



AALBORG UNIVERSITET

# **CURRICULUM FOR THE MASTER'S PROGRAMME IN MANAGEMENT IN THE BUILDING INDUSTRY, 2012**

MASTER OF SCIENCE (MSC) IN TECHNOLOGY  
AALBORG

[Link to this studyline](#)

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## **§ 1: PREFACE**

Pursuant to Act 367 of May 22, 2013 on Universities (the University Act) with subsequent changes, the following curriculum for the Master of Science programme in Management in the Building Industry is stipulated. The programme also follows the Framework Provisions and the Examination Policies and Procedures for 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. 1328 of November 15, 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. 111 of January 30, 2017 (the Admission Order) and Ministerial Order no. 114 of February 3, 2015 (the Grading Scale Order) with subsequent changes.

## **§ 3: CAMPUS**

The Master's programme is offered in Aalborg.

## **§ 4: FACULTY AFFILIATION**

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

## **§ 5: STUDY BOARD AFFILIATION**

The Master's programme falls under Study Board of Civil Engineering.

## **§ 6: AFFILIATION TO CORPS OF EXTERNAL EXAMINERS**

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

## **§ 7: ADMISSION REQUIREMENTS**

### **Applicants with a legal right of admission (retskrav)**

- Admission to the Master's programme in Management in the Building Industry requires a Bachelor's degree in Architectural Technology and Construction Management, a Bachelor's degree in civil engineering, or a Bachelor of engineering degree in civil engineering, or the like.

### **Applicants without legal right of admission**

- 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.

## **§ 8: THE PROGRAMME TITLE IN DANISH AND ENGLISH**

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

## **§ 9: PROGRAMME SPECIFICATIONS IN ECTS CREDITS**

The Master's programme is a 2-year, research-based, full-time study program. The program 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 successfully completed (passed) programme elements from other Master's programmes in lieu of programme elements in this programme (credit transfer). The Study Board can also approve successfully completed (passed) programme elements from another Danish programme or a programme outside of Denmark at the same level in lieu of programme elements within this curriculum. Decisions on credit transfer are made by the Study Board based on an academic assessment. See the Joint Programme Regulations for the rules on credit transfer.

## § 11: EXEMPTIONS

In exceptional circumstances, the Study Board 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.

## § 12: RULES FOR EXAMINATIONS

The rules for examinations are stated in the Examination Policies and Procedures published by the faculty on their website.

## § 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 (or another foreign language: French, Spanish or German upon approval by the Study Board). If the project is written in English, the summary must be in Danish (The Study Board can grant exemption from this). The summary must be at least 1 page and not more than 2 pages (this is not included in any fixed minimum and maximum number of pages per student). The summary is included in the evaluation of the project as a whole.

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

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.

## § 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

### Knowledge

- has knowledge in management in the building industry that, in selected areas, are based on the highest international research in a subject area.
- can understand and, on a scientific basis, reflect over the knowledge of management in the building industry and identify scientific problems.
- has knowledge about organisation and management of order-based production in the building activity, including management systems, both technical, economic, social and organisational.
- can understand and, on a scientific basis, reflect over the builders and construction contractors frames and conditions for production, and be able to identify innovation and development potentials.

### Skills

- excels in the scientific methods and tools and general skills related to employment within Management in the Building Industry.
- can evaluate and select among the scientific theories, methods, tools and general skills within Management in the Building Industry and, on a scientific basis, advance new analyses and solutions.

- can communicate research-based knowledge and discuss professional and scientific problems with both peers and non-specialists.

### Competencies

- can manage work and development situations that are complex, unpredictable and require new solutions.
- can independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility.
- can independently take responsibility for own professional development and specialisation.
- can structure and communicate problems and solutions and consequences targeted at different recipients and consider both professional, technical ethics as a possible conflict of interests.
- has knowledge of the connection between project engineering and execution, running and maintenance of building, including basic knowledge of design of models and building up models that describe the building's products and processes.

## § 17: STRUCTURE AND CONTENTS OF THE PROGRAMME

The programme is structured in modules and organized as a problem-based study. A module is a programme 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.

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:

- project work
- lectures
- classroom instruction
- study circles
- workshops
- exercises (individually and in groups)
- laboratory experiments
- field measurements and registration
- portfolio work
- independent study

Where the modules are specific aspects of teaching methods, this will be indicated by the module description, see below.

Project modules are generally evaluated in a group based oral exam based upon a submitted report and an oral group presentation according to the Framework provisions (examination policies).

For individual written exams the study board selects among the following possibilities:

- written exam based on handed out exercises
- multiple choice
- on-going evaluation of written assignments

For individual oral exams the study board selects among the following possibilities:

- oral exam with or without preparation
- oral exam based on project report
- oral exam based on presentation seminar

- portfolio based oral exam

If the number of students following a module is small and/or if the number of students having to attend a re-exam is small the study board can decide that an exam is conducted either as an oral or written individual exam for practical and economic reasons. In the first case decision must be notified before the start of the teaching activity in the latter case the students must be notified when the examination date is decided.

## § 18: 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).

Of a total of 120 ECTS, 105 ECTS are assessed by the 7-point scale and 45 ECTS are assessed by external examination.

| Offered as:  |             |      |                       |                      |                               |
|--|-------------|------|-----------------------|----------------------|-------------------------------|
| Study programme: Cand.tech. in Construction Management - BLX                   |             |      |                       |                      |                               |
| Module name  | Course type | ECTS | Applied grading scale | Evaluation method    | Assessment method             |
| <b>1 SEMESTER</b>  |             |      |                       |                      |                               |
| <a href="#">Design and Construction of Buildings</a>                           | Project     | 15   | 7-point grading scale | Internal examination | Oral exam based on a project  |
| <a href="#">Project Management and Economics</a>                               | Course      | 5    | 7-point grading scale | Internal examination | Written or oral exam          |
| <a href="#">Geotechnics and Foundation</a>                                     | Course      | 5    | 7-point grading scale | Internal examination | Written or oral exam          |
| <a href="#">Problem Based Learning and Introduction to Statics</a>             | Course      | 5    | Passed/Not Passed     | Internal examination | Written or oral exam          |
| <b>2 SEMESTER</b>  |             |      |                       |                      |                               |
| <a href="#">Project management and Production in Construction</a>              | Project     | 15   | 7-point grading scale | External examination | Oral exam based on a project  |
| <a href="#">Management of the Construction Process</a>                         | Course      | 5    | 7-point grading scale | Internal examination | Written or oral exam          |
| <a href="#">Framework Conditions of Construction</a>                           | Course      | 5    | 7-point grading scale | Internal examination | Written or oral exam          |
| <a href="#">Development of Project and Quality Management Systems</a>          | Course      | 5    | Passed/Not Passed     | Internal examination | Written or oral exam          |
| <b>3 SEMESTER</b>  |             |      |                       |                      |                               |
| <a href="#">3. Semester Electives: Projects</a>                                |             | 15   |                       |                      |                               |
| <a href="#">Information Technology and Building Modelling</a>                  | Course      | 5    | Passed/Not Passed     | Internal examination | Written or oral exam          |
| <a href="#">Development of Advanced Project and Quality Management Systems</a> | Course      | 5    | 7-point grading scale | Internal examination | Written or oral exam          |
| <a href="#">Strategy and Performance Measurements</a>                          | Course      | 5    | 7-point grading scale | Internal examination | Written or oral exam          |
| <b>4 SEMESTER</b>  |             |      |                       |                      |                               |
| <a href="#">Master's Thesis</a>  | Project     | 30   | 7-point grading scale | External examination | Master's thesis/final project |

| 3. Semester Electives: Projects   |             |      |                       |                      |                              |
|---|-------------|------|-----------------------|----------------------|------------------------------|
| Module name   | Course type | ECTS | Applied grading scale | Evaluation Method    | Assessment method            |
| <a href="#">Management of Construction Industry Companies</a>                       | Project     | 15   | 7-point grading scale | Internal examination | Oral exam based on a project |
| <a href="#">Management of Construction Industry Facilities Management Companies</a> | Project     | 15   | 7-point grading scale | Internal examination | Oral exam based on a project |

On the 3rd semester the students must select one of two projects, which can be found in **3. Semester Electives: Projects**

The students are given options in the project modules as they can select among different projects within the same general theme. Moreover, the Master Thesis on the 4th semester can be selected freely within the field of Management in the Building Industry.

The Study Board of Civil Engineering can decide, that the contents of a course module on a semester is taught in the project module in the same semester, by increasing the ECTS extend as well as the learning goals. The decision is taken regarding to capacity and/or economy of the semester.

## § 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.

\* Or another foreign language (upon approval from the Board of Studies).

\*\* 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 Framework Provisions for the rules on credit transfer.

### Rules for examinations

The rules for examinations are stated in the Examination Policies and Procedures published by the Faculties of Engineering, Science and Medicine 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.

**Completion of the Master's program**

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

**§ 20: COMMENCEMENT AND TRANSITIONAL RULES**

The curriculum is approved by the dean and enters into force as of 1 February 2012.

Students who wish to complete their studies under the previous curriculum from 2009 must conclude their education by the summer examination period 2013 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 at Aalborg University, the curriculum must be revised no later than 5 years after its entry into force.

**§ 21: AMENDMENTS TO THE CURRICULUM AND REGULATIONS**

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