

**Curriculum for
the Master's Programme in Architecture /
Cand.polyt. i arkitektur**

**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 Architecture is stipulated. The programme also follows the Framework Provisions and the Examination Policies and Procedures for the Faculty of Engineering and Science.

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Chapter 1: Legal Basis of the Curriculum

1.1 Basis in ministerial orders

The Master's programme in Architecture 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 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 arkitektur / Master of Science (MSc) in Engineering (Architecture)

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:

The graduate of the Master's programme:

Knowledge

- Must have a broad knowledge of theories, methods and practices associated with the professions of engineering, architecture and design combined with a knowledge of methods and practices associated with the professionalisms of engineering, architecture and design ranging from the design component to the building section to the city as a whole
- Must have advanced knowledge of analytical approaches to technical and societal aspects 'of the profession
- Must have a broad knowledge of both analogue and digital tools for the development and representation of architecture, design and urban design
- Must have extensive knowledge of the methods and theories of engineering related design applied to the styling of design components, building parts, buildings and entire building developments

- Must have an advanced knowledge of periods, theories, works and principal figures in the history of architecture, urban and general design
- Must understand integrated architectural design where relevant and strategically chosen technical parameters are fully integrated with the architecture
- Must have scientifically based knowledge of key disciplines, methodologies, theories and concepts within architectural engineering
- Must have scientifically based knowledge in Tectonic and Sustainable architectural design based on the highest international research and references in these areas
- Must be able to reflect upon the relevant knowledge in engineering and architectural theories, methods, and tools related to Tectonic and Sustainable architectural design for design of buildings with substantial engineering and architectural qualities

Skills

- Must be able to demonstrate the ability to make advanced integrated design* proposals at different scales
- Must be able to practically apply theories, methods and tools within architecture, industrial design and urban design and to apply skills associated with employment within the fields of engineering and architecture on a scientific basis
- Must be able to assess theoretical and practical problems and to select and motivate relevant solutions in architecture, design and engineering on the basis of scientific methods
- Must be able to communicate disciplinary problems and solutions to both peers and non-specialists as well as to collaborators and users, and to analyse and understand the connections between design, architecture, cities and society as a whole
- Must be able to apply advanced theories and methods in technical fields of knowledge such as planning, construction, technique and climatology
- Must master the scientific engineering and architectural theories, methods and tools relevant to the design and development of Tectonic and Sustainable architecture
- Must be able to use and communicate in the newest digital calculation and simulation tools, 3D programming and CAD programs
- Must be able to communicate research-based knowledge and discuss professional and scientific problems with both peers and non-specialists
- Must be able to select and apply appropriate engineering and architectural methods, theories and tools competent in finding an integrated design solution of Tectonic and Sustainable architecture

* 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 be able to handle and manage complex and development-oriented situations in relation to both study and work
- Must be able with a professional approach independently and with demonstrable overview to participate in professional and interdisciplinary cooperation in the fields of engineering, architecture and design
- Must be able to identify own learning needs and structure own learning in various learning environments with a view to solving new types of problems
- Must possess high-level professional competencies in the intersection between the disciplines of engineering, architecture and design
- Must be able to independently make advanced integrated design proposals that fulfill all predefined criteria and target values regarding high engineering and architectural design quality on an international level
- Must be able to manage work-related situations that are complex and unpredictable, and which require new solutions in the built environment
- Must be able to independently initiate and implement interdisciplinary co-operation and assume professional responsibility
- Must be able to independently take responsibility for own professional development and specialization

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).

Architecture 1st to 4th semester

Semester		Module	ECTS	Assessment	Exam	
1 st	C	Performance-Aided Design: Form, Material, Structure, Acoustics and Fabrication	5	7-point scale	Internal	
	C	Tectonic Studies and Experimentations in Form, Structure, Materials and Details	5	Pass/Fail	Internal	
	P	Tectonic Design: Structure and Construction	20	7-point scale	Internal	
2 nd	C	Zero Energy Buildings	5	7-point scale	Internal	
	C	Integrated Design of Sustainable Architecture	5	Pass/Fail	Internal	
	P	Sustainable Architecture	20	7-point scale	External	
3 rd	A or	C	Project, Design and Construction Management	5	Pass/Fail	Internal
		C	Transfer of Knowledge from Architectural Engineering to Practice	5	Pass/Fail	Internal
		P	Research and Development in Architectural Engineering and Design	20	7-point scale	Internal
	B or	C	Project, Design and Construction Management in Architecture and Urban Design	5	Pass/Fail	Internal
		P	Academic Internship	25	7-point scale	Internal
	C or D	P/C	Study at another university	30	Transfer of credits	Transfer of credits
	P	Long Master's Thesis	+30	7-point scale	External	
4 th	P	Master's Thesis	30	7-point scale	External	
Total 120 ECTS						

Minimum 100 ECTS are evaluated by 7-point scale, and minimum 50 ECTS are evaluated with an external examiner.

Descriptions of modules

Master in Architecture 1st to 4th semester

Master in Architecture 1st semester

Title:	Performance-Aided Design: Form, Material, Structure, Acoustics and Fabrication (5 ECTS) <i>Performancebaseret design: Form, materiale, struktur, akustik og fabrikation</i>
Prerequisites:	A BSc degree (Bachelor) in Architecture and Design or similar
Objective:	The aim of the course is to enable students with the parametric design tools and the understanding required to develop integrated design with respect to form, material, structure and fabrication. Parametric design tools support the definition of advanced geometry, and the interaction between geometry and structural and/or acoustics analysis. Issues of fabrication are considered in the context of parametric modeling and rapid prototyping. Students who complete the module: Knowledge <ul style="list-style-type: none"> • Must have knowledge of complex spatial structures, including an understanding of the structural functionality of various construction systems using shells, plates, frames, beams, etc. • Must have knowledge of parametric design tools that enable the generation of quick feedback loops from generation of form and performance analysis (structure, acoustics) • Must have knowledge of advanced room acoustics Skills <ul style="list-style-type: none"> • Must be able to use parametric design tools to enable quick feedback loops between geometric exploration of form and performance analysis including structural and acoustic parameters • Must be able to make a structural analysis of complex spatial structural systems • Must be able to use advanced numerical tools for structural and acoustics analysis of advanced structural systems or rooms Competencies <ul style="list-style-type: none"> • Can create a synthesis of architectural, structural and acoustic requirements larger scale buildings, by using parametric design tools that support the definition and control of advanced geometry, digital fabrication and performance analysis
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: **Tectonic Studies and Experimentations in Form, Structure, Materials and Details (5 ECTS)**
Tektoniske studier og eksperimenter med form, struktur, materialer og detaljer.

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

Objective: The aim of the course is to provide a broad critical understanding of tectonic theory and practice in tectonic design through the presentation and analysis of relevant engineering and architectural theories, methods and models in historical as well as contemporary engineering and architectural design combined with physical tectonic studies, experimentation, modeling, prototyping and crafting.

Students who complete the module:

Knowledge

- Must have knowledge of tectonic theory, methods and models that are applicable to a tectonic design
- Must have knowledge of prototyping and crafting methods
- Must have tectonic knowledge of interrelationship between form, structure, materials and detail

Skills

- Must be able to analyse and critically reflect on the application and use of form, structure, materials and details in a tectonic design
- Must be able to design and model tectonic constructions with an interrelationship between form, structure, materials and detail
- Must be able to demonstrate understanding of tectonic constructions during experimentation, modeling, prototyping and crafting

Competencies

- Can design a tectonic project on the basis of engineering and architectural analyses, sketches, physical models and a critical account of the process evaluating its tectonic quality

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:	Tectonic Design: Structure and Construction (20 ECTS) <i>Tektonisk design: Struktur og konstruktion</i>
Prerequisites:	A BSc degree (Bachelor) in Architecture and Design or similar
Objective:	The aim of the project is to develop a preliminary design with a tectonic design approach and to achieve an authenticity of innovative design of structure and the architectural expression by ensuring a continuity and integrity between form, structure and construction. Further the aim is to develop the Nordic craft tradition in relation to the new innovative design of structure, use of materials and means of construction in contemporary architecture.
	Students who complete the module:
	<p>Knowledge</p> <ul style="list-style-type: none"> • Must have knowledge of complex spatial structures, including an understanding of the structural functionality of various construction systems in connection with the architectural ideas behind a project and in relation to context • Must have knowledge of tectonic theory and methods and a critical understanding of Nordic architecture, and an aesthetic and technical understanding of the interplay between form, structure, materials and detail in relation to the integrity of architectural design <p>Skills</p> <ul style="list-style-type: none"> • Must be able to make engineering and architectural innovative design of buildings that emphasize the interplay between form, structure, materials and detail in relation to the integrity of an architectural idea • Must be able to do performance aided design using parametric design tools for structural and acoustical analysis • Must be able to synthesize complex room programmes, functional and aesthetic demands, and be able to integrate constructional and tectonic design in a coherent architectonic project solution of substantial quality • Must be able to apply critical reasoning to the innovative engineering and architectural design issues that arise through project development and to demonstrate independent thinking and informed judgment <p>Competencies</p> <ul style="list-style-type: none"> • Can demonstrate making performance aided engineering and architectural design of a building of high complexity and substantial scale • Can prepare a design proposal for a tectonic building of substantial aesthetic, architectural, constructive, structural and functional qualities • Can present the project in a professionally competent way by means of relevant media and techniques
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: Zero Energy Buildings (5 ECTS)

Energineutralt byggeri

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

Objective: The aim of the course is to enable students in a professional way to develop and document Zero Energy Buildings using both passive and active energy technologies.

Students who complete the module:

Knowledge

- Must have knowledge of the political strategy at national as well as international level for saving energy in the building sector
- Must have knowledge of energy optimisation of existing buildings
- Must have knowledge of intelligent and dynamic climate shields
- Must have knowledge of active energy technologies

Skills

- Must be able to apply indoor environmental systems and technologies
- Must be able to analyse, simulate and apply passive energy technologies in buildings
- Must be able to simulate and analyse the dynamic behavior of a building regarding indoor environment and energy use taking all relevant parameters into account
- Must be able to apply advanced mathematical models to the analysis of passive energy technologies and the interplay between building design, building use and outdoor climate

Competencies

- Can discuss and reflect on the influence of the chosen indoor environmental level on the buildings total energy use
- Can use a professional and interdisciplinary approach to the design of zero energy building
- Can use a professional and interdisciplinary approach to energy optimisation of existing buildings
- Can choose proper modeling of single zone and multi-zone buildings and discuss inherent model limitations

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: Integrated Design of Sustainable Architecture (5 ECTS)

Integreret design af bæredygtig arkitektur

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

Objective: The aim of the course is to enable the students to acquire knowledge of technical, functional and aesthetic aspects of and approaches to sustainable architecture, to acquire knowledge of integrated design concepts and to become skilled in analysing and comparing such approaches and concepts with regard to user needs.

Students who complete the module:

Knowledge

- Must have knowledge of different approaches to sustainable architecture
- Must have knowledge of different low-energy and zero-energy concepts and the importance of user-related behavior
- Must have knowledge of sustainable site planning and infrastructure
- Must have knowledge about architecture in relation to site, climate and materials

Skills

- Must be able to use the terminology in the field of sustainable architecture
- Must be able to analyse and reflect upon the integration of climatic, technical, spatial, social, functional, aesthetic and logistic needs of a specific client and/or user group
- Must be able to analyse and evaluate different strategies to design sustainable architecture and zero-energy buildings
- Must be able to evaluate buildings by using assessment and certification methods for high performance buildings

Competencies

- Can evaluate different approaches to zero-energy concepts
- Can analyse a building concept with regard to architectural qualities and the technical performance of the building and users needs
- Can evaluate different concepts with regard to their qualities in relation to the people who live or work in the buildings
- Can evaluate methodologies of building certification 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: Sustainable Architecture (20 ECTS)

Bæredygtig arkitektur

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

Objective: The aim of this project is to develop preliminary building design for a zero-energy building using advanced integrated design process methodology. Technical, spatial, social, functional, logistical as well as aesthetic problems must be solved in the integrated building design.

Students who complete the module:

Knowledge

- Must have knowledge of advanced integrated design
- Must have knowledge of different strategies in the field of sustainable architecture
- Must have knowledge of passive energy technologies in relation to indoor environment

Skills

- Must be able to elaborate the building design through the advanced use of the integrated design process
- Must be able to integrate technical solutions in relation to energy and climate with respect to the performance of the building
- Must be able to evaluate the technical solutions for the building
- Must be able to choose, implement and combine strategies for the use of passive as well as active energy technologies
- Must be able to model and design zero-energy buildings with sustainable architectural qualities
- Must be able to devise solutions which include social, technical and environmental aspects
- Must be able to identify and target their design to the defined user group and their demands and well-being in the building

Competencies

- Can develop an integrated building proposal that fulfills all predefined architectural, functional and technical design criteria and target values
- Can communicate proper terminology in oral, written and graphical communication and documentation of problems and solutions in the integrated design of buildings and building services
- Can discuss and reflect on potentials and limitations in integrated building energy design

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:	Project, Design and Construction Management in Architecture and Urban Design (5 ECTS)
	<i>Projekt-, design- og byggeledelse i arkitektur og urbant design</i>
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:
	<ul style="list-style-type: none"> • 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:
	<ul style="list-style-type: none"> • 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:
	<ul style="list-style-type: none"> • 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: **Transfer of Knowledge from Architectural Engineering to Practice (5 ECTS)**
Overførsel af forskning fra bygningsingeniørområdet til praksis

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: To familiarise students with basic research methods and theories within the field of architectural engineering and enable them to acquire specific knowledge in relation to architectural engineering research.

Students who complete the module:

Knowledge:

- Must have scientifically based knowledge of key disciplines, methodologies, theories and concepts within architectural engineering
- Must be able to reflect on the validity and relevance of the data and results produced through various methodologies

Skills:

- Must be able to approach scientific methods and theories within architectural engineering related research
- Must be able to formulate a given scientific problem in clear and consistent way
- Must be able to evaluate the results, relevance and quality of the chosen architectural engineering research issue
- Must be able to communicate relevant aspects of scientific and professional knowledge in a clear and systematic way

Competencies:

- Can choose relevant methods and analyse the findings of the research relevant for the task and apply the results of architectural engineering research
- Can communicate and transfer the results of architectural engineering research for practical use

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:** **Research and Development in Architectural Engineering and Design (20 ECTS)**
Forskning og udvikling inden for bygningsingeniør- og designområdet
- 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:** The aim of the project is to use the latest architectural engineering research to raise the knowledge level and to qualify the knowledge in the project. Furthermore, the project must document the use of architectural engineering research based knowledge.
- Students who complete the module:
- Knowledge**
- Must have knowledge of practice within the chosen field related to architectural engineering
 - Must have knowledge of the theory used or the methodologies within the chosen field
- Skills**
- Must have the ability to select architectural engineering research based knowledge in the chosen field
 - Must be able to select an appropriate research method for the chosen problem area to be examined within the given timeframe or time available
 - Must be able to apply relevant research methods as well as praxis-oriented methods
- Competencies**
- Must be able to seek out current research for a theoretical or concrete research project of their choice
 - Must be able to integrate relevant research knowledge into a practical project or a theoretical project related to architectural engineering
 - Must be able to communicate research results
- 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 architectural design and engineering field corresponding to the completion of the MSc01 and MSc02 Architectural Engineering education or similar.
- Objective:** Is to give the students an opportunity to use skills they have acquired during the 1st and 2nd master semesters.
- Students who complete the module:
- Knowledge:**
- Must have practical, conceptual and professional knowledge of relevance to architectural / engineering design practice
- Skills:**
- Must be able to engage with a professional environment in relation to architectural engineering design assignments
 - Must further develop and challenge their interdisciplinary approach skills
 - Must be able to reflect upon construction management in praxis
- Competencies:**
- Can participate in cross-disciplinary team-works and solving architectural / engineering design related tasks e.g. in a relevant architectural and/or engineering company or consultancy, the state, the authorities, the local authorities or similar
- 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:	Master's Thesis (30 ECTS) <i>Kandidatspeciale</i>
Prerequisites	The student must have knowledge, skills and competencies within the architectural design and engineering field corresponding to the completion of the MSc01 - MSc03 Architectural Engineering education or similar.
Objective:	<p>The final semester sets the stage of manifestation of the students' abilities to make design solutions. The students must define a problem and display the ability to achieve a design proposal in an integrated whole. The work must include relevant theories and methodologies and be based on the skills and competencies acquired throughout the Master's programme in architecture.</p> <p>Students who complete the module:</p> <p>Knowledge</p> <ul style="list-style-type: none"> • Must demonstrate knowledge and understanding within the field of specialisation at a high international level • Must be able to critically assess knowledge and identify problems within the field of specialisation • Must demonstrate the ability to select appropriate research based knowledge in the process <p>Skills</p> <ul style="list-style-type: none"> • Must be able to use an advanced integrated design process • Must be able to independently motivate their choice of methods or/and theoretical approach • Must be able to demonstrate the acquired skills in tectonics and sustainability in accordance with and at a level suitable to the chosen theme of the master thesis • Must be able to apply a range of methods within the field of engineering and architecture and demonstrate the use of selected parameters in engineering within the field of specialisation • Must be able to communicate in a clear and systematic way relevant scientific and professional aspects of the project work both to peer and non-peer <p>Competencies</p> <ul style="list-style-type: none"> • Can independently develop a project based on a specific problem within the field of specialisation to the highest international standards • Can be competent in finding an integrated design solution of Tectonic and Sustainable architecture and make a design that fulfill all predefined criteria • Can anticipate and solve problems and make a synthesis in the design that includes the technical, functional and aesthetic qualities • Must be able to present the results of the project work professionally
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
<i>Evaluation format P – Project module</i> 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.
<i>Evaluation format L – Course module, oral or written assessment. Comprising:</i>
<i>Evaluation format La – Course module, oral assessment</i> 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.
<i>Evaluation format Lb – Course module, oral assessment</i> 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.
<i>Evaluation format Lc – Course module, oral assessment</i> 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.
<i>Evaluation format Ld – Course module, written assessment</i> 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.
<i>Evaluation format Le – Course module, written assessment</i> 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.