Curriculum for
the Master's Programme in Urban Design/
Cand.polyt. i urbant design

The Faculty of Engineering and Science
Aalborg University
September 2013

Preface

Pursuant to Act 695 of June 22, 2011 on Universities (the University Act) with subsequent changes, the following curriculum for the Master's programme in Urban Design is stipulated. The programme also follows the Framework Provisions and the Examination Policies and Procedures for the Faculty of Engineering and Science.

Table of Contents

Chapter 1: Legal Basis of the Curriculum

1.1 Basis in ministerial orders

The Master's programme in Urban Design is organized in accordance with the Ministry of Science, Technology and Innovation's Ministerial Order no. 814 of June 29, 2010 on Bachelor's and Master's Programmes at Universities (the Ministerial Order of the Study Programmes) and Ministerial Order no. 857 of July 1, 2010 on University Examinations (the Examination Order) with subsequent changes. Further reference is made to Ministerial Order no. 233 of March 24, 2011 (the Admission Order) and Ministerial Order no. 250 of March 15, 2007 (the Grading Scale Order) with subsequent changes.

1.2 Faculty affiliation

The Master's programme falls under the Faculty of Engineering and Science, Aalborg University.

1.3 Board of Studies affiliation

The Master's programme falls under the Board of Studies for Architecture and Design, School of Architecture, Design and Planning.

Chapter 2: Admission, Degree Designation, Programme Duration and Competence Profile

2.1 Admission
Admission to the Master's programme in Architecture and Design requires a Bachelor's degree in Architecture and Design with specialisation in Architecture and Urban Design.

Students with another Bachelor's degree, upon application to the Board of Studies, will be admitted after a specific academic assessment if the applicant is deemed to have comparable educational prerequisites. The University can stipulate requirements concerning conducting additional exams prior to the start of study.

2.2 Degree designation in Danish and English
The Master's programme entitles the graduate to the designation:

Civilingeniør, cand.polyt. i urbant design / Master of Science (MSc) in Engineering (Urban Design)

2.3 The programme's specification in ECTS credits
The Master's programme is a 2-year, research-based, full-time study programme. The programme is set to 120 ECTS credits.

2.4 Competence profile on the diploma
The following competence profile will appear on the diploma:

> A graduate of the Master's programme has competencies acquired through an educational program that has taken place in a research environment.
>
> The graduate of the Master's programme can perform highly qualified functions on the labor market on the basis of the educational programme. Moreover, the graduate has prerequisites for research (a Ph.D. programme). Compared to the Bachelor's degree, the graduate of the Master's programme has developed her/his academic knowledge and independence, so that the graduate can independently apply scientific theory and method in both an academic and occupational/professional context.

2.5 Competence profile of the programme:

<u>The graduate of the Master's programme:</u>

Knowledge

- Must develop the knowledge on an international level about urban design in relation to global urban challenges
- Must develop knowledge on an international level about theories and methods concerning measuring, mapping and analysing the built environment in engineering related areas
- Must obtain knowledge concerning traffic systems and urban planning
- Must have 'Research based knowledge at highest international level' about design methods and related theories on the built environment
- Must develop knowledge on an international level about sustainable urban environments and urban ecosystems in relation to the design of cities adapting to change.
- Must be able to understand and reflect on the use of the newest

digital tools when simulating, calculating, analysing, and mapping the built environment
- Must have knowledge about design theories related to computational design

Skills

- Must on the highest international level be able to identify and address design challenges in relation to urban development and urban transformation
- Must be able to identify and address engineering related problems in relation to climatic, infrastructural, social and cultural issues relevant to the design of the built environment
- Must be able to use computational tools to map, simulate and visualize relations between environmental, infrastructural and spatial, aesthetic parameters
- Must be able to create design proposals for the built environment and communicate those in both digital models and utilised these in advanced production methods for physical models
- Must be able to plan and calculate the dimensions of basic infrastructural systems such as roads, traffic systems and urban water infrastructures in relation to the design of the built environment
- Must be able to utilise analytical and methodological tools concerning sustainable and infrastructural design

* Integrated Design: Is a methodic process where research and evidence based knowledge is continuously applied and integrated through a succession of engineering, design and architectural based theories and methods throughout the design process of the project.

Competencies

- Must have competences on the highest international level to create urban design proposals in relation to urban development and urban transformation
- Must have competencies on the highest international level to create technically sound urban design proposals and plan their realization
- Must have the ability to evaluate projects in the built environment and assess their implementation effects in the city
- Must have the ability to carry out design proposals for urban design on highest international level concerning traffic systems, urban water infrastructures in an changing social and cultural context
- Must have the ability to collect, analyse and document urban data and implement these in strategies for urban development
- Must have competencies to communicate the newest urban design projects and participate in interdisciplinary teams concerning the built environment
- Must be able to communicate scientific knowledge applying international recognized methods within urban design engineering

Chapter 3: Content and Organization of the Programme

The programme is structured in modules and organized as a problem-based study. A module is a program element or a group of programme elements, which aims to give students a set of professional skills within a fixed time frame specified in ECTS credits, and concluding with one or more examinations within specific exam periods. Examinations are defined in the curriculum. The programme is based on a combination of academic, problem-oriented and interdisciplinary approaches and organized based on the following work and evaluation methods that combine skills and reflection:

- lectures
- classroom instruction
- project work
- workshops
- exercises (individually and in groups)
- teacher feedback
- reflection
- portfolio work

Overview of the programme:

All modules are assessed through individual grading according to the 7-point scale *or* Pass/Fail. All modules are assessed by external examination (external grading) or internal examination (internal grading or by assessment by the supervisor only).

Urban Design 1st to 4th semester

Semester			Module	ECTS	Assessment	Exam
1st		C	Constructing and Designing Performative Urban Environments	10	Pass/Fail	Internal
		C	Climate and Hydrology of the Dense City	5	7-point scale	Internal
		P	Urban Transformation and Sustainable Engineering Techniques	15	7-point scale	Internal
2nd		C	Simulating and Modeling Urban Flows	5	Pass/Fail	Internal
		C	Theories of the Network City and its Technologies	5	7-point scale	Internal
		C	Site Morphology and Landscape Techniques	5	7-point scale	Internal
		P	Designing Urban Mobility	15	7-point scale	External
3rd	A *or*	C	Methodology and Theories of Science	5	Pass/Fail	Internal
		C	Project, Design and Construction Management in Architecture and Urban Design	5	Pass/Fail	Internal
		P	Global Challenges and Urban Technologies	20	7-point scale	Internal
	B *or*	C	Methodology and Theories of Science	5	Pass/Fail	Internal
		P	Academic Internship	25	7-point scale	Internal
	C *or*	P/C	Study at another university	30	Transfer of credits	Transfer of credits
	D	P	Long Master's Thesis	+30	7-point scale	External
4th		P	Master's Thesis	30	7-point scale	External
Total 120 ECTS						

Minimum 95 ECTS are evaluated by 7-point scale, and minimum 45 ECTS are evaluated with an external examiner.

Descriptions of modules

Master in Urban Design 1st to 4th semester

Master in Urban Design 1st semester

Title: **Constructing and Designing Performative Urban Environments (10 ECTS)**
Konstruktion og design af performative urbane rum

Prerequisites: A BSc degree (Bachelor) in Architecture and Design or similar.

Objective: The aim of the course is the construction and design of performative urban structures and environments. It explores the role of new technologies and their ability to develop performative urban structures, environments and designs in an integrated design process. The module presents theories of parametric design, material and structure in relation to theories of instant urbanism, cultural grafting and city life. The course will present concepts and the use of analogue and digital technologies related to performative urban spaces.

Students who complete the module:

Knowledge

- Must have knowledge about theories related to the analysis, construction and design of performative urban environments
- Must have knowledge about performative technologies and computational design tools in relation to performative structures in the built environment
- Must have knowledge of parametric design tools that enable the generation of feedback loops from generation of form and performance analysis in relation to structure and urban space
- Must have knowledge about methodologies related to design and construction of performative urban environments

Skills

- Must be able to identify, analyse and address challenges related to the development of performative urban environments and media architecture
- Must be able to make a structural analysis of complex spatial systems when setting up design concepts
- Must be able to analyse and to use mixed technological and aesthetical methods when designing performative structures
- Must be able to analyse and identify relevant design concepts in relation to performative technologies in the built environment

Competencies

- Must be able to create a synthesis of structural, urban and performative elements in a complex urban setting by using advanced design tools that support the definition and control of complex context, advanced geometry and performance analysis
- Must be able to evaluate the effect of the design on city life including sensual experiences

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

Exam format: Version L.

Evaluation criteria: As stated in the Framework Provisions.

Title: **Climate and Hydrology of the Dense City (5 ECTS)**
Klima og hydrologi i den tætte by

Prerequisites: A BSc degree (Bachelor) in Architecture and Design or similar

Objective: The course will provide practical knowledge and skills in the development of designs supporting sustainability in the urban built environment. The main goal is to gain knowledge and understanding of the design challenges involved in creating a more ecologically based city considering natural and built elements in the design process. The course will contribute to knowledge and skills about sustainable urban development in a changing built environment. Hereby the students obtain competencies in engineering solutions to guide the city through a sustainable transformation.

Students who complete the module:

Knowledge

- Must have knowledge of causes, development, and effects of climate change from global to local scale
- Must have knowledge on aquatic and terrestrial ecology and ecosystems
- Must have knowledge on techniques for addressing climate adaptation
- Must have knowledge on urban water management practices

Skills

- Must be able to utilise analytical tools and methods concerning sustainable and infrastructural design
- Must be able to identify and address problems in relation to climate adaption and hydrological issues relevant to the design of the built environment
- Must be able to assess similarities and differences between rural and urban ecosystems
- Must be able to assess the impact of the build environment on urban climatology
- Must be able to measure quantify, and model urban transformation processes in relation to the built environment

Competencies

- Must have the competence to analyse, plan, and guide the sustainable transformation of a city
- Must be able to evaluate the quality of urban ‘blue’ and ‘green’ ecosystem structures
- Must have the competence to develop strategies for urban climate adaption

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

Exam format: Version L.

Evaluation criteria: As stated in the Framework Provisions.

Title: **Urban Transformation and Sustainable Engineering Techniques (15 ECTS)**
Urban transformation og bæredygtige teknikker

Prerequisites: A BSc degree (Bachelor) in Architecture and Design or similar

Objective: The module addresses the transformation of the built urban environment in which the notion of the compact city is a driving force. Emphasis is on integrating engineering techniques and urban design. In this context, the focus is to identify potential in existing built environments and to employ techniques for e.g. densification, climate adaptation and social inclusivity. These will be put into perspective for developing engineering based solutions to environmentally responsible design strategies and interventions.

Students who complete the module:

Knowledge:
- Must understand the dynamics of the urban climate and its effects on the built environment
- Must have knowledge of environmentally and socially sustainable techniques for densifying the urban environment
- Must have knowledge of potential resources in the contemporary built environment as a catalyst to finding sustainable engineering and design solutions

Skills:
- Must be able to analyse and conceptualise complex urban projects and environments from a number of perspectives related to the 'compact city', e.g. climate adaptation and mitigation, densification, re-use, inclusivity
- Must be able to analyse the interaction between environmental factors such as wind, water and the built environment
- Must be able to utilise theories and methods in order to analyse and evaluate contemporary built environments and notions of 'compact cities'
- Must be able to develop a proposal that integrates engineering techniques with conceptual and spatial design

Competencies:
- Must be able to work with techniques for adapting to climate change in densified built environments that compile technical, spatial, social and aesthetic qualities into an integrated design solution
- Must be able to evaluate existing situations and utilise innovative and contemporary sustainable engineering techniques in the transformation of the built environment
- Must be able to evaluate and communicate the effects of urban transformation as environmentally and socially sustainable

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

Exam format: Version P.

Evaluation criteria: As stated in the framework Provisions.

Master in Urban Design 2nd semester

Title: **Simulating and Modeling Urban Flows (5 ECTS)**
Urbane flowsimuleringer og -modeller

Prerequisites: A BSc degree (Bachelor) in Architecture and Design or similar

Objective: The objective is to strengthen the students' ability to create functional urban design based on mobility and flows in the contemporary network city. This should be done by applying a wide field of contemporary information technologies such as interactive media, mediated surface design, mobility tracking technologies (GPS / RFID), mobile and digital networks, ICT software for urban flow simulation and design, mobile robotics and 'intelligent' cybernetics systems design.

Students who complete the module:

Knowledge:
- Must have knowledge about contemporary information technologies and their practical design and implementation in the network city
- Must be able to understand the technical potentials in applying 'intelligent' technologies in urban design
- Must be able to understand and reflect on the use of the newest digital simulation tools, 3D programming, GIS and CAD programs

Skills:
- Must be able to create design proposals and experiments applying new information technologies and software to mobility and flows in urban design of the network city
- Must be able to evaluate the solutions presented in the field and assess their values seen in the light of 'intelligent' technologies
- Must be able to use CAD and GIS programs to map and visualise relations between environmental, infrastructural and spatial parameters

Competencies:
- Must have competencies to create design proposals and concepts for urban mobility/flow and assess their implementation effects

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

Exam format: Version L.

Evaluation criteria: As stated in the framework Provisions.

Title: **Theories of the Network City and its Technologies (5 ECTS)**
Teorier om netværksbyen og dens teknologier

Prerequisites: A BSc degree (Bachelor) in Architecture and Design or similar

Objective: The objective is to strengthen the students' ability to comprehend and understand the technical factors in their social context shaping contemporary network cities. This is done by introducing state-of-the-art scientific theories relating to the development of the network city within the fields of urban theory, mobility theory, network theory and other related theoretical fields.

Students who complete the module:

Knowledge:
- Must have knowledge about the technical forces shaping the network city and their societal consequences
- Must be able to understand the basic factors behind the creation of the network city and its technologies
- Must be able to develop knowledge about the network city and its technologies as a 'large technical system'

Skills:
- Must be able to apply the relevant scientific theories and methods related to an analysis of the technological infrastructure systems of the network city
- Must be able to evaluate proposals for intervention and design of the network city in light of state-of-the-art theories

Competencies:
- Must acquire competencies in analysing the network city on a theoretical and methodologically reflective level
- Must acquire competencies in assessing technical solutions to traffic and mobility challenges of the network city

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

Exam format: Version L.

Evaluation criteria: As stated in the framework Provisions.

Title: **Site Morphology and Landscape Techniques (5 ECTS)**
Stedets morfologi og landskabsteknikker

Prerequisites: A BSc degree (Bachelor) in Architecture and Design or similar

Objective: This module activates theories and methodologies concerning site and investigates the site as an urban landscape of technical and aesthetic features. Thus, the module draws on subjects such as Landscape Urbanism and Landscape Architecture, site mapping and spatial development, as well as geotechnical methods and theories; all of which contribute to the understanding of the site as a living organism. This course works with the spatial section as a tool in order to examine what is above and what is below the surface in order to facilitate a movement from analysis to conceptual design in an integrated process - a process within which, technique, nature and aesthetics mutually influence each other, and are parts of the same totality.

Students who complete the module:

Knowledge:
- Must exhibit knowledge of natural processes and their effect on technical and formal considerations relating to landscape and urban design
- Must be able to understand theories and methods relating to sites and technical and aesthetic landscapes
- Must be able to understand theories and methods relating to geotechnical conditions; among these knowledge about soil conditions and ground water conditions, as well as knowledge of the methods used to solve geotechnical and foundation problems.

Skills:
- Must be able to apply theories and methods relating to the site seen as a result of natural processes
- Must be able to utilise analytical and methodological tools in the determination of site characteristics, origin and development and further to use this information as a catalyst for design proposals and the generation of form and space
- Must be able to work with sectional models, using this technique as both an analytical and a conceptual design tool
- Must be able to understand the site as being made up of what occurs both above and below the surface, as well as it being constructed of both technical and aesthetic elements
- Must be able to understand what a geotechnical report is and what constitutes the content of such a report

Competencies:
- Must be able to reflect upon the interdependency and mutual influence that the built and natural environments have on each other
- Must be able to present the movement from analysis to conceptual design as an integrated proposal through the use of sectional models
- Must be able to communicate knowledge of and methods relating to the geological conditions of the soil

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

Exam format: Version L.

Evaluation criteria: As stated in the framework Provisions.

Title: **Designing Urban Mobility (15 ECTS)**
Urban mobilitetsdesign

Prerequisites: A BSc degree (Bachelor) in Architecture and Design or similar

Objective: The objective is to strengthen the students' ability to functional urban design in the contemporary network city covering a range from urban mobility systems (e.g. metros and subways) and their relation to the city to urban spaces and their linkages to the technical based transit network or large scale urban architecture and transit terminals and their function as urban flow spaces.

Students who complete the module:

Knowledge:
- Must develop knowledge of the importance of contemporary transit systems to the functionality of cities
- Must be able to understand the technical factors shaping and forming the contemporary urban transit system in their social context
- Must develop knowledge of the adequate functional and technical solutions to mobility challenges within the contemporary network city

Skills:
- Must be able to apply the theories and methods relevant to the design and development of urban transit and mobility
- Must be able to evaluate the solutions presented in the field and assess their values seen in the light of urban design theories, methods and reference projects
- Must be able to establish skills in analysing the mobility challenges of the contemporary city applying relevant technologies and methods

Competencies:
- Must have competencies to create design proposals and concepts for urban mobility and assess their implementation effects

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

Exam format: Version P.

Evaluation criteria: As stated in the framework Provisions.

Master in Urban Design 3rd semester

Title: **Project, Design and Construction Management in Architecture and Urban Design (5 ECTS)**

Projekt-, design- og byggeledelse i arkitektur og urbant design

Prerequisites: The student must have knowledge, skills and competencies within the architectural design and engineering field corresponding to the completion of the MSc01 and MSc02 Architectural Engineering education or similar.

Objective: An introduction to project, design and construction management.

Students who complete the module:

Knowledge:

- Must have knowledge and understanding of theories and methods within project, design or construction management
- Must have knowledge of ethical, economical, legal and social interests in the field of construction management
- Must have knowledge of current theories and practice in construction management

Skills:

- Must be able to analyse and assess the cross-disciplinary inclusion of actors involved in the decision-making processes
- Must be able to use methods and techniques for preparing cost estimates for building construction projects
- Must be able to apply methods of planning and scheduling of construction projects
- Must be able to identifying work elements, estimating activity durations, preparing network schedules and schedule updates, analysing planned vs. actual project progress

Competencies:

- Can apply methods and theories for project, design or construction management within a given budget using specified materials and construction methods

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

Exam format: Version L.

Evaluation criteria: As stated in the Framework Provisions.

Title: **Methodology and Theories of Science (5 ECTS)**
Forskningsmetode og videnskabsteori

Prerequisites: The student must have knowledge, skills and competencies within the urban design and engineering field corresponding to the completion of the MSc01 and MSc02 Urban Design Engineering education or similar.

Objective: The objective is to give the students the necessary skills to participate in the academic and professional practice within the fields of Architecture, Design and Planning (or related areas) as contributing scholars and researchers by training the basic academic skills of paper writing and design of research methodology seen in light of the adequate positions within theories of science / philosophy of science.

Students who complete the module:

Knowledge:

- Must have knowledge about the academic production process, the systems of research quality assessments and monitoring governing the field of research and the channels for publication and dissemination of academic knowledge
- Must be able to understand societal and contextual conditions for a situation of increasing 'scientification' of practice fields
- Must be able to understand how the 'state-of-the-art' within academic fields of relevance are emerging and how these are evolving

Skills:

- Must be able to apply established models for paper writing and methodological reflection to a specific case within architecture, design or planning
- Must be able to write a methodologically reflective paper which positions itself in relation to relevant and adequate positions within theories of science / philosophy of science
- Must be able to evaluate the paper in relation to established practices and systems of academic research

Competencies:

- Must have competencies to write an academic paper and/or a design for research methodology relating to the state-of-the-art of knowledge production within architecture, design or planning

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

Exam format: Version L.

Evaluation criteria: As stated in the framework Provisions.

Title: **Global Challenges and Urban Technologies (20 ECTS)**
Globale udfordringer og urbane teknologier

Prerequisites: The student must have knowledge, skills and competencies within the urban design and engineering field corresponding to the completion of the MSc01 and MSc02 Urban Design Engineering education or similar.

Objective: The objective of this module is to address the challenges affecting contemporary global societies and environments in a technical, critical and reflective manner. This is achieved through the identification and selection of a physical problem within a global perspective, registration and mapping of the existing situation and the subsequent analytical and technical assessment of the situation and utilisation of empirical case studies. Further this module creates an understanding of these challenges as design challenges solvable by the proposal of strategies that integrate technical solutions with aesthetic practices and that develop a holistic approach to urban problem-solving in a global context.

Students who complete the module:

Knowledge:
- Must have knowledge about the technical and design based problems facing contemporary global societies and urban environments
- Must be able to understand a local problem in their global context
- Must have knowledge of methods for the attainment of data and information regarding the identified problem
- Must have knowledge of empirical cases that illuminate the given problem from both technical and design based angles

Skills:
- Must be able to identify a global challenge and relate it to specific challenges in the built environment
- Must be able to identify technical solutions and work with and develop form and space as integral elements in the adaptation of technical solutions
- Must be able to apply technical and analytical methods to extract data and amass critical information regarding the chosen locality and nature of the identified problem
- Must be able to evaluate the quality of the proposed solutions as experiential realities

Competencies:
- Must be able to critically assess and synthesise gathered registration and case study material from both a technical and design based perspective
- Must be able to implement the synthesised information into the development of conceptual and spatial strategies
- Must be able to integrate technical and aesthetic factors into a holistic approach
- Must be able to communicate the technical and aesthetic elements of the proposal as a spatially understood reality

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

Exam format: Version P.

Evaluation criteria: As stated in the framework Provisions.

Title: **Academic Internship (25 ECTS)**
Projektorienteret forløb

Prerequisites: The student must have knowledge, skills and competencies within the urban design and engineering field corresponding to the completion of the MSc01 and MSc02 Urban Design Engineering education or similar.

Objective: The objective of this module is to give the students an opportunity to use and test the skills they have acquired during the 1st and 2nd semesters by participating in projects developed in a company setting. The testing of the urban design engineering skills is attained not only through gaining practical experience, but also through the choice of a focus area for academic reflection and the subsequent investigation and illumination of this. The choice of a focus area should be related to urban design engineering skills attained in the first part of the Master program.

Students who complete the module:

Knowledge:
- Must have practical, technical, conceptual and professional knowledge of relevance to urban design practice
- Must have knowledge of the analytical methods utilised in urban design practice
- Must be aware of the practice of urban design as a practice containing technical, design based and societal factors

Skills:
- Must be able to engage professionally in the environment within which the urban design assignment takes place
- Must be able to identify a relevant and specific technical focus for subsequent investigation and reflection
- Must be able to utilise analytical and investigative techniques in the development of urban design proposals
- Must be able to work both independently and in a team setting in project development

Competencies:
- Must be able to describe specific problems relating to urban design engineering and find technical and design based strategies for illuminating them
- Must be able to participate in the solving of urban design engineering problems
- Must be able to make academic reflections on an identified technical and design focus area relating to urban design engineering and implement previously attained knowledge to qualify it and set it into perspective

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

Exam format: Version P.

Evaluation criteria: As stated in the framework Provisions.

Master in Urban Design 4th semester

Title: **Master's Thesis (30 ECTS)**
Kandidatspeciale

Prerequisites: The student must have knowledge, skills and competencies within the urban design and engineering field corresponding to the completion of the MSc01 - MSc03 Urban Design Engineering education or similar.

Objective: To give the students the ability to on the highest international level make an integrated urban design project as an experimental, technological/engineering, empirical, and/or theoretical investigation of one or more central issues within the field of urban design engineering. This happens with reflective incorporation of relevant theories and methods acquired throughout the full master program in urban design engineering.

Students who complete the module:

Knowledge:
- Must develop knowledge on an international level about urban design in relation to global urban challenges
- Must have knowledge on highest international level about relevant theories and methods in relation to the chosen project theme
- Must be able to on the highest international level to understand and reflect the theories and methods applied in relation to the practice of an integrated urban design engineering profession

Skills:
- Must on the highest international level be able to identify and address design challenges in relation to urban development and urban transformation
- Must on highest international level be able to analyse, map and apply theories on a high reflective level
- Must on highest international level be able to make proposals for design, strategies and interventions of relevance to the urban design field applying technical challenges as a central design element

Competencies:
- Must have competencies on the highest international level to create urban design proposals in relation to urban development and urban transformation
- Must on highest international level have competencies to integrate mapping, analysis and theories into an integrated urban design engineering proposal
- Must on highest international level have competencies to make strategies, plans and designs into an integrated urban design engineering proposal

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

Exam format: Version P.

Evaluation criteria: As stated in the framework Provisions.

Chapter 4: Entry into Force, Interim Provisions and Revision

The curriculum is approved by the Dean of the Faculty of Engineering and Science and enters into force as of September 2013.

Students who wish to complete their studies under the previous curriculum from 2007 must conclude their education by the summer examination period 2015 at the latest, since examinations under the previous curriculum are not offered after this time.

In accordance with the Framework Provisions and the Handbook on Quality Management for the Faculty of Engineering and Science and The Faculty of Medicine at Aalborg University, the curriculum must be revised no later than 5 years after its entry into force.

Chapter 5: Other Provisions

5.1 Rules concerning written work, including the Master's thesis

In the assessment of all written work, regardless of the language it is written in, weight is also given to the student's spelling and formulation ability, in addition to the academic content. Orthographic and grammatical correctness as well as stylistic proficiency are taken as a basis for the evaluation of language performance. Language performance must always be included as an independent dimension of the total evaluation. However, no examination can be assessed as 'Pass' on the basis of good language performance alone; similarly, an examination normally cannot be assessed as 'Fail' on the basis of poor language performance alone.
The Board of Studies can grant exemption from this in special cases (e.g., dyslexia or a native language other than Danish).

The Master's thesis must include an English summary.[1] If the project is written in English, the summary must be in Danish.[2] The summary must be at least 1 page and not more than 2 pages. The summary is included in the evaluation of the project as a whole.

5.2 Rules concerning credit transfer (merit), including the possibility for choice of modules that are part of another program at a university in Denmark or abroad

In the individual case, the Board of Studies can approve successfully completed (passed) program elements from other Master's programs in lieu of program elements in this program (credit transfer). The Board of Studies can also approve successfully completed (passed) program elements from another Danish program or a program outside of Denmark at the same level in lieu of program elements within this curriculum. Decisions on credit transfer are made by the Board of Studies based on an academic assessment. See the Framework Provisions for the rules on credit transfer.

5.3 Rules for examinations

The rules for examinations are stated in the Examination Policies and Procedures published by the Faculty of Engineering and Science on their website.

5.4 Exemption

In exceptional circumstances, the Board of Studies can grant exemption from those parts of the curriculum that are not stipulated by law or ministerial order. Exemption regarding an examination applies to the immediate examination.

5.5 Completion of the Master's programme

The Master's program must be completed no later than four years after it was begun.

[1] Or another foreign language (upon approval from the Board of Studies).
[2] The Board of Studies can grant exemption from this.

5.6 Rules and requirements for the reading of texts

It is assumed that the student can read academic texts in his or her native language as well as in English and use reference works etc. in other European languages.

5.7 Additional information

The current version of the curriculum is published on the Board of Studies' website, including more detailed information about the program, including exams.

Enclosure 1

A&D – Evaluation formats under BSc and MSc curricula
Evaluation format P – Project module The module is assessed by an oral assessment based on written material, typically a jointly prepared (or in exceptional cases, prepared by the individual student) project module report (containing the report/analyses/posters/drawings/models or similar). It is further presumed that the student has regularly and actively participated in evaluation seminars and the like. The written material for submission is submitted in physical form to the semester secretary.
Evaluation format L – Course module, oral or written assessment. *Comprising:*
Evaluation format La – Course module, oral assessment The module is assessed with an oral assessment based on written material prepared by the individual student such as a portfolio presentation or a (possibly jointly prepared) project module report (containing the report/analyses/posters/drawings/models or similar). It is further presumed that the student has regularly and actively participated in evaluation seminars. Oral assessment with aid and without preparation time. The written material for submission must be digitally uploaded to the directory assigned by the semester secretary.
Evaluation format Lb – Course module, oral assessment The module is assessed with an oral exam based on the objectives for the course module. The examinee pulls a known and predefined question, after which the assessment begins. Oral assessment without aid and without preparation time.
Evaluation format Lc – Course module, oral assessment The module is assessed with an oral exam based on the objectives for the course module. The examinee pulls a question, gets preparation time, after which the assessment begins. Oral assessment without aid and with preparation time – aid is allowed in the preparation time.
Evaluation format Ld – Course module, written assessment The module is assessed with a written assignment based on central parts of the objectives for the course module through one or more written assignments (including reports/analyses/posters/drawings/models or the like). A written assignment is developed during the execution of the course module. The written material for submission must be digitally uploaded to the directory assigned by the semester secretary.
Evaluation format Le – Course module, written assessment The module is assessed with a written assignment based on central parts of the objectives for the course module. A written assignment given by the end of the course module and completed within a defined time frame. The written material for submission must be digitally uploaded to the directory assigned by the

semester secretary.
Evaluation format V – Course module The module is passed by the student's regular and active participation in teaching/ evaluation seminars or the like and by compliance with the assignment requirements of the course module. The module is assessed by internal assessment. Please refer to the study guide of the relevant semester for further descriptions. In case of re-examination evaluation format V will be superseded by a replacement assignment.