

## MASTER OF SCIENCE (MSC) IN TECHNOLOGY (ENTREPRENEURIAL ENGINEERING), 2020

MASTER OF SCIENCE (MSC) IN TECHNOLOGY AALBORG

Link to this studyline

Master of Science (MSc) in Technology (Entrepreneurial Engineering), 2020

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

Entrepreneurial Engineering 2017

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#### § 1: PREFACE

Pursuant to consolidation Act 778 of August 7, 2019 on Universities (the University Act), the following is established. The programme also follows the Joint Programme Regulations and the Examination Policies and Procedures for Aalborg University.

#### § 2: BASIS IN MINISTERIAL ORDERS

The Master's programme is organised in accordance with the Ministry of Higher Education and Science's Order no. 20 of January 9, 2020 on Bachelor's and Master's Programmes at Universities (the Ministerial Order of the Study Programmes) and Ministerial Order no. 22 of January 9, 2020 on University Examinations (the Examination Order). Further reference is made to Ministerial Order no. 153 of February 26, 2020 (the Admission Order) and Ministerial Order no. 114 of February 3, 2015 (the Grading Scale Order).

#### § 3: CAMPUS

The programme is offered in Aalborg.

#### § 4: FACULTY AFFILIATION

The Master's programme falls under the Faculty of Social Sciences, Aalborg University.

#### § 5: STUDY BOARD AFFILIATION

The Master's programme falls under the Study Board of Economics and Business Administration.

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

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

#### § 7: ADMISSION REQUIREMENTS

Applicants with one of the following degrees are entitled to admission:

None.

#### Applicants without legal claim to admission:

- Bachelor of Science in Architecture and Design
- Bachelor of Science in Civil Engineering
- Bachelor of Science in Electronics and Computer Engineering
- Bachelor of Science in Internet Technology
- Bachelor of Science in Computer Systems
- Bachelor of Science in Software
- Bachelor of Science in Machine and Manufacturing
- Bachelor of Science in Medialogy
- Bachelor of Science in City-, Energy and Envrironmental Planning
- Bachelor of Science in Health Science and Technology
- Bachelor of Science in Architectural Technology and Construction Management
- Bachelor of Science in Civil Engineering

- Bachelor of Science in Mechanical Engineering
- Bachelor of Science in Engineering in Information and Communication Technology.

All applicants without a legal claim must prove that their English language qualifications is equivalent to level B (Danish level) in English.

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

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

#### § 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: <a href="https://www.studieservice.aau.dk/regler-vejledninger">https://www.studieservice.aau.dk/regler-vejledninger</a>

#### § 12: RULES FOR EXAMINATIONS

The rules for examinations are stated in the Examination Policies and Procedures published at this website: <a href="https://www.studieservice.aau.dk/regler-vejledninger">https://www.studieservice.aau.dk/regler-vejledninger</a>

#### § 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

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 programme:

#### Knowledge

- The graduate will have acquired knowledge about theories, methods and tools within the fields of business development, innovation, entrepreneurship, agile processes, prototyping, design thinking and creativity, based on research at the highest international level
- The graduate can understand and scientifically reflect on knowledge associated with the above-mentioned areas, and the graduate will be able to idenfiy research questions related to these areas.

#### Skills

- The graduate has learned to master the scientific methods, tools and general skills related to business development, innovation, entrepreneurship, agile processes, prototyping, design thinking and creativity.
- The graduate will be able to choose between the different scientific theories, methods, tools and general skills and based on a scientific foundation generate models of analysis and solutions.
- The graduate will be able to disseminate research-based knowledge and discuss professional and scientific topics with both peers and non-specialists.

#### **Competencies**

- The graduate can use creative and lateral thinking for the creation of new and innovative solutions and methods.
- The graduate can identify and create new technology- and knowledge based opportunities for value creation and business.
- The graduate can organize the process of qualifying, quantifying and pursuing opportunities in both new and existing organizations.
- The graduate will be able to strengthen the potential for creativity and innovation in existing organizations through implementation of new processes and methods.
- The graduate will be able to independently take responsibility for his/her own professional development and specialisation.
- The graduate will have developed professional competencies within developing new business and the transformation of organisational settings with a special attention to:
  - Commercialisation of new knowledge
  - Value creation through innovative solutions
  - Development and implementation of processes that enable creative and innovative solutions in organisations.

#### § 17: STRUCTURE AND CONTENTS OF THE PROGRAMME

The programme is structured in modules and organised as a problem-based study. A module is a programme element or a group of programme elements aiming 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 that are defined in the curriculum.

The programme is based on a combination of academic, problem-oriented and interdisciplinary approaches and organised based on the following work and evaluation methods that combine skills and reflection:

- Lectures
- Classroom instruction
- Project work
- Workshops
- Collaboration with external partners

- Exercises (individually and in groups)
- Teacher feedback
- Reflection
- Portfolio work

#### § 18: OVERVIEW OF THE PROGRAMME

The table below gives an overview of the project modules and course modules that need to be completed during the four Semesters of the master's 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).

Offered as: 1-professional						
Module name	Course type	ECT S	Applied grading scale	Evaluation method	Assessment method	Langua ge
		1	SEMESTER			
Entrepreneurial Practice (M-EE-K1-1A)	Project	15	7-point grading scale	Internal examination	Oral exam based on a project	English
Agile Business Navigation (M-EE-K1-2)	Course	5	Passed/Not Passed	Internal examination	Written or oral exam	English
<u>Design Based Innovation</u> (M-EE-K1-3)	Course	5	7-point grading scale	Internal examination	Written or oral exam	English
<u>Understanding Entrepreneurship</u> (M-EE-K1-4)	Course	5	7-point grading scale	Internal examination	Written or oral exam	English
		2	SEMESTER			
Entrepreneurial Tactics (M-EE-K2-1A)	Project	15	7-point grading scale	External examination	Oral exam based on a project	English
Corporate Entrepreneurship (M-EE-K2-2)	Course	5	7-point grading scale	Internal examination	Written or oral exam	English
Applied Business Modelling (M-EE-K2-3)	Course	5	7-point grading scale	Internal examination	Written or oral exam	English
Markets, Resources and Entrepreneurship (M-EE-K2-4)	Course	5	7-point grading scale	Internal examination	Written or oral exam	English
			SEMESTER lective track A			
Entrepreneurial Strategy (M-EE-K3-1A)	Project	30	7-point grading scale	Internal examination	Written or oral exam	English
			SEMESTER lective track B			
Project-oriented Study in an External Organisation (M-EE-K3-2A)	Project	30	7-point grading scale	Internal examination	Oral exam based on a project	English
	•	3-4	SEMESTER			•
Master's Thesis (M-EE-K3-3A)	Project	60	7-point grading scale	External examination	Master's thesis/final project	English

4 SEMESTER										
Master's Thesis (M-EE-K4-1A)	Project	30	7-point grading scale	External examination	Master's thesis/final project	English				

The 3rd Semester offers different ways of organisation – depending on the student's choice of content; traditional project work at Aalborg University, study visit at an educational institution in Denmark or abroad, a project oriented study in an external organisation in Denmark or abroad, or a Semester programme that comprises cross-disciplinary programme elements composed by the student. The total work load of the Semester must be equivalent to 30 ECTS. The project may be finalised with a project report or in the form of a scientific paper, or, if the project is continued on the 4th Semester, with a midterm evaluation. The project oriented study in an external organisation has to be approved by the study board before the beginning of the Semester.

The master thesis can be conducted as a long master thesis using both the 3<sup>rd</sup> and 4<sup>th</sup> Semester. If choosing to do a long master thesis, it has to include experimental work and has to be approved by the study board.

#### § 19: ADDITIONAL INFORMATION

All students who have not participated in Aalborg University's PBL introductory course during their Bachelor's degree must attend the introductory course "Problem-based Learning and Project Management". The introductory course must be approved before the student can participate in the project exam. Please see further information about the course on the study board website <a href="https://www.mp.aau.dk/study-board">https://www.mp.aau.dk/study-board</a>

#### § 20: COMMENCEMENT AND TRANSITIONAL RULES

The curriculum is approved by the Dean of the Faculty of Engineering and Science and enters into force as of September 2020.

The Study Board does not offer teaching after the previous curriculum from 2017 after the summer examination 2022.

The Study Board will offer examinations after the previous curriculum, if there are students who have used examination attempts in a module without passing. The number of examination attempts follows the rules in the Examination Order.

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