Programme syllabus

Master's Programme, Real Estate and Construction Management, 120 credits
Masterprogram, fastigheter och byggande

120.0 credits

Valid for students admitted to the education from autumn 18 (HT - Autumn term; VT - Spring term).

This is a translation of the Swedish, legally binding, programme syllabus.

Programme objectives

This information applies to students starting the programme in the 2018/2019 academic year. There may be some changes to the content in Year 2 of the programme. Always check www.kth.se/utbildning for the latest information about the programme.

- To train entrepreneurially-minded urban planners who are attractive to the labour market with their in-depth knowledge of construction project management, real estate economics and land law. Students are trained to collaborate across disciplinary boundaries, work independently, exercise their own power of initiative and create new ideas for a sustainable built environment.
- To prepare students for PhD studies.

Knowledge and understanding

Students are expected to develop and deepen their knowledge of real estate economics, land law and construction project management to prepare them for professional roles in the real estate and construction management sectors.

Skills and abilities

We expect our graduates to be competent in applying disciplinary knowledge to practical situations. We also expect our graduates to be highly proficient in systematically acquiring new knowledge and insights in the fields of real estate and construction management. To achieve this, they should be able to implement theories and concepts that are relevant to the field while adopting a critical approach. In addition, the graduates should be able to cooperate both in national and international multi-disciplinary teams, and communicate effectively, orally and in writing.
Through seminars, case studies and project assignments we train our graduates to develop their powers of independent analysis, reasoning and reflection, and to train their powers of analytical decision-making. They should also be able to complete demanding projects inside given time frames.

**Ability to make judgements and adopt a standpoint**

After completing the programme, the students should be able to reason, reflect over and make well-balanced assessments on issues related to the field, while taking ethical aspects into account. In particular we aim to train graduates to independently search for the information required to arrive at reasonable conclusions on a variety of issues.

The students should be aware of and understand the consequences of how decisions and the implementation of disciplinary knowledge can contribute to the development of social, economic and ecologically sustainable built environments.

**Extent and content of the programme**

This is a two-year programme; three terms of courses (90 ECTS credits) and one term consisting of a degree project (30 ECTS credits). The programme is at an advanced academic level. The tuition language is English and, in some courses, Swedish.

**Eligibility and selection**

The general admission requirement for masters programmes at KTH is a completed Bachelor's degree, equivalent to a Swedish Bachelor's degree (180 ECTS credits), or equivalent academic qualifications from an internationally recognised university. In addition, students have to meet following specific requirements:

Degree on the first level consisting of at least 180 ECTS credits/120 higher education credits or a corresponding foreign degree in the field of built environment, including civil engineering, building technology, real estate finance and investment, real estate economics, real estate/property management, construction management, architecture, planning, surveying, geomatics and law. Applicants are required to have at least

- 15 ECTS credits in economics/business administration and/or statistics or equivalent.

Admission to the English-language Master’s programme requires English B proficiency or equivalent. While Swedish is not a requirement for completion of the degree work, the real estate development and land law course sequence that is taught in Swedish requires students have a proficiency in Swedish equivalent to Swedish B.

For further information see KTH:s admission regulations in the KTH regulatory framework, www.kth.se

**Selection**

The selection process is based on the following selection criteria: University, previous studies (for instance GPA, grades in specific subjects and English). The evaluation scale is 1-75.
Specific documents for the master's programme in Real Estate and Construction Management are:

- Motivation letter
- Relevant work experience
- Letters of recommendation

**Implementation of the education**

**Structure of the education**

The academic year consists of one autumn and one spring term. Each term consists of two study periods. Students are expected to take two courses per period. The curriculum covers four terms of full time studies.

The programme is structured so that all students read the joint mandatory courses in periods 1 to 2 of year 1 and the mandatory course Theory of Science and Research Methods in period 2 of year 2. The programme also contains a number of proposed course sequences that provide a level of progression within different profiles in the programme that are oriented towards construction project management, building and real estate economics or real estate development and land law.

**Courses**

The programme is course-based. Lists of courses are included in appendix 1.

The programme is largely course-based, with some training in scientific work in the form of assignments in specific courses and a degree project. Appendix 1 includes the courses in the programme. A typical course will consist of a series of lectures combined with a project or a set of exercises, some of them resulting in term papers, project reports or oral presentations.

The courses in the course sequences are conditionally elective and conditions are also imposed by the entry requirements between courses that are built on each other to achieve a level of progression in the programme.

**Grading system**

Courses in the first and the second cycle are graded on a scale from A to F. A-E are passing grades, A is the highest grade. The grades pass (P) and fail (F) are used for courses under certain circumstances.

Information regarding the scale found in the curriculum.

**Conditions for participation in the programme**

Participation requires admission to courses within the programme and course registration. Course registration is done via the personal menu at www.kth.se
For students starting their education from the autumn semester 2018, previous promotion requirements have been replaced with special admission requirements to each course. Admission requirements are specified in the course syllabus.

**Recognition of previous academic studies**

Students are able to apply for credit transfer for courses taken at another university, in Sweden or abroad.

For more information please refer to KTH's regulations at www.kth.se

**Studies abroad**

Students have the opportunity to spend one semester at one of KTH’s partner universities abroad.

For more information and recommendation on the appropriate semester for exchange studies refer to the International coordinators.

**Degree project**

The completion of a degree project (30 ECTS credits) is required to fulfil the requirements of the Master of Science Degree (MSc).

The degree project is the final part of the education. The project work may begin when special admission requirements for the course are fulfilled.

If a student intends to undertake a degree in another subject area, it must be approved by the Director of undergraduate and Master studies.

Each student’s proposed degree project has to be approved by the senior course supervisor for the degree project. Current supervisory capacity at the department will determine which subjects are covered in the degree projects.

The degree project is graded pass (P) or fail (F).

**Degree**

Title: Master of Science with a Major in the Built Environment specialized in Real Estate and Construction Management, 120 credits

Degree in the programme described above is obtained after completion of courses comprising 120 ECTS credits of which

- at least 60 ECTS credits at advanced level including mandatory and conditionally elective courses
- 30 ECTS degree project within the master programme
- a maximum of 30 ECTS credits of entirely elective courses
When the Master’s programme is the final part of the degree programme in Civil engineering and urban management, there are additional degree requirements according to the study programme for Civil engineering and urban management, for example courses in mathematics and natural science subjects for a minimum of 45 ECTS credits.

The application for degree certificate is done through the personal menu on KTH.se.

Appendix 1 - Course list
Appendix 2 - Programme syllabus descriptions
Appendix 1: Course list

Master's Programme, Real Estate and Construction Management, 120 credits (TFOBM), Programme syllabus for studies starting in autumn 2018

General courses

Year 1

Mandatory courses (22.5 Credits)

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI2102</td>
<td>Real Estate Market Analysis and Development</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AI2152</td>
<td>Quantitative Methods Applied to Real Estate and Construction Management</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AI2810</td>
<td>Project Communication</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

Conditionally elective courses

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI2135</td>
<td>Financial Investments</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AI2144</td>
<td>Corporate Finance</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AI2154</td>
<td>Advanced Valuation and Analysis</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AI2155</td>
<td>Urban Economics and Cost Benefit Analysis</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AI2156</td>
<td>Contract Theory with Application to Property Management</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AI2507</td>
<td>Law of Real Estate Formation</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td></td>
<td>The course is given in Swedish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI2508</td>
<td>Compulsory Purchase and Compensation</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td></td>
<td>The course is given in Swedish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI2511</td>
<td>Implementation of Development Plans</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td></td>
<td>The course is given in Swedish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AI2517</td>
<td>Land Development</td>
<td>7.5 hp</td>
<td>Second cycle</td>
</tr>
<tr>
<td></td>
<td>The course is given in Swedish</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
AI2805  Building Informatics and Logistics  7.5 hp  Second cycle
AI2808  Project Development and Architectural Concepts  7.5 hp  Second cycle
AI2809  Construction Management  7.5 hp  Second cycle

Supplementary information

The programme contains a number of proposed course sequences that provide a level of progression within different profiles in the programme that are oriented towards construction project management, building and real estate economics or real estate development and land law.

These courses are given in Swedish:

AI2507 Law of Real Estate Formation
AI2508 Compulsory Purchase and Compensation
AI2517 Land Development
AI2511 Implementation of Development Plans

Year 2

Mandatory courses (7.5 Credits)

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI2150</td>
<td>Theory of Science and Research Methods</td>
<td>7.5 hp  Second cycle</td>
</tr>
</tbody>
</table>

Conditionally elective courses

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI206X</td>
<td>Degree Project in Building and Real Estate Economics, Second Cycle</td>
</tr>
<tr>
<td>AI2106</td>
<td>Business Cycles in Construction and Real Estate Markets</td>
</tr>
<tr>
<td>AI2117</td>
<td>Facility Management</td>
</tr>
<tr>
<td>AI2127</td>
<td>Management and Leadership</td>
</tr>
<tr>
<td>AI2148</td>
<td>Entrepreneurial Finance</td>
</tr>
<tr>
<td>AI2153</td>
<td>Financial Economics with Real Estate Applications</td>
</tr>
<tr>
<td>AI2505</td>
<td>Law and Economics for Land Use Topics The course is given in Swedish</td>
</tr>
<tr>
<td>AI2518</td>
<td>Infrastructure - Responsibility and Financing The course is given in Swedish</td>
</tr>
<tr>
<td>AI2519</td>
<td>Rent, Tenant Ownership and Leasehold Law The course is given in Swedish</td>
</tr>
</tbody>
</table>
AI252X  Degree Project in Real Estate Development and Land Law.,  
Second Cycle  
The course is given in Swedish  
30.0 hp  Second cycle

AI2807  Project for Construction Project Managers  
7.5 hp  Second cycle

AI281X  Degree Project in Architectural Design and Construction 
Project Management, Second Cycle  
30.0 hp  Second cycle

Supplementary information

Note: The course list updates 15th November.

These courses are given in Swedish:

AI2518- Infrastructure - Responsibility and Financing

AI2519- Rent, Tenant Ownership and Leasehold Law

AI2505- Law and Economics for Land Use Topics

AI252X- Degree project in Real Estate Development and Land Law
Appendix 2: Specialisations

Master's Programme, Real Estate and Construction Management, 120 credits (TFOBM), Programme syllabus for studies starting in autumn 2018

This programme has no specialisations.