AALBORG UNIVERSITET

STUDIEORDNINGEN FOR KANDIDATUDDANNELSEN I MEDIALOGI, 2014, AALBORG

CAND.SCIENT.
AALBORG

MODULER SOM INDGÅR I STUDIEORDNINGEN

INDHOLDSFORTEGNELSE

SENSING MEDIA - COMPUTER GRAPHICS

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

Investigate the chosen specialization from a formal perspective, with a focus on one or more of the following: 1) exploiting the possibilities and/or limitations offered by the perceptual system, 2) exploring the functioning of a particular cognitive process, 3) constructing an application or a part of an application in the chosen specialization, or 4) analyzing and evaluating the developed application demonstrating how it supports, relies on, or exploits specific modalities or features of the perceptual system.

Additionally, students are required to work according to a scientific method and to report results in scientific forms, such as papers and posters.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will gain the following qualifications:

- Must be able to understand the core elements in computer graphics in terms of 3D geometry modelling and representation, surface material properties, and illumination conditions and relevant models for these
- Must be able to understand the principles in real-time (accelerated) and/or non-real-time (ray traced) computer graphics
- Must be able to understand central issues relating to the human visual system (sensation, perception and cognition)

SKILLS

Students who complete the module will gain the following qualifications:

- Must be able to apply a graphics API such as OpenGL, a rendering package, or a game engine to design and implement a system which uses computer graphics as output modality

COMPETENCES

Students who complete the module will gain the following qualifications:

- Must be able to apply an understanding of the affordances and the limitations in the human visual system in the design of a computer graphics based solution, or in the evaluation of such a system
- Must be able to synthesize relevant computer graphics theory, techniques and tools to produce new knowledge and/or solutions

- Must be able to communicate, discuss and evaluate research-based knowledge in the area of 3D computer graphics in the formats of a scientific paper and a poster, and in the format of a 15 minute conference presentation

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work

EXAM

EXAMS

Name of exam	Sensing Media - Computer Graphics
Type of exam	Oral exam based on a project In accordance with the current Joint Programme Regulations and directions on examination from the Study Board for Media Technology: Oral exam with an internal censor based on a scientific paper written in English and a mediatechnological product, an AVproduction illustrating and summarizing the project, a poster in English, and edited worksheets/portfolio documenting project details. The assessment is performed in accordance with the 7-point grading scale.
ECTS	15
Permitted aids	With certain aids: See semester description
Assessment	7-point grading scale
Type of grading	Internal examination

FACTS ABOUT THE MODULE

Danish title	Sansning af medier - computergrafik
Module code	MSNMEDM1142
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MULTIVARIATE STATISTICS AND PATTERN RECOGNITION

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

When designing and developing interactive media systems and technology, one is often faced with looking for interesting patterns and trends in data of several dimensions, what is called 'multivariatedata.' This course presents theoretical concepts and practical tools for analyzing multivariate data and designing pattern recognition methods for multimedia applications. Many of these methods are used in, e.g., automatic speech recognition, face detection, web page ranking, etc. The course includes the following topics: multivariate probability density functions, Bayesian estimation and detection, Gaussian model, parameter estimation, assessment of classifiers and estimators, data fitting, supervised and unsupervised learning, parametric and non-parametric learning, feature selection and reduction, and clustering.

LEARNING OBJECTIVES

KNOWLEDGE

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

- Understand multivariate statistics and describe how to model multivariate data, e.g., using probabilistic and parametric descriptions
- Understand Bayesian classification
- Understand supervised and non-supervised learning methods, e.g., k-means clustering, principal component analysis, nearest neighbor
- Understand features and the process of feature extraction from data

SKILLS

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

- Choose, implement and apply pattern recognition tools to solve classification problems, e.g., footstep detection from accelerometers, recognition of single spoken digits
- Apply knowledge to compare classification methods in terms of performance and complexity
- Apply theory of multivariate statistics and analyse multimedia data, e.g., speech and music, images of faces, etc.

COMPETENCES

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

- Analyse a problem in your field in the context of multivariate statistics and pattern recognition, and reflect on a variety of possibilities to recommend a solution
- Analyse features for this problem
- Implement and evaluate a classifier for this problem, and discuss and generalize the results

TYPE OF INSTRUCTION

Refer to the overview of instruction types listed in the start of chapter 3. The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Multivariate Statistics and Pattern Recognition
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Multivariat statistik og mønstergenkendelse
Module code	MSNMEDM1145
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

Study Board	Study Board of Media Technology

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

MULTIMODAL PERCEPTION AND COGNITION

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:
In interactive-immersive systems that rely on digital technology, human interactivity and responsiveness are directly linked to the processes of human perception and cognition.

This course introduces current research trends and emerging paradigms on the relation between digital technologies and multi-modal perception and cognition. Particular emphasis is put on multimodal
perception processes that are usually involved in interactive digital media (e.g., visual, auditory, haptic, proprioception) and higher cognitive processes related to interactivity (e.g. multimodal integration, enaction, intelligibility, cognitive closure, affective states and emotions,

spatial cognition and navigation).

The course draws relevant knowledge from a variety of disciplines and fields such as cognitive neuroscience, ecological psychology, biology, cognitive ergonomics and cognitive technologies. Different bio-behavioral and biofeedback methods for interaction design and assessment are also introduced (e.g. EEG, EMG, ECG, galvanic skin response, ocular measures) and new trends in integration of interactive digital technologies with cognitive processes are addressed (e.g. multimodal interfaces and set-ups, brain-computer-interfaces, enactive interfaces). Finally, the course provides the opportunity for targeting the knowledge provided towards the specialization profile chosen by the student (Computer graphics, Interaction, Games).

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Understanding of the main paradigms, concepts and disciplines that contribute to multimodal perception research and cognition studies and which have relevance for the interaction of human subjects with immersive-interactive systems
- Knowledge about the potentialities and limits that the human “perceptual apparatus” and the cognitive system present for the technology designer
- Understanding of the relations between multimodal perception, higher cognitive functions, affective states and action

SKILLS

Students who complete the module will obtain the following qualifications:

- Ability to apply knowledge on human multimodal perception and cognition in the design of interactive digital systems
- Ability to apply knowledge to the design perception and cognition tests related to the crossmodal action of two or more senses
- Be able to apply biofeedback and bio-behavioral measurements in experimental designs

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Ability to synthesize knowledge and theoretical frameworks from a variety of relevant sources and disciplines, which contribute to the study of technology -cognition interaction
- Be able to synthesize such knowledge in the design of multimodal interactive systems
- Ability to analyse and interpret experimental work and literature in the field

EXAM

EXAMS

Name of exam	Multimodal Perception and Cognition
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written examination with internal censor. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Multimodal perception og kognition
Module code	MSNMEDM1146
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MEDIATING REALITY - COMPUTER GRAPHICS

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

1st semester or similar

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Explore the chosen specialisation from a formal perspective with a focus on exploring the relationships between real and artificially generated stimuli. Develop and evaluate an application in the chosen specialisation investigating this issue in terms of either: 1) emulating reality, 2) enhancing reality or virtuality, or 3) transforming reality into novel forms of expression and aesthetics.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to **understand** core elements in computer graphics in terms of fundamental radiometric/photometric concepts, and advanced modelling and animation techniques
- Must be able to **understand** principles of modelling and animation of 3D computer graphics content
- Must be able to **understand** how some of the models applied in computer graphics relate to the real physical world

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to **apply** computer graphics related concepts, tools, and technologies to create products with a conscious and purposive relation to applicable concepts and phenomena of the real world

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to **evaluate** and select relevant computer graphics theories, methods, and tools, and synthesize them to produce new knowledge and solutions

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

EXAM

EXAMS

Name of exam	Mediating Reality - Computer Graphics
Type of exam	Oral exam based on a project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral examination with external censor based on a written project report and a media-technological product plus an A/V production that illustrates and summarizes the project.

	The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Mediering af virkeligheden - computergrafik
Module code	MSNMCGM2141
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

FOUNDATIONS IN MEDIALOGY

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

1st semester or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:
The goal of this course is to provide the foundations necessary to perform advanced work in the student-selected specialization in the 9th and 10th semesters. Students explore state of the art theories and techniques in a formalized manner by analyzing a selection of research textsfundamental to thespecialization through, e.g.,critical annotations, paper presentations, reproduction of experiments, etc.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to understand theories and principles related to the chosen specialization.

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to analyse research topics in the chosen specialization
- Must be able to analyse research papers related to the chosen specialization
- Must be able to apply concepts, tools, theories and technologies of the chosen specialization to address a specific research problem

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to critically evaluate the developed application, and explain its relevance in science and society

TYPE OF INSTRUCTION

Refer to the overview of instruction types listed in the start of chapter 3. The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Foundations in Medialogy

Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Foundations in Medialogy
Module code	MSNMEDM2142
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MEDIA INNOVATION - COMPUTER GRAPHICS

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

2nd semester or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

Develop and evaluate a novel system that uses concepts and technologies in the chosen specialisation with a focus on exploring 1) its commercial aspects, and/or 2) its socio-cultural implications, and/or 3) its use in generating scientific knowledge.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to understand core state-of-the-art concepts, theories, techniques and methodologies relating to the sub-area of computer graphics that has been applied in the project
- Must be able to synthesize relevant concepts in media commercialization and innovation

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to apply market and trend analysis methods to a media product or production with computer generated imagery content
- Must be able to apply computer graphics related tools and technologies to create products that are viable from a commercial, socio-cultural, and/or scientific perspective

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to evaluate and select relevant computer graphics theories, methods, and tools, with the specific aim of working towards creating new products, commercially viable products, or new knowledge

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

EXAM

EXAMS

Name of exam	Media Innovation - Computer Graphics

Type of exam	Oral exam based on a project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral examination with internal censor based on a written project report and a media-technological product plus an A/V-production that illustrates and summarizes the project. The assessment is performed in accordance with the 7-point grading scale.
ECTS	20
Permitted aids	With certain aids: See semester description
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Medie-innovation - computergrafik
Module code	MSNMCGM3141
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	20
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

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

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

All previous semesters (projects and course-modules) must have been passed (1st to 3rd semester)

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

To document that the student, independently or in a small group, is capable of planning and completing a major research project in the chosen specialization. The final thesis must document the student's ability to apply scientific theories and methods, critically analyse existing work, and synthesize new knowledge.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must have knowledge and **understanding** in one or more subject areas that are representative of the state of the art in the research community of the chosen specialization
- Can understand and, on a scientific basis, **apply** an area of the chosen specialization and identify scientific problems

SKILLS

Students who complete the module will obtain the following qualifications:

- **Synthesize** scientific methods and tools and general skills related to the chosen specialization
- Can **evaluate** and select among scientific theories, methods, tools and general skills and, on a scientific basis, advance new analyses and solutions in the chosen specialization
- Can **synthesize** research-based knowledge and discuss professional and scientific problems with both peers and non-specialists

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Can **synthesize** work and development situations that are complex, unpredictable and require new solutions
- Can **apply** acquired knowledge to independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility
- Can independently **synthesize** and take responsibility for own professional development and specialisation

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

The project is carried out individually or in small groups of a maximum of three students. At least one internal supervisor is assigned, who deals with the primary area of the project in his or her research.

EXAM

EXAMS

Name of exam	Master's Thesis

Type of exam	Master's thesis/final project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Individual oral examination with external censor based on a written project report and a media-technological product plus an A/V-production illustrating and summarizing the project. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions

FACTS ABOUT THE MODULE

Danish title	Kandidatspeciale
Module code	MSNMCGM4141
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	30
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

SENSING MEDIA - GAMES

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

Investigate the chosen specialization from a formal perspective, with a focus on one or more of the following: 1) exploiting the possibilities and/or limitations offered by the perceptual system, 2) exploring the functioning of a particular cognitive process, 3) constructing an application or a part of an application in the chosen specialization, or 4) analyzing and evaluating the developed application demonstrating how it supports, relies on, or exploits specific modalities or features of the perceptual system.

Additionally, students are required to work according to a scientific method and to report results in scientific forms, such as papers and posters.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will gain the following qualifications:

- Must be able to understand game design principles
- Must be able to understand central issues related to the human perceptual system (including sensation, perception and cognition)

SKILLS

Students who complete the module will gain the following qualifications:

- Must be able to measure, analyse, and evaluate the user experience in games or play

COMPETENCES

Students who complete the module will gain the following qualifications:

- Must be able to apply an understanding of the possibilities and limitations of the human perceptual system to the evaluation of a game or playware
- Must be able to communicate, discuss, and evaluate research-based knowledge in the area of games and playware in the formats of a scientific paper and a poster, and in the format of a 15 minute conference presentation

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work

EXAM

EXAMS

Name of exam	Sensing Media - Games

Type of exam	Oral exam based on a project In accordance with the current Joint Programme Regulations and directions on examination from the Study Board for Media Technology: Oral exam with an internal censor based on a scientific paper written in English and a media-technological product, an AVproduction illustrating and summarizing the project, a poster in English, and edited worksheets/portfolio documenting project details. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Sansning af medier - spil
Module code	MSNMEDM1141
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MEDIATING REALITY - GAMES

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

1st semester or similar

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:
Explore the chosen specialisation from a formal perspective with a focus on exploring the relationships between real and artificially generated stimuli. Develop and evaluate an application in the chosen specialisation investigating this issue in terms of either: 1) emulating reality, 2) enhancing reality or virtuality, or 3) transforming reality into novel forms of expression and aesthetics.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to understand game development and the evaluation of user experience in games
- Must be able to understand and compare game design theories, principles and methods

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to analyse games, gameplay, and game mechanics according to game design theories
- Must be able to apply game design theories, principles and methods to design new games and interactive entertainment

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to analyse and plan new game-related development projects by applying knowledge about game design and game development

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

EXAM

EXAMS

Name of exam	Mediating Reality - Games
Type of exam	Oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral examination with external censor based on a written project report and a media-technological product plus an A/V production that illustrates and summarizes the project. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Mediering af virkeligheden - spil
Module code	MSNMGAM2141
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MEDIA INNOVATION - GAMES

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

2nd semester or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

Develop and evaluate a novel system that uses concepts and technologies in the chosen specialisation with a focus on exploring 1) its commercial aspects, and/or 2) its socio-cultural implications, and/or 3) its use in generating scientific knowledge.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to understand game design theories, principles, and methods that have been applied in the project
- Must be able to synthesize relevant concepts in media commercialization and innovation

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to apply market and trend analysis methods to a media product or production with game elements
- Must be able to apply game-related tools and technologies to create products that are viable from a commercial, socio-cultural, and/or scientific perspective

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to evaluate and select relevant game design theories, methods, and tools, with the specific aim of working towards creating new products, commercially viable products, or new knowledge

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

EXAM

EXAMS

Name of exam	Media Innovation - Games
Type of exam	Oral exam based on a project

	In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral examination with internal censor based on a written project report and a media-technological product plus an A/V-production that illustrates and summarizes the project. The assessment is performed in accordance with the 7-point grading scale.
ECTS	20
Permitted aids	With certain aids: See semester description
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Medie-innovation - spil
Module code	MSNMGAM3141
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	20
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

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

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

All previous semesters (projects and course-modules) must have been passed (1st to 3rd semester)

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

To document that the student, independently or in a small group, is capable of planning and completing a major research project in the chosen specialization. The final thesis must document the student's ability to apply scientific theories and methods, critically analyse existing work, and synthesize new knowledge.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must have knowledge and **understanding** in one or more subject areas that are representative of the state of the art in the research community of the chosen specialization
- Can understand and, on a scientific basis, **apply** an area of the chosen specialization and identify scientific problems

SKILLS

Students who complete the module will obtain the following qualifications:

- **Synthesize** scientific methods and tools and general skills related to the chosen specialization
- Can **evaluate** and select among scientific theories, methods, tools and general skills and, on a scientific basis, advance new analyses and solutions in the chosen specialization
- Can **synthesize** research-based knowledge and discuss professional and scientific problems with both peers and non-specialists

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Can **synthesize** work and development situations that are complex, unpredictable and require new solutions
- Can **apply** acquired knowledge to independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility
- Can independently **synthesize** and take responsibility for own professional development and specialisation

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

The project is carried out individually or in small groups of a maximum of three students. At least one internal supervisor is assigned, who deals with the primary area of the project in his or her research.

EXAM

EXAMS

Name of exam	Master's Thesis

Type of exam	Master's thesis/final project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Individual oral examination with external censor based on a written project report and a media-technological product plus an A/V-production illustrating and summarizing the project. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions

FACTS ABOUT THE MODULE

Danish title	Kandidatspeciale
Module code	MSNMGAM4141
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	30
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

SENSING MEDIA - INTERACTION

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

Investigate the chosen specialisation from a formal perspective, with a focus on one or more of the following: 1) exploiting the possibilities and/or limitations offered by the perceptual system, 2) exploring the functioning of a particular cognitive process, 3) constructing an application or a part of an application in the chosen specialisation, or 4) analyzing and evaluating the developed application demonstrating how it supports, relies on, or exploits specific modalities or features of the perceptual system.

Additionally, students are required to work according to a scientific method and to report results in scientific forms, such as papers and posters.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will gain the following qualifications:

- Must be able to understand the core elements in human centred interaction, such as design methodologies, multimodal input recognition and interpretation, multimodal output generation and synchronisation, etc.
- Must be able to understand and distinguish participatory and ethnographic design approaches
- Must be able to understand and distinguish between methods for assessing the quality of a design solution
- Must be able to analyse central issues relating to human perception and cognition and their relevance for interaction design

SKILLS

Students who complete the module will gain the following qualifications:

- Must be able to analyse and compare the state of the art in human centred interaction design
- Must be able to apply participatory or ethnographic design approaches
- Must be able to apply scientific methods for assessing the quality of their design solution
- Must be able to synthesize an interactive system based on a design solution
- Must be able to anlyse the feasibility of the proposed solution in terms of cost/benefit and social impact

COMPETENCES

Students who complete the module will gain the following qualifications:

- Must be able to analyse a real world problem, design a solution and translate it into a human centred interactive system
- Must be able to compare and analyse the potential of different technologies, methods, and approaches in order to make the proper design choices for optimal functionality
- Must be able to analyse the ethical perspective of human centred systems
- Must be able to analyse research-based knowledge in the area of interaction design in the formats of a scientific paper and a poster as well as a 15 minute conference presentation

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work

EXAM

EXAMS

Name of exam	Sensing Media - Interaction
Type of exam	Oral exam based on a project In accordance with the current Joint Programme Regulations and directions on examination from the Study Board for Media Technology: Oral exam with an internal censor based on a scientific paper written in English and a mediatechnological product, an AVproduction illustrating and summarizing the project, a poster in English, and edited worksheets/portfolio documenting project details. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Sansning af medier - interaktion
Module code	MSNMEDM1143
Module type	Project

Duration	1 semester
Semester	Autumn
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MEDIATING REALITY - INTERACTION

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

1st semester or similar

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Explore the chosen specialisation from a formal perspective with a focus on exploring the relationships between real and artificially generated stimuli. Develop and evaluate an application in the chosen specialisation investigating this issue in terms of either: 1) emulating reality, 2) enhancing reality or virtuality, or 3) transforming reality into novel forms of expression and aesthetics.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to **understand**, describe and distinguish between core elements in sensor technology and mapping of information
- Must be able to **understand** parameters for technology mediated interaction and interactions in public social environments
- Must be able to **understand** fundamentals of embodied interaction and physical interface design

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to **analyse** and compare the state of the art in tangible and embodied interaction
- Must be able to **apply** scientific methods for assessing the quality of their solution
- Must be able to **apply** knowledge to the design and implement spatial interactive installations and embodied and/or interactive artifacts
- Must be able to **synthesize** state of the art sensor technologies
- Must be able to **evaluate** the feasibility of their solution in terms of cost/benefit and social impact

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to compare, select and **analyse** relevant sensor technologies
- Must be able to evaluate and **apply** signal processing methods
- Must be able to **synthesize** knowledge in various forms of scientific documentation
- Must be able to **evaluate** ethical consideration of applying advanced sensor technologies

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

EXAM

EXAMS

Name of exam	Mediating Reality - Interaction
Type of exam	Oral exam based on a project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral examination with external censor based on a written project report and a media-technological product plus an A/V production that illustrates and summarizes the project. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Mediering af virkeligheden - interaktion
Module code	MSNMINM2141
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MEDIA INNOVATION - INTERACTION

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

2nd semester or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

Develop and evaluate a novel system that uses concepts and technologies in the chosen specialisation with a focus on exploring 1) its commercial aspects, and/or 2) its socio-cultural implications, and/or 3) its use in generating scientific knowledge.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to understand core state-of-the-art concepts, theories, techniques and methodologies relating to the sub-area of interaction design that has been applied in the project
- Must be able to synthesize relevant concepts in media commercialization and innovation

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to apply market and trend analysis methods to a media product or production involving advanced interaction design
- Must be able to apply interaction design methods and technologies to create products that are viable from a commercial, socio-cultural, and/or scientific perspective

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to evaluate and select relevant theories, methods, and tools, with the specific aim of working towards creating new products, commercially viable products, or new knowledge

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

EXAM

EXAMS

Name of exam	Media Innovation - Interaction

Type of exam	Oral exam based on a project In accordance with the current Framework Provisions and directions on examination from the Study Board for Medi Technology: Oral examination with internal censor based on a written project report and a media-technological product plus an A/V-production that illustrates and summarizes the project. The assessment is performed in with the 7-point grading scale.
ECTS	20
Permitted aids	With certain aids: See semester description
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Medie-innovation - interaktion
Module code	MSNMINM3141
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	20
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

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

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

All previous semesters (projects and course-modules) must have been passed (1st to 3rd semester)

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

To document that the student, independently or in a small group, is capable of planning and completing a major research project in the chosen specialization. The final thesis must document the student's ability to apply scientific theories and methods, critically analyse existing work, and synthesize new knowledge.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must have knowledge and **understanding** in one or more subject areas that are representative of the state of the art in the research community of the chosen specialization
- Can understand and, on a scientific basis, **apply** an area of the chosen specialization and identify scientific problems

SKILLS

Students who complete the module will obtain the following qualifications:

- **Synthesize** scientific methods and tools and general skills related to the chosen specialization
- Can **evaluate** and select among scientific theories, methods, tools and general skills and, on a scientific basis, advance new analyses and solutions in the chosen specialization
- Can **synthesize** research-based knowledge and discuss professional and scientific problems with both peers and non-specialists

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Can **synthesize** work and development situations that are complex, unpredictable and require new solutions
- Can **apply** acquired knowledge to independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility
- Can independently **synthesize** and take responsibility for own professional development and specialisation

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

The project is carried out individually or in small groups of a maximum of three students. At least one internal supervisor is assigned, who deals with the primary area of the project in his or her research.

EXAM

EXAMS

Name of exam	Master's Thesis

Type of exam	Master's thesis/final project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Individual oral examination with external censor based on a written project report and a media-technological product plus an A/V-production illustrating and summarizing the project. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions

FACTS ABOUT THE MODULE

Danish title	Kandidatspeciale
Module code	MSNMINM4141
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	30
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

SENSING MEDIA

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

Investigate the chosen specialisation from a formal perspective, with a focus on one or more of the following: 1) exploiting the possibilities and/or limitations offered by the perceptual system, 2) exploring the functioning of a particular cognitive process, 3) constructing an application or a part of an application in the chosen specialisation, or 4) analyzing and evaluating the developed application demonstrating how it supports, relies on, or exploits specific modalities or features of the perceptual system.

Additionally, students are required to work according to a scientific method and to report results in scientific forms, such as papers and posters.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will gain the following qualifications:

- Must be able to understand the core elements in technology integration and media convergence in interactive multimodal systems in terms of hardware, software, electronics, networking, wired and wireless possibilities
- Must be able to apply the principles for creating, coding, manipulating and/or combining digital contents in different modalities
- Must be able to understand methods for assessing the different means by which a user might interact with content to create novel and engaging experiences
- Must be able to apply central issues relating to human perception and cognition in the interaction with content in multimodal systems

SKILLS

Students who complete the module will gain the following qualifications:

- Must be able to synthesize different technological components into a unified working multimodal system that accomplishes a specific function
- Must be able to design, create and synthesize content in multimodal systems
- Must be able to apply scientific methods for assessing experience and human response to content in a particular multimodal interactive system

COMPETENCES

Students who complete the module will gain the following qualifications:

- Must be able to methodically identify and analyse state of the art technology and trends
- Must be able to synthesize emerging technologies into innovative systems
- Must able to plan, design and synthesize content with a clearly defined objective and with a specific or coherent function
- Must be able to analyse the social and cultural implications of the integrated system and the content mediated

EXAM

EXAMS

Name of exam	Sensing Media
Type of exam	Oral exam based on a project In accordance with the current Joint Programme Regulations and directions on examination from the Study Board for Media Technology: Oral exam with an internal censor based on a scientific paper written in English and a mediatechnological product, an AVproduction illustrating and summarizing the project, a poster in English, and edited worksheets/portfolio documenting project details. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Sansning af medier
Module code	MSNMEDM1144
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MEDIATING REALITY

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

1st semester or similar

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Explore the chosen specialisation from a formal perspective with a focus on exploring the relationships between real and artificially generated stimuli. Develop and evaluate an application in the chosen specialisation investigating this issue in terms of either: 1) emulating reality, 2) enhancing reality or virtuality, or 3) transforming reality into novel forms of expression and aesthetics.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to **understand** core elements in current and emerging immersive-interactive technology systems (e.g., mobile devices and platforms, augmented reality, game consoles, affective computing, multimodal systems, virtual reality, ambient intelligence, etc.)
- Must be able to **analyse** the principles and challenges behind the design and integration of such systems
- Must be able to **understand** how to produce and/or implement digital content and assets in such systems
- Must be able to **understand** on the concepts behind virtuality (i.e.: mixed, augmented, virtual, simulated and fictional worlds) in the process of delivering content in such systems and platforms

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to **synthesize** emerging paradigms, concepts, theories, tools, and technologies to create products with a conscious and purposive relation to applicable concepts and phenomena of the real world

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to **evaluate** and select relevant strategies, methods and theories for integrating immersive-interactive systems and synthesize them to produce new knowledge and solutions
- Must be able to **synthesize** considerations of sustainability, social responsibility and ethical dimensions in the design of such systems

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

EXAM

EXAMS

Name of exam	Mediating Reality
Type of exam	Oral exam based on a project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral examination with external censor based on a written project report and a media-technological product plus an A/V production that illustrates and summarizes the 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Mediering af virkeligheden
Module code	MSNMWSM2141
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	15
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MEDIA INNOVATION - MEDIALOGY

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

2nd semester or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

Develop and evaluate a novel system that uses concepts and technologies in the chosen specialisation with a focus on exploring 1) its commercial aspects, and/or 2) its socio-cultural implications, and/or 3) its use in generating scientific knowledge.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to understand core state-of-the-art concepts, theories, techniques and methodologies relating to the particular technologies integrated in the system and the overall strategy and rationale for their integration
- Must be able to synthesize relevant concepts in media commercialization and innovation, as well as relevant considerations of the socio-cultural implications of new media systems

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to apply market and trend analysis methods to a convergent media integrated product or production which includes multimodal digital content
- Must be able to apply tools and technologies to create products, processes and systems that are viable and of interest from a commercial, socio-cultural, and/or scientific perspective

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to evaluate and integrate different technological components, theories and tools into a unified system or product that can lead to commercial applications or to the generation of knowledge
- Must be able to analyse and incorporate considerations of sustainability, social responsibility and ethical dimensions in the design of such systems

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

EXAM

EXAMS

Name of exam	Media Innovation - Medialogy
Type of exam	Oral exam based on a project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral examination with internal censor based on a written project report and a media-technological product plus an A/V-production that illustrates and summarizes the project. The assessment is performed in accordance with the 7-point grading scale.
ECTS	20
Permitted aids	With certain aids: See semester description
Assessment	7-point grading scale
Type of grading	Internal examination
Criteria of assessment	The criteria for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Medie-innovation
Module code	MSNMWSM3141
Module type	Project
Duration	1 semester
Semester	Autumn
ECTS	20
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

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

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

All previous semesters (projects and course-modules) must have been passed (1st to 3rd semester)

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

To document that the student, independently or in a small group, is capable of planning and completing a major research project in the chosen specialization. The final thesis must document the student's ability to apply scientific theories and methods, critically analyse existing work, and synthesize new knowledge.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must have knowledge and **understanding** in one or more subject areas that are representative of the state of the art in the research community of the chosen specialization
- Can understand and, on a scientific basis, **apply** an area of the chosen specialization and identify scientific problems

SKILLS

Students who complete the module will obtain the following qualifications:

- **Synthesize** scientific methods and tools and general skills related to the chosen specialization
- Can **evaluate** and select among scientific theories, methods, tools and general skills and, on a scientific basis, advance new analyses and solutions in the chosen specialization
- Can **synthesize** research-based knowledge and discuss professional and scientific problems with both peers and non-specialists

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Can **synthesize** work and development situations that are complex, unpredictable and require new solutions
- Can **apply** acquired knowledge to independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility
- Can independently **synthesize** and take responsibility for own professional development and specialisation

TYPE OF INSTRUCTION

Academically supervised student-governed problem oriented project work.

The project is carried out individually or in small groups of a maximum of three students. At least one internal supervisor is assigned, who deals with the primary area of the project in his or her research.

EXAM

EXAMS

Name of exam	Master's Thesis

Type of exam	Master's thesis/final project In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Individual oral examination with external censor based on a written project report and a media-technological product plus an A/V-production illustrating and summarizing the project. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions

FACTS ABOUT THE MODULE

Danish title	Kandidatspeciale
Module code	MSNMWSM4141
Module type	Project
Duration	1 semester
Semester	Spring
ECTS	30
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

ADVANCED A/V PRODUCTION

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Understanding of concept- and iterative format development
- Understanding the dramatic premise as the basis of the three-act paradigm
- Understanding of the elements of propulsion within fiction: conflicts, obstacles, complications, expectations, foretellings, tests, timelimits, suspense, surprise, and changes
- Understanding of the elements of propulsion within entertainment formats: competition, assignment, challenge, randomizer, the vote and the unexpected visitor
- Understanding of AV-production management concepts and tools – and the application of such
- Understanding and application of various advanced lighting setups including greenscreen lighting
- Understanding the effects of combining multicam and singlecam within fictional and factual programming

SKILLS

Students who complete the module will obtain the following qualifications:

- Ability to analyse and methodically produce and analyse productions that feature more than one shot shown simultaneously
- Ability to analyse and choose the means of expression that manage the audience's perception in multishot productions
- Ability to analyse and edit factual material and combine it with fictioncodes
- Ability to discuss and analyse three different editing methods: the formalists' five methods of montage, the valuebased Rule of Six and the Kuleshov effect
- Ability to analyse advanced lighting set-ups combining hard light, soft light and eye light
- Ability to analyse and methodically produce using POV and POA
- Ability to analyse methodical uses of long takes
- Ability to analyse and methodically produce greenscreen shots on pre-produced material

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to apply the general framework of advanced A/V-production in new contexts.This includes choosing the relevant methods and the ability to evaluate the output
- Must be able to synthesize the different means of expression and understand the resulting effect they have on the audio-visual entity

TYPE OF INSTRUCTION

Refer to the overview of instruction types listed in the start of chapter 3. The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Advanced A/V Production
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: To be eligible to take the exam the student must have fulfilled: · handing in of written assignments or the like · completion of certain – or all – study activities Note that if admittance to the exam or parts of the assessment is to be based on written work or exercises, a deadline is stipulated for when the work must be handed in. If the student hands in a paper/exercises after the deadline, the student has used an examination attempt. The exam: Oral or written examination with internal censor. The assessment is performed with the Pass/Non-Pass grade.
ECTS	5
Permitted aids	With certain aids: See semester description
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	The criteria for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Avanceret A/V-produktion
Module code	MSNMEDM1147
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

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 MULTI-MODAL INTERACTION

2018/2019

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

This course trains students to research, analyze, prototype, and conceptualize 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 usability lab testing. The course introduces students to the application of multi modal methods and interaction design within contemporary fields such as, for example, surface computing, pervasive computing, social and mobile computing, and/or mundane computing.

The objectives are realized by presenting methods and tools in a case based framework and through the students' active participation in workshops and assignments.

LEARNING OBJECTIVES

KNOWLEDGE

- Must have knowledge about system design methods including the social and cultural contexts of use

- Must have knowledge of ethnographic study methods for user behaviour research
- Must have knowledge about qualitative research methods involving end users in the field, such as interview techniques, analysis and experience sampling
- Must have knowledge about scenario-based design methods
- Must have knowledge about principles for multi modal interaction design

SKILLS

- Must be able to apply the taught methods to solve concrete design problems.
- Must be able to evaluate and compare and apply the methods for a specific design problem
- Must be able to facilitate the design process involving users in real-life contexts

COMPETENCES

- Students will acquire the competencies to decide how to choose the appropriate method to suit different dimensions of a design problem at different stages in the process and the pitfalls of each approach
- Must have competencies in understanding the strengths and weaknesses of the methods
- Must have the competencies to facilitate the design process involving users in context

TYPE OF INSTRUCTION

As described in the introduction to Chapter 3.

EXAM

EXAMS

Name of exam	User Experience Design for Multi Modal Interaction
Type of exam	Written or oral exam
ECTS	5

Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	As stated in the Joint Programme Regulations http://www.en.tech.aau.dk/education-programmes/Education+and+Programmes/

FACTS ABOUT THE MODULE

Danish title	Design af brugeroplevelsen for multi-modal interaktion
Module code	ESNVGISK1K2C
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Esbjerg, Campus Copenhagen
Responsible for the module	Ove Kjeld Andersen

ORGANISATION

Study Board	Study Board of Electronics and IT, Study Board of Media Technology
Department	Department of Electronic Systems
Faculty	Technical Faculty of IT and Design

PROTOTYPING AND FABRICATION TECHNIQUES

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:
In order to be part of a leading design team, it is essential to be able to develop and communicate new interaction design concepts for the implementation and production of future electronic devices. The course rationale is that students need to have an understanding of physical interaction design processes, where ideas are formed, developed and tested in proof-of-concept models that can be demonstrated to others via video, poster presentations, and working prototypes. The focus is on understanding and applying design and development strategies needed to move from concept to working prototype, with the most recent tools and techniques for producing new forms, input/output

from computers and embedded systems, and interactive systems and devices. The course incorporates advanced fabrication techniques; students should be able to build a prototype for any concept they can imagine. By incorporating computer-assisted industrial and electronic design techniques, knowledge about specific design tools and procedures is gained. In order to be able to apply this knowledge, a thorough understanding of the many underlying concepts is required.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- The student must have knowledge about various approaches to Concept Design methodologies
- The student must have knowledge about standard methods and techniques for prototyping of new devices and systems
- The student must be able to understand the relationship between concept development and implementation/fabrication, specifically regarding research-based prototyping techniques

SKILLS

Students who complete the module will obtain the following qualifications:

- The student must be able to apply concept design methods and prototyping techniques to real world scenarios involving fabrication of objects or systems with intended functionalities (e.g. responsive environments, interactive games, robots, musical interfaces, public
  installations, etc.). Specific skills to be gained by the student may include many of the following:

- Knowledge of concept development techniques
- Knowledge of modelling and design tools
- Knowledge of rapid prototyping techniques
- Understanding advanced microcontroller programming
- Understanding sensors, actuators, and displays
- Understanding wired and wireless communication protocols
- Understanding 3D input devices and haptics
- Understanding iterative development (redesign/polish of product)
- Understanding circuit design (schematic to printed circuit board)
- Understanding Field Programmable Gate Arrays

COMPETENCES

Students who complete the module will obtain the following qualifications:

- The student must be able to analyse a problem, design a solution and translate it into a rapid prototyping design
- The student must be able to analyse his/her solutions in order to compare and assess the potential of different concept design methods and prototyping techniques, iteratively making the proper design choices
- The student must be able to synthesize results and concepts in a professional way equivalent to practices in both academic and industrial contexts

TYPE OF INSTRUCTION

The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Prototyping and Fabrication Techniques
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written examination with internal censor. The assessment is performed with the Pass/Non-Pass grade.
ECTS	5
Permitted aids	With certain aids: See semester description
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	Are stated in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Prototyping og fremstillingsteknikker
Module code	MSNMEDM1149
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MULTIMEDIA PROGRAMMING

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

1st semester or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

The goal of this course is to strengthen a student's capacity to participate in software development. This puts the student in a position to take advantage of a significant amount of prior work by integrating a variety of software libraries on a variety of platforms.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Understand advanced topics of software development relevant to the design and implementation of multimedia software applications, e.g., software design patterns, multithreaded programming, real-time programming, advanced UML, GPU programming, programming mobile devices and other embedded systems, network programming, graphics, VR and AR programming

SKILLS

Students who complete the module will obtain the following qualifications:

- ability to apply a variety of intermediate and advanced software technologies, techniques and methods in the construction of effective and efficient multimedia software applications

COMPETENCES

Students who complete the module will obtain the following qualifications:

- ability to analyse multimedia software engineering problems and select, apply and evaluate appropriate technologies in developing successful solutions
- ability to synthesize advanced concepts in multimedia programming and software engineering

TYPE OF INSTRUCTION

Refer to the overview of instruction types listed in the start of chapter 3. The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Multimedia Programming
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination

	from the Study Board for Media Technology: Oral or written examination with internal censor. The assessment is performed with the Pass/Non-Pass grade.
ECTS	5
Permitted aids	With certain aids: See semester description
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	The criteria for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Multimedieprogrammering
Module code	MSNMEDM2143
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

MODELLING PHYSICAL SYSTEMS

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

The module gives an in-depth introduction to modelling of physical systems and the analogies between dynamics systems such as mechanical, hydraulic, electronic, and acoustic systems.

Constructing and modelling physical systems requires an understanding of basic kinematics and kinetics. In turn, models of dynamic systems have analogies that can be described by the same underlying mathematics. Students who complete this module will understand the basics of mechatronic systems and the analogy between various dynamic systems.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must have knowledge about the kinematics of particles
- Must have knowledge about the kinetics of particles
- Must be able to understand the analogy between various dynamic systems, i.e. electronic,mechanical and hydraulic systems
- Must be able to understand how to model the kinematics and kinetics of simple mechanical systems

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to apply knowledge to the creation of free body diagrams of dynamic systems
- Must be able to understand how to calculate and model forces of dynamic systems
- Must be able to select and apply methods for modelling the analogy between various dynamic systems i.e. electronic, mechanical and hydraulic systems

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to understand how to collaborate within teams designing, building and modelling physical artefacts
- Must be able to synthesize methods for modelling of physical systems and analogies between various dynamic systems such as electronic and hydraulic systems

TYPE OF INSTRUCTION

Refer to the overview of instruction types listed in the start of chapter 3. The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Modelling Physical Systems
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written examination with internal censor. The assessment is performed with the Pass/Non-Pass grade.
ECTS	5
Permitted aids	With certain aids: See semester description
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	The criteria for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Modellering af fysiske systemer
Module code	MSNMEDM2144
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

EMBODIED INTERACTION

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

The module focuses on intelligent systems with a strong focus on embodied interaction and current research trends in intelligent agent technology. Thus, the lectures consists of two parts: (i) Introduction to AI methodology and techniques, (ii) application in embodied interaction. The AI part will introduce standards for knowledge representation, search algorithms, decision making and learning as well as fundamentals of intelligent agents. In the second part these methods and techniques are applied in the area of embodied interaction focusing on affective computing, behaviour modelling, social interaction, interactive storytelling as well as cooperation and collaboration.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must have knowledge about standard methods and techniques in AI
- Must have knowledge about modelling intelligent behaviour in embodied interactions
- Must be able to understand the relationship between AI techniques and the design and implementation of intelligent embodied interactions

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to apply methods and techniques to real world scenarios (e.g., games, robots, public installations, etc.)

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to analyse a problem, design a solution and translate it into an intelligent embodied system
- Must be able to analyse, compare and assess the potential of different methods and techniques in order to make the proper design choices
- Must be able to synthesize results and concepts in a professional way equivalent to practices in AI and Embodied Interaction

TYPE OF INSTRUCTION

In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology:

To be eligible to take the exam the student must have fulfilled:

- handing in of written assignments or the like
- completion of certain – or all – study activities

Note that if admittance to the exam or parts of the assessment is to be based on written work or exercises, a deadline is stipulated for when the work must be handed in. If the student hands in papers/exercises after the deadline, the student has used an examination attempt.

EXAM

EXAMS

Name of exam	Embodied Interaction
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written examination with internal censor. The assessment is performed with the Pass/Non-Pass grade.
ECTS	5
Permitted aids	With certain aids: See semester description
Assessment	Passed/Not Passed
Type of grading	Internal examination
Criteria of assessment	The criteria for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Embodied interaction
Module code	MSNMEDM2145
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

NARRATIVES IN DIGITAL CULTURE

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

The digital revolution is having a great impact on cultural processes and society. Innovation runs at a high speed and there is a constant emergence of new paradigms and futuristic ideas for new developments and applications.

In this course students will have the opportunity to place their own work in the historical perspective of these developments, so they can effectively monitor and interpret current and future trends. Analytical tools are provided from a variety of disciplines in order to be on top of such rapid evolution in the field. Working with examples from, for instance, games, edutainment, performing arts, interactive storytelling, virtual reality, social media, and art installations, and by establishing comparisons with a wide range of media and art forms, students also learn how to work with, evaluate and design narrative structures as a key element for reconciling the interplay between immersion, engagement and interactivity in different creative applications.

Furthermore, the students also acquire knowledge on how to combine elements of persuasive communication and aesthetics in order to optimize the relation between content and convergent media technology. A final important objective of the course is to explore the dimensions of sustainability and social responsibility in interactive media technology.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Understanding of the advent of digital culture in contemporary society
- Knowledge about new emerging and innovative technological paradigms
- Understanding about the social implications and the cultural context of interactive media technology and familiarity with the main academic disciplines that study digital culture
- Understanding of the importance and design implications of narrative structures in different applications of immersive and interactive media
- Knowledge about new methodologies for non-lineal interactive narrative and immersive story-telling.
- Broad understanding of the concepts behind virtuality (i.e. virtual, simulated and fictional worlds)
- Knowledge about a sustainability and ethical perspective of digital culture
- Knowledge about the cultural and creative industries

SKILLS

Students who complete the module will obtain the following qualifications:

- Be able to synthesize knowledge from a variety of academic disciplines such as anthropology, cultural studies, cybernetics, semiotics and economics to comprehend the cultural and social processes that originate with the development and expansion of new interactive, immersive and representational digital media
- Ability to analyse technologies in order to predict new trends of technological convergence and engage in innovative design
- Be able to analyse the trade-offs between immersion and interactivity in new digital 40 systems as compared to other media and artistic forms
- Be able to analyse the specificities of cultural products and services based on digital media
- Be able to synthesize a rhetoric strategy and the aesthetic choices in the design of user experience in immersive and interactive applications

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Be able to synthesize new fields of application for interactive, immersive and/or representational digital media
- Be able to synthesize case studies on particular current, emerging or future trends in the field.
- Be able to synthesize different theoretical perspectives and frameworks to contemplate user experience in narrative-based immersive and interactive applications
- Be able to analyse and characterize such emerging and future trends in terms of its contextual aspects and socio-cultural implications

TYPE OF INSTRUCTION

Refer to the overview of instruction types listed in the start of chapter 3. The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Narratives in Digital Culture
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Narrativer i digital kultur
Module code	MSNMEDM2146
Module type	Course
Duration	1 semester
Semester	Spring
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

CREATIVE INNOVATION AND ENTREPRENEURSHIP

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

BSc in Medialogy or equivalent

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

This course will give an in-depth introduction of the various factors that are in play when starting a business in the media and entertainment industry. It will provide the necessary background for startup of business both in context of a team working inside an existing organisation (Intrepreneurship) and startup of new businesses (Entrepreneurship).

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must have knowledge about methods and concepts for startup of businesses
- Must be able to understand market potentials for new media products or productions
- Must be able to understand different business forms in relation to specific products or productions

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to analyse a business case
- Must be able to synthesize a business plan
- Must be able to understand property rights and patents
- Must be able to understand, design and conduct media culture analysis

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to understand how to collaborate within teams developing and implementing new business plans within existing companies or for startup companies
- Be able to analyse, compare and discuss different business strategies
- Be able analyse and evaluate the potential market for new media products or productions

TYPE OF INSTRUCTION

Refer to the overview of instruction types listed in the start of chapter 3. The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Creative Innovation and Entrepreneurship
Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written examination with internal censor. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Kreativ innovation og entrepreneurskab
Module code	MSNMEDM3142
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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

RESEARCH IN MEDIALOGY

2018/2019

PREREQUISITE/RECOMMENDED PREREQUISITE FOR PARTICIPATION IN THE MODULE

2nd semester

CONTENT, PROGRESS AND PEDAGOGY OF THE MODULE

Objectives:

The goal of this course is to perform advanced work in the student-selected specialisation, building upon the foundation gained in the 8th semester. Students explore state of the art theories and techniques in a formalized manner by analyzing a selection of new research texts to the specialisation through, e.g., critical annotations, paper presentations, reproduction of experiments, etc.

LEARNING OBJECTIVES

KNOWLEDGE

Students who complete the module will obtain the following qualifications:

- Must be able to understand theories and principles related to a specific area of the chosen specialization

SKILLS

Students who complete the module will obtain the following qualifications:

- Must be able to analyse a research topic in the chosen specialisation
- Must be able to analyse research papers related to a specific area of the chosen specialisation
- Must be able to apply concepts, tools, theories and technologies of the chosen specialisation to address a specific research problem

COMPETENCES

Students who complete the module will obtain the following qualifications:

- Must be able to synthesize a specific topic in the chosen specialization

TYPE OF INSTRUCTION

Refer to the overview of instruction types listed in the start of chapter 3. The types of instruction for this course are decided in accordance with the current Framework Provisions and directions are decided and given by the Study Board for Media Technology.

EXAM

EXAMS

Name of exam	Research in Medialogy

Type of exam	Written or oral exam In accordance with the current Framework Provisions and directions on examination from the Study Board for Media Technology: Oral or written examination with internal censor. The assessment is performed in accordance with the 7-point grading 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 for the evaluation are specified in the Framework Provisions.

FACTS ABOUT THE MODULE

Danish title	Forskning i medialogi
Module code	MSNMEDM3143
Module type	Course
Duration	1 semester
Semester	Autumn
ECTS	5
Language of instruction	English
Location of the lecture	Campus Aalborg, Campus Copenhagen, Campus Esbjerg
Responsible for the module	Claus Brøndgaard Madsen

ORGANISATION

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