AALBORG UNIVERSITET

CURRICULUM FOR THE MASTER'S PROGRAM IN ARCHITECTURE, CAND.TECH, 2017

MASTER OF SCIENCE (MSC) IN TECHNOLOGY
AALBORG

Link to this studyline

Link(s) to other versions of the same line:

Curriculum for the Master's Programme (cand.tech.) in Architecture, 2020

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§ 1: PREFACE

Pursuant to Act 261 of March 18, 2015 on Universities (the University Act) with subsequent changes, the following curriculum for the Master's program in Architecture is stipulated. The program also follows the Joint Program Regulations and the Examination Policies and Procedures for The Technical Faculty of IT and Design, The Faculty of Engineering and Science, and The Faculty of Medicine.

§ 2: BASIS IN MINISTERIAL ORDERS

The Master's programme is organised in accordance with the Ministry of Higher Education and Science's Order no. 1061 of June 30, 2016 on Bachelor's and Master's Programmes at Universities (the Ministerial Order of the Study Programmes) and Ministerial Order no. 1062 of June 30, 2016 on University Examinations (the Examination Order). Further reference is made to Ministerial Order no. 258 of March 18, 2015 (the Admission Order) and Ministerial Order no. 114 of February 3, 2015 (the Grading Scale Order) with subsequent changes.

§ 3: CAMPUS

The programme is offered in Aalborg.

§ 4: FACULTY AFFILIATION

The Master's programme falls under The Technical Faculty of IT and Design, Aalborg University.

§ 5: STUDY BOARD AFFILIATION

The Master's programme falls under Study Board of Architecture and Design

§ 6: AFFILIATION TO CORPS OF EXTERNAL EXAMINERS

The Master's programme is associated with the external examiners corps on Nationwide engineering examiners/Design

§ 7: ADMISSION REQUIREMENTS

Applicants with a legal claim to admission (retskrav):
- Bachelor of Science (BSc) in Engineering (Architecture and Design), Aalborg University

Applicants without legal claim to admission:
Students with another Bachelor's degree may, upon application to the Board of Studies, 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.

§ 8: THE PROGRAMME TITLE IN DANISH AND ENGLISH

The Master's programme entitles the graduate to the designation Cand.tech. i arkitektur. The English designation is: Master of Science (MSc) in Technology (Architecture).

§ 9: PROGRAMME SPECIFICATIONS 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.

§ 10: RULES CONCERNING CREDIT TRANSFER (MERIT), INCLUDING THE POSSIBILITY FOR CHOICE OF MODULES THAT ARE PART OF ANOTHER PROGRAMME AT A UNIVERSITY IN DENMARK OR ABROAD

The Study Board can approve that passed programme elements from other educational programmes at the same level replaces programme elements within this programme (credit transfer).

Furthermore, the Study Board can, upon application, approve that parts of this programme is completed at another university or a further education institution in Denmark or abroad (pre-approval of credit transfer).

The Study Board's decisions regarding credit transfer are based on an academic assessment.

§ 11: EXEMPTIONS

The Study Board's possibilities to grant exemption, including exemption to further examination attempts and special examination conditions, are stated in the Examination Policies and Procedures published at this website: https://www.studyservice.aau.dk/rules

§ 12: RULES FOR EXAMINATIONS

The rules for examinations are stated in the Examination Policies and Procedures published at this website: https://www.studyservice.aau.dk/rules

§ 13: 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 formulation and spelling 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 Study Board 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. If the project is written in English, the summary can be in Danish. The summary is included in the evaluation of the project as a whole.

§ 14: REQUIREMENTS REGARDING THE READING OF TEXTS IN A FOREIGN LANGUAGE

At programs that are taught in Danish, it is assumed that the student can read academic texts in modern Danish, Norwegian, Swedish and English and use reference works, etc., in other European languages. At programs taught in English, it is assumed that the student can read academic text and use reference works, etc., in English.

§ 15: COMPETENCE PROFILE ON THE DIPLOMA

The following competence profile will appear on the diploma:

A Candidatus graduate has the following competency profile:

A Candidatus graduate has competencies that have been acquired via a course of study that has taken place in a research environment.

A Candidatus graduate is qualified for employment on the labour market based on his or her academic discipline as well as for further research (PhD programmes). A Candidatus graduate has, compared to a Bachelor, developed his or her academic knowledge and independence so as to be able to apply scientific theory and method on an independent basis within both an academic and a professional context.

§ 16: COMPETENCE PROFILE OF THE PROGRAMME

The graduate of the Master's program:

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 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

* 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

§ 17: STRUCTURE AND CONTENTS OF THE PROGRAMME

The program is structured in modules and organized as a problem-based study. A module is a program element or a group of program 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 program 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

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).

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

§ 18: OVERVIEW OF THE PROGRAMME

Offered as: 1-professional Study programme:						
Module name	Course type	ECTS	Applied grading scale	Evaluation method	Assessment method	Language
1 SEMESTER						
Zero Energy Buildings (AODATM1K171)	Course	5	7-point grading scale	Internal examination	Written or oral exam	English
Integrated Design of Sustainable and Tectonic Architecture (AODATM1TK172)	Course	5	Passed/Not Passed	Internal examination	Written or oral exam	English
Sustainable Architecture (AODATM1SP173)	Project	20	7-point grading scale	Internal examination	Oral exam based on a project	English
2 SEMESTER Version A						
Performance-Aided Design: Form, Material, Structure, Acoustics and Fabrication (AODATM2TK171)	Course	5	7-point grading scale	Internal examination	Written or oral exam	English
Tectonic Studies and Experimentations in Form, Structure, Materials and Details (AODATM2TK172)	Course	5	Passed/Not Passed	Internal examination	Written or oral exam	English
Tectonic Design: Structure and Construction (AODATM2TP173)	Project	20	7-point grading scale	External examination	Oral exam based on a project	English

2 SEMESTER Version B						
Architecture, Health and Well-being (AODATM2SK171)	Course	5	7-point grading scale	Internal examination	Written or oral exam	English
Materiality and Construction of Sustainable Buildings (AODATM2SK172)	Course	5	Passed/Not Passed	Internal examination	Written or oral exam	English
Sustainable Welfare Buildings (AODATM2SP173)	Project	20	7-point grading scale	External examination	Oral exam based on a project	English
3 SEMESTER Version A						
Construction Management (AODATM3K171)	Course	5	Passed/Not Passed	Internal examination	Written or oral exam	English
Transfer of Knowledge from Architectural Engineering to Practice (AODATM3K172)	Course	5	Passed/Not Passed	Internal examination	Written or oral exam	English
Research and Development in Architectural Engineering and Design (AODATM3P173)	Project	20	7-point grading scale	Internal examination	Oral exam based on a project	English
3 SEMESTER Version B						
Construction Management (AODATM3K174)	Course	5	Passed/Not Passed	Internal examination	Written or oral exam	English
Academic Internship (AODATM3P175)	Project	25	7-point grading scale	Internal examination	Oral exam based on a project	English
3 SEMESTER Version C - Study Abroad*						
3-4 SEMESTER Version D						
Long Master's Thesis (AODATM3P177)	Project	60	7-point grading scale	External examination	Master's thesis/final project	English
4 SEMESTER						
Master's Thesis (AODATM4P171)	Project	30	7-point grading scale	External examination	Master's thesis/final project	English

On 2nd semester the student must choose between version A or B.

On 3rd semester the student must choose between version A, B, C og D.

*3rd semester Version C: If the student wants to study abroad the Study Board recommends this in the third semester. The student must apply for a preapproval of credit transfer by the Study Board of Architecture and Design.

§ 19: ADDITIONAL INFORMATION

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. If the project is written in English, the summary must be in Danish.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.

[1] Or another foreign language (upon approval from the Board of Studies).

[2] The Board of Studies can grant exemption from this.

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 Joint Program Regulations for the rules on credit transfer.

Rules for examinations
The rules for examinations are stated in the Examination Policies and Procedures published by The Technical Faculty of IT and Design on their website.

Exemption
In exceptional circumstances, the Board of Studies study 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.

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.

Evaluation formats for the Bachelor and Master programs under the Board of Studies for Architecture and Design, School of Architecture, Design and Planning.

Please refer to the study guide of the relevant semester and module for further descriptions of the chosen evaluation format.

Project modules

Evaluation format C – Project module with external examination:
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/analyzes/posters/drawings/models) where the individual examinee's contribution is not indicated. It is further presumed that the student has regularly and actively participated in evaluation seminars etc..

The module is assessed with external examination.

The written material is submitted in physical form to the semester secretary and also digitally uploaded to the directory assigned by the semester secretary. This according to the current delivery requirements in the Semester Description or Study Guide.

Evaluation format P – Project module with internal examination:
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/analyzes/posters/drawings/models) where the individual examinee's contribution is not indicated. It is further presumed that the student has regularly and actively participated in evaluation etc..

The module is assessed with internal examination.

The written material is submitted in physical form to the semester secretary and also digitally uploaded to the directory assigned by the semester secretary. This according to the current delivery requirements in the Semester Description or Study Guide.

Course modules:

Evaluation format L – Course module, oral or written assessment.
Comprising of:

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). 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 must be digitally uploaded to the directory assigned by the semester secretary. This according to the current delivery requirements in the Semester Description or Study Guide.

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 must be digitally uploaded to the directory assigned by the semester secretary. This according to the current delivery requirements in the Semester Description or Study Guide.

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 must be digitally uploaded to the directory assigned by the semester secretary. This according to the current delivery requirements in the Semester Description or Study Guide.

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.

§ 20: COMMENCEMENT AND TRANSITIONAL RULES

The curriculum is approved by the Dean of The Technical Faculty of IT and Design and enters into force as of September 2017.

Students who wish to complete their studies under the previous curriculum from 2015 must conclude their education by the summer examination period 2018 at the latest, since examinations under the previous curriculum are not offered after this time.

§ 21: AMENDMENTS TO THE CURRICULUM AND REGULATIONS

Minor editorial changes have been made in connection with the digitisation of the study Curriculum.