation in the design process.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain:

- knowledge of the foundations of system design thinking as a learning approach
- knowledge of the structure of a service in relation to its time, experience and factors related to the system´s technical and social characteristics
- knowledge of the nature of the value co-creation process occurring between service providers, technologies and users in a service encounter

SKILLS

Students who complete the module will be able to:

- apply adequate analytical tools to integrate the different stakeholders´ role in the value co-creation process
- organise a service, its structure, actors, sets of operations, sequence of events, interactions and material evidences in a service
- use adequate representation techniques to communicate the structure of a service to all the service stakeholders taking into account their different knowledge and technical/cultural background

COMPETENCES

Students who complete the module will be able to:

- select and apply the most appropriate design approach and representation techniques to aggregate human, social and technical resources for the design of a service

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	Designing Product Service Systems
Type of exam	Oral exam based on a project
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	MSNSSDM1233
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

VISUALIZING AND PROTOTYPING FOR SERVICE DESIGN

2023/2024

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The module will introduce visualization and prototyping as two key competences to better understand, represent, and communicate service systems. Different techniques will be presented in workshop settings, allowing the exploration of the

approaches and their benefits in different phases of the design process and in different contexts (analog/live and

digital/online).

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the course module will obtain:

- knowledge about different visualization theories and techniques to analyse and represent services

- knowledge about different digital and physical prototyping techniques and processes

SKILLS

Students who complete the course module will be able to:

- design and use a visual artefact to engage with the different stakeholders of a complex service system

- plan, execute and evaluate a prototyping process, including interactive and digital prototypes

COMPETENCES

Students who complete the course module will be able to:

- materialise service touch-points and to create tangible service representations

- apply various visualisation techniques according to the specific system and context under analysis

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	Visualizing and Prototyping for Service Design

Type of exam	Written exam
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	Visualisering og prototyping til service design
Module code	MSNSSDM1234
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

SERVICES AS SYSTEMS

2023/2024

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, in which key components of related ecosystems are clearly identified, organizational and interaction aspects are envisioned and user participation is planned and supported.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the project module will obtain:

- knowledge about the nature and structure of distributed systems
- knowledge geared towards identifying, explaining and discussing the role, capabilities and relevance of different components/actors in a product service system

SKILLS

Students who complete the project module will be able to:

- produce a project report according to norms of the area, apply the correct terminology and convey the research-based foundation, the problem framing and the results of the project orally and in writing in a coherent manner, including the relationship between the problem formulation, the project's realization and its outputs
- identify, evaluate and build on relevant literature, scientific or academically-sound methods and models and other tools for application in the project work
- apply techniques that support the participation of actors with different backgrounds, skills and culture

With respect to Problem-Based Learning students will be able to:

- produce a project report according to norms of the area, take into consideration relevant literature, apply correct terminology and convey the research-based foundation, problem and results of the project orally and in writing in a coherent manner, including the relationship between the problem formulation, the project's realization and its conclusions
- evaluate and select relevant literature, scientific methods and models and other tools for application in the project work, and evaluate the project's problem area in a relevant scientific context

COMPETENCES

Students who complete the project module will be able to:

- plan adequate systemic structures for the organisation of services while supporting collaboration, participation and integration of different components in a service system

With respect to Problem-Based Learning students will be able to:

- plan, execute and manage complex research and/or development tasks, and assume a professional responsibility for carrying out, potentially cross-disciplinary, collaborations
- assume responsibility for own scientific development and specialization

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

PREREQUISITE FOR ENROLLMENT FOR THE EXAM

- An approved PBL competency profile is a prerequisite for participation in the project exam

EXAMS

Name of exam	Services as Systems
Type of exam	Oral exam based on a project
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	MSNSSDM2231
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	15
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

PERSPECTIVES IN SERVICE DESIGN

2023/2024

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The objective of this module is to introduce a number of perspectives on current aspects and future trends in service design. The module will bring the students through a journey that will explore how such perspectives provide a rich array

of applications for service design. These perspectives will be also analyzed in relation to possible configurations of

distributed systems, examining their different components and their impact on the way services are designed.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the course module will obtain:

- a solid knowledge in relation to how service design can be deployed in different contexts according to different theoretical perspectives and practical approaches (e.g., social innovation, circular economy, policy-making, ...)

- knowledge about key technological and organizational trends connected to services and service design, including their distributed nature, and knowledge about the methodology to identify and analyze them

SKILLS

Students who complete the course module will be able to:

- conceptualize service design as a rich and multifaceted field

- conceive service design practice in terms of pliable processes, whose deployment needs to be adapted to specific contexts of application

- analyse and evaluate various dimensions of modular products and services, also in relation to their IT and organizational components

COMPETENCES

Students who complete the course module will be able to:

- track how the field of service design continuously evolves through a rich and multulayered array of perspectives

- identify, examine and discuss current trends and new trends in service design

- analyse and design a complex service to address needs and wants of multiple stakeholders and taking into account its systemic, technological and organizational components

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	Perspectives in Service Design
Type of exam	Written or oral exam
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	Perspektiver i service design
Module code	MSNSSDM2232
Module type	Course
Duration	2 semesters
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

USER PARTICIPATION AND SOCIAL INNOVATION 2023/2024

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:

- knowledge about 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
- knowledge about the relevance of participatory design approach on specific applications of services in the public and private sector

SKILLS

Students who complete the course module will be able to:

- apply advanced knowledge about user-, human-, and planet-centred techniques to support users' co-creation and participation
- apply specific methods and tools to engage with users and support their participation, also by developing prototypes that simulate and provide evaluation elements on user interaction and participation
- evaluate the social-technical implications of design intervention in social contexts

COMPETENCES

Students who complete the course module will be able to:

- plan and develop user-, human-, planet-oriented design activities in relation to a specific design task and context
- plan and facilitate the involvement and the participation in the design process of multiple actors

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	User Participation and Social Innovation
Type of exam	Written or oral exam
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	MSNSSDM2233
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

DESIGN FUTURES

2023/2024

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

This module provides an overview of theoretical perspectives, actionable methods, and exemplary cases from the emerging field of design futures, i.e. a series of practices at the intersection of design and futures studies (also referred to

as foresight and futures thinking). The course will also allow the students to tinker with and apply methods connected to

speculative design, design fiction, and experiential futures.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the course module will obtain:

- knowledge about different theoretical perspectives within futures studies and design futures

- knowledge about key frameworks and methods employed in design futures

SKILLS

Students who complete the course module will be able to:

- apply design futures methodology and techniques to carry out research activities within service design processes

- produce rich and elaborated representations of services as related to a variety of future states

COMPETENCES

Students who complete the course module will be able to:

- identify, select, adapt and use common design futures methods in conjunction with specific contexts of application

- apply various storytelling techniques to represent future states of services

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	Design Futures
Type of exam	Written or oral exam

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 fremtider
Module code	MSNSSDM2234
Module type	Course
Duration	2 semesters
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

STRATEGY AND BUSINESS IN SERVICES

2023/2024

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

The purpose of this module is to provide advanced knowledge of theories and methodological tools to analyse and define appropriate and innovative strategies and business plans for service companies. The module will focus on various strategic approaches and theories of entrepreneurship with an 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:

- knowledge about theories and methods for business ideation and development
- knowledge about theories of strategy, innovation and entrepreneurship
- Knowledge about the key linkages between the different theories and how they impact the practical execution of entrepreneurial projects

SKILLS

Students who complete the course module will be able to:

- appropriately and critically apply frameworks and methods from strategy, innovation management and business development to a variety of contexts
- combine previous knowledge on service systems and related technology with the financial, economic, organizational and business aspects of service design

COMPETENCES

Students who complete the course module will be able to:

- appropriately select, define and execute business models in relation to different services
- select and use creative and design-driven perspectives to manage innovative services, all the way up to the development of appropriate strategy and business plans

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	Strategy and Business in Services
Type of exam	Written or oral exam
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	MSNSSDM3233
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

MASTER'S THESIS

2023/2024

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:

- knowledge about the appropriate methodological approaches to specific study areas
- knowledge about design theories and methods that focus on the design of advanced and complex product-service systems
- knowledge about the relevant literature in the Service Design field

With respect to Problem-Based Learning students will be able to:

- account for the scientific foundation, and scientific problem areas
- describe the state of the art of relevant research

SKILLS

Students who complete the module will be able to:

- work independently, to identify major problem areas and adequately address problems and opportunities
- analyse, design and represent innovative solutions
- evaluate and address major organisational and business issues emerging in the design of a product-service system

With respect to Problem-Based Learning students will be able to:

- master the scientific methods and general skills associated with the problem area
- produce a project report according to norms of the area, apply correct terminology, document extensive command over relevant literature, communicate and discuss the research-based foundation, problem and results of the project orally, graphically and in writing in a coherent manner
- critically evaluate the results of the project in relation to relevant literature and established scientific methods and models, evaluate and discuss the project's problem area in a relevant scientific context
- evaluate and discuss the project's potential for further development

COMPETENCES

Students who complete the module will be able to:

- master design and development work in situations that are complex, unpredictable and require new solutions
- independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility

With respect to Problem-Based Learning students will be able to:

- participate in, and independently carry out, technological development and research, and apply scientific methods in solving complex problems
- plan, execute and manage complex research and/or development tasks, and assume a professional responsibility for independently carrying out, potentially cross-disciplinary, collaborations
- independently assume responsibility for own scientific development

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	Master's Thesis
Type of exam	Master's thesis/final project Oral exam based on a project
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	MSNSSDM4231
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	30
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

PROJECT-ORIENTED STUDY IN AN EXTERNAL ORGANISATION

2023/2024

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 a project-oriented study in an external organisation or through cooperation between the student, the university, and the company.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the project module will obtain:

- practical, conceptual and professional knowledge that qualifies the role and value of service design when applied in real-life contexts
- knowledge about relevant professional, business-related and organizational aspects that are relevant for the design practice

With respect to Problem-Based Learning students will be able to:

- account for the scientific foundation, and scientific problem areas
- describe the state of the art of relevant research

SKILLS

Students who complete the project module will be able to:

- analyse design briefs and identify actionable plans to execute service design processes
- engage effectively with a professional environment in relation to service design assignments

With respect to Problem-Based Learning students will be able to:

- master the scientific methods and general skills associated with the problem area
- produce a project report according to norms of the area, apply correct terminology, document extensive command over relevant literature, communicate and discuss the research-based foundation, problem and results of the project orally, graphically and in writing in a coherent manner
- critically evaluate the results of the project in relation to relevant literature and established scientific methods and models, evaluate and discuss the project's problem area in a relevant scientific context
- evaluate and discuss the project's potential for further development

COMPETENCES

Students who complete the project module will be able to:

- manage and solve a variety of tasks related to service design within a private or a public organization

With respect to Problem-Based Learning students will be able to:

- participate in, and independently carry out, technological development and research, and apply scientific methods in solving complex problems
- plan, execute and manage complex research and/or development tasks, and assume a professional responsibility for independently carrying out, potentially cross-disciplinary, collaborations
- independently assume responsibility for own scientific development

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	Project-Oriented Study in an External Organisation
Type of exam	Oral exam based on a project
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	Projektorienteret forløb i en virksomhed
Module code	MSNSSDM3231
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	25
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design

THEORETICAL ELABORATION OF A TOPIC OR A CASE 2023/2024

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 relevant knowledge to analyse, define and frame a relevant subject for investigation and research within the area of design of product service systems
- knowledge of the various relevant theoretical positions and related methodologies pertaining to the chosen subject

With respect to Problem-Based Learning students will be able to:

- account for the scientific foundation, and scientific problem areas
- describe the state of the art of relevant research

SKILLS

Students who complete the project module will be able to:

- identify and frame research problems, taking into account the interdependency between type of knowledge wanted, the possible methods of investigation and type of data produced
- produce a project report according to norms of the area, apply the correct terminology, engage with relevant academic literature, communicate and discuss the research-based foundation, problem and results of the project orally, graphically and in writing in a coherent and effective manner

With respect to Problem-Based Learning students will be able to:

- master the scientific methods and general skills associated with the problem area
- produce a project report according to norms of the area, apply correct terminology, document extensive command over relevant literature, communicate and discuss the research-based foundation, problem and results of the project orally, graphically and in writing in a coherent manner
- critically evaluate the results of the project in relation to relevant literature and established scientific methods and models, evaluate and discuss the project's problem area in a relevant scientific context
- evaluate and discuss the project's potential for further development

COMPETENCES

Students who complete the project module will be able to:

- plan and carry out research of a chosen subject and to describe the chosen problem in a theoretical and methodological framework as well as to draw conclusions of own analysis of the results
- plan, execute and manage complex research and/or development tasks, and assume a professional responsibility for independently carrying out cross-disciplinary collaborations
- independently assume responsibility for own scientific development and specialization

With respect to Problem-Based Learning students will be able to:

- participate in, and independently carry out, technological development and research, and apply scientific methods in solving complex problems
- plan, execute and manage complex research and/or development tasks, and assume a professional responsibility for independently carrying out, potentially cross-disciplinary, collaborations

- independently assume responsibility for own scientific development

TYPE OF INSTRUCTION

See general description of the types of instruction described in § 17.

EXAM

EXAMS

Name of exam	Theoretical Elaboration of a Topic or a Case
Type of exam	Oral exam based on a project
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 en sag
Module code	MSNSSDM3232
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	25
Language of instruction	English
Location of the lecture	Campus Copenhagen
Responsible for the module	Madsen

ORGANISATION

Education owner	Master of Science (MSc) in Service Systems Design
Study Board	Study Board of Media Technology
Department	Department of Architecture, Design and Media Technology
Faculty	The Technical Faculty of IT and Design