



AALBORG UNIVERSITET

**CURRICULUM FOR THE MASTER'S  
PROGRAM (CAND.GEOM.) IN  
SURVEYING, PLANNING AND LAND  
MANAGEMENT - 2015 - COPENHAGEN**

MASTER OF SCIENCE (MSC) IN SURVEYING,  
PLANNING AND LAND MANAGEMENT  
COPENHAGEN

Curriculum for the Master's Program (cand.geom.) in Surveying, Planning and Land Management - 2015 - Copenhagen

[Link til denne studieordning](#)

Link(s) til andre versioner af samme studieordning:

[Curriculum for the Master's Programme \(cand.geom\) in Surveying, Planning and Land Management - 2017 - Copenhagen](#)

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## § 1: PREFACE

Pursuant to Act 960 of August 14, 2014 on Universities (the University Act) with subsequent changes, the following curriculum for the Master's program in Surveying, Planning and Land Management is stipulated. The program also follows the Framework Provisions and the Examination Policies and Procedures for the Faculty of Engineering and Science.

Commencement of this curriculum is 1. September 2015.

## § 2: BASIS IN MINISTERIAL ORDERS

The Master's programme is organised in accordance with the Ministry of Higher Education and Science's Order no. 1520 of December 16, 2013 on Bachelor's and Master's Programmes at Universities (the Ministerial Order of the Study Programmes) and Ministerial Order no. 670 of June 19, 2014 on University Examinations (the Examination Order) with subsequent changes. Further reference is made to Ministerial Order no. 1488 of December 16, 2013 (the Admission Order) and Ministerial Order no. 250 of March 15, 2007 (the Grading Scale Order) with subsequent changes.

## § 3: CAMPUS

The programme is offered in Copenhagen.

## § 4: FACULTY AFFILIATION

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

## § 5: STUDY BOARD AFFILIATION

The Master's programme falls under Study Board of Planning, Geography and Surveying

## § 6: AFFILIATION TO CORPS OF EXTERNAL EXAMINERS

The Master's programme is associated with the external examiners corps on Surveying Programme

## § 7: ADMISSION REQUIREMENTS

Admission to the Master's program in Surveying, Planning and Land Management requires a Bachelor's degree in Surveying, Planning and Land Management.

All international students applying to Aalborg University must document English language qualifications comparable to an 'English B level' in the Danish upper secondary school (minimum average grade 02).

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 Danish designation Landinspektør, cand.geom. med specialisering i:

- geoinformatik *eller*
- arealforvaltning og planlægning

The English designation is: Master of Science (MSc) in Surveying, Planning and Land Management with specialisation in:

- Geoinformatics *or*
- Land Management

## § 9: PROGRAMME SPECIFICATIONS IN ECTS CREDITS

The Master's program 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**

**Competence profile of the Master's program (cand.geom.) with Specialisation in Geoinformatics**

The graduate of the Master's program:

**Knowledge**

## Curriculum for the Master's Program (cand.geom.) in Surveying, Planning and Land Management - 2015 - Copenhagen

- Has knowledge in geospatial information technology, distributed geo-services, 3D-visualisation, spatial data infrastructure, and geocomputation based on the highest international research in the subject areas
- Can understand and, on a scientific basis, make reflections on the knowledge and identify scientific problems regarding the development of spatial enabled services, advanced geovisualisation technologies, spatial data infrastructures, geocomputation, image processing and spatial decision support systems

### Skills

- Excels in the scientific methods and tools and general skills related to all aspects of geographic information
- Can evaluate and select among the scientific theories, methods, tools regarding data storage, flow, processing, and visualisation - 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 on geographic information technology.

### Competencies

- Can use advanced geospatial theories, methods and tools to 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 on all aspects of geographic information technology.
- Can independently take responsibility for own professional development and specialisation on geographic information

### Competence profile of the Master's program (cand.geom.) with Specialisation in Land Management

#### The graduate of the Master's program:

#### Knowledge

- Has knowledge in land management based on research and practices concerning development and regulation of property and land use, spatial development and planning, land economics and land governance.
- Has knowledge in spatial planning and governance based on state-of-the-art international research.
- Understands legal issues concerning real property and legal and economic issues concerning public intervention in the property market.
- Understands legal issues concerning the use of and public interventions of private property, based on the highest research in the field.
- Can understand and, on a scientific basis, reflect over the knowledge areas and identify scientific as well as practical problems or challenges regarding urban and rural development. Including how this relates to societal values and norms of relevance for land management.

#### Skills

- Excels in main theories that relate to the knowledge areas and in scientific methods and tools and general skills related to planning and management activities for urban and rural development.
- Can apply, evaluate and select among the scientific theories, methods and tools regarding planning and land management for urban and rural development - 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 concerning planning and land management for urban and rural development

#### Competencies

- Can apply and combine theories, methods and tools to 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 on relevant aspects of planning and land management for urban and rural development
- Can independently take responsibility for own professional development and specialisation on planning and land management for urban and rural development

## § 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 that 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:

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

By prior agreement with the study board, it is possible for students to attend modules offered at other relevant master programmes.

## Completion of the Master's program

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

## § 18: OVERVIEW OF THE PROGRAMME

### Specialisation in Geoinformatics

#### Overview of the program

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					
Specialisation: Geoinformatics					
Study programme: Surveying, Planning and Land Management					
Module name	Course type	ECT S	Applied grading scale	Evaluation method	Assessment method
<b>1 SEMESTER</b>					
<a href="#">GI Technology and Information Systems</a>	Project	20	7-point grading scale	External examination	Oral exam based on a project
<a href="#">Geospatial Information Technology</a>	Course	5	Passed/Not Passed	Internal examination	Written exam
<a href="#">Land Governance and Geographic Information in a Societal Context</a>	Course	5	Passed/Not Passed	Internal examination	Active participation and/or written assignment
<b>2 SEMESTER</b>					
<a href="#">GI – Integration, Applications and Society</a>	Project	20	7-point grading scale	External examination	Oral exam based on a project
<a href="#">Geocomputation and Spatial Analytics</a>	Course	5	Passed/Not Passed	Internal examination	Written exam
<a href="#">Geovisualisation</a>	Course	5	Passed/Not Passed	Internal examination	Written exam
<b>3 SEMESTER</b>					
<a href="#">Professional Development</a>	Project	30	7-point grading scale	Internal examination	Oral exam based on a project
<b>4 SEMESTER</b>					
<a href="#">Master's Thesis</a>	Project	30	7-point grading scale	External examination	Oral exam based on a project

**Specialisation in Land Management**

**Overview of the program**

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:					
Specialisation: Land Management					
Study programme: Surveying, Planning and Land Management					
Module name	Course type	ECT S	Applied grading scale	Evaluation method	Assessment method
<b>1 SEMESTER</b>					
<a href="#">Development and Regulation of Real Property</a>	Project	15	7-point grading scale	Internal examination	Oral exam based on a project
<a href="#">Property regulation</a>	Course	5	Passed/Not Passed	Internal examination	Written or oral exam
<a href="#">Managing the Use of Land</a>	Course	5	Passed/Not Passed	Internal examination	Active participation and/or written assignment
<a href="#">Land Governance and Geographic Information in a Societal Context</a>	Course	5	Passed/Not Passed	Internal examination	Active participation and/or written assignment
<b>2 SEMESTER</b>					
<a href="#">Spatial Development and Planning</a>	Project	20	7-point grading scale	External examination	Oral exam based on a project
<a href="#">Spatial Planning and Governance</a>	Course	5	Passed/Not Passed	Internal examination	Active participation and/or written assignment
<a href="#">Land Use Regulation and Land Economics</a>	Course	5	Passed/Not Passed	Internal examination	Active participation and/or written assignment
<b>3 SEMESTER</b>					
<a href="#">Professional Development</a>	Project	30	7-point grading scale	Internal examination	Oral exam based on a project
<b>4 SEMESTER</b>					
<a href="#">Master's Thesis</a>	Project	30	7-point grading scale	External examination	Oral exam based on a project

**§ 19: 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.

**§ 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 1<sup>th</sup> of September 2015.

Students who wish to complete their studies under the previous curriculum from 2011 must conclude their education by the summer examination period 2016 at the latest, since examinations under the previous curriculum are not offered after this time.

In accordance with the Framework Provisions 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 digitalisation of the curriculum.