Programme syllabus

Master's Programme, Sustainable Urban Planning and Design, 120 credits
Masterprogram, hållbar samhällsplanering och stadsutformning
120.0 credits

Valid for students admitted to the education from autumn 20 (HT - Autumn term; VT - Spring term).

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

Programme objectives

The information is valid for students who started the program academic year 2020/2021. Later decisions may affect year 2 in the program. Please look at www.kth.se/studies?l=en_UK for further information.

In addition to the general objectives for Masters programmes as stated in the national degree ordinance and the local degree policy of KTH, specific learning outcomes are defined for the Masters programme Sustainable Urban Planning and Design. After completing the programme requirements students shall:

Knowledge and understanding

- Be acquainted with the theoretical foundations and present developments within urban and regional planning, architecture and urban design as well as environmental sciences.
- Have a sound knowledge on processes that determine urban change and regional development, the actors that are involved in these processes, and the aesthetical, social, economic, institutional and environmental determinants that contribute to sustainable development.
- Have a deep understanding of the tools and methods that can be applied to analyse the current status of cities and regions, and the prerequisites for future change.
- Comprehend the relation between theory and practice in planning and urban design, and the connections to other disciplines involved in urban and regional development on the local, regional and global level.

Skills and abilities

- Be able to assess and handle complexities of urban development in a local and regional perspective and relate them to their social, economic, environmental and political context.
• Be able to carry out advanced studies on contemporary problems, opportunities and future wants and needs, and by that contribute to the development of the field of knowledge. Be able to apply the aforementioned knowledge and skills in design, analysis and synthesis in urban development planning practice.
• Be able to make effective oral and written presentations of complex tasks in urban design, planning and environmental issues.
• Be able to convey own results and others viewpoints in a coherent and qualitative way through drawings, sketches, essays and oral presentations.
• Be able to use modern communication techniques and tools to illustrate and visualise plans, concepts and strategies.
• Be able to organise and lead multi-disciplinary groups with experts and contribute to the outcome of the working task.

Ability to make judgements and adopt a standpoint

• Analyse the merits of theoretical concepts, policies, plans and projects. Be able to detect implicit normative assumptions that determine different perspectives on planning problems. Be able to contextualise plans, concepts and policies in different temporal, cultural and institutional backgrounds.
• Be able to reflect critically on the nature and manner of dealing with impending planning problems.
• Be able to track developments within the discipline and analyse how these will affect planning practice.
• Be able to define needs for learning opportunities in order to improve professional capacity.

Extent and content of the programme

The Masters programme Sustainable Urban Planning and Design counts 120 ECTS credits and consists of three terms of coursework and one term for the degree project, together 2 years. The coursework encompasses a substantial share of studios and projects that aim at training students’ practical skills in planning and urban design and at gaining a better understanding of planning practice. All courses in the programme are at advanced (2nd cycle) level. The language of instruction is English.

The programme offers three profiles, Urban Planning and Design (UPD), Urban and Regional Planning (URP) and Environment and Planning (EP). The three profiles are recommended combinations of courses which represent separate professional competences that are involved in urban planning and regional development. By merging these professional competences into one programme, graduates acquire a comprehensive understanding of the planning process, the actors involved, and the aesthetical, social, economic, institutional and environmental determinants that contribute to the development of a sustainable society. Students can make their own combinations of courses within the programme.

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:
• a completed Bachelor’s degree in architecture or landscape architecture, physical planning, civil engineering in the built environment, energy and environment or equivalent, urban and regional planning, social or natural sciences relevant to the scope of the programme.
• at least 30 ECTS in the field of urban design, urban, transport or regional planning, national/regional economy or environmental sciences.

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

Admission to the programme does not imply that all students are eligible to register for all courses within the programme. Some of the courses have specific pre-requisites which either relate to other courses within the master programme or to the student's previous studies. However, all students are offered different combinations of courses which correspond to full-time studies in each semester.

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 Sustainable Urban Planning and Design are:

• Curriculum Vitae
• Motivation letter
• Portfolio (for students with a degree in architecture, landscape architecture and physical planning) The portfolio should contain three to five projects showing design processes from research/ fieldwork/ analysis to conclusion; an interest in sustainability questions; an engagement with architecture + urbanism; personality, curiosity, motivation; design- and representation skills. The student should certify that the portfolio only contains own work or contributions to group work.

Implementation of the education

Structure of the education

The academic year is 40 weeks and is divided into two semesters, autumn and spring. Each semester consists of two study periods.

Information on the extent of the school year, the exam and re-examination periods are cited on KTH.se

The first term starts with the mandatory course Sustainable Planning and Design, in which practices for sustainable urban development are explored and Stockholm as field of studies for urban planning and design is studied. In the second period a number of primary courses are offered which provide core knowledge for the profiles. The second and third term comprise courses that provide students with deeper knowledge and skills that prepare students for their Degree project and professional career. Urban Planning and Design (UPD) includes a series of studios in which students practice their design skills. Urban and Regional Planning (URP) offers courses with a focus on analysis, conceptualisation and implementation of development potentials for cities and regions. Environment and Planning (EP) also offers courses with a focus on analysis, conceptualisation and implementation, but in the field of environmental policy making, planning, scenario building or sustainability assessments. The third term
includes an interdisciplinary project in which students apply the skills and knowledge that are gained in the programme. The programme concludes with a Master’s Degree project in which students address selected problems within the scope of the programme.

**Courses**

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

**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 on KTH.se and the Education office.

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

The degree project comprises 30 credits and provides students with the opportunity to in-vesti-gate a problem in depth under the supervision of experienced company representative and researchers. The programme offers degree projects within three alternative field of studies; Urban Planning and Design, Urban and Regional Planning, and Environmental Strategic Analysis. If a student intends to undertake a degree in another subject area, it must be approved by the Director of undergraduate and Master studies.
The degree project work is graded pass (P) or fail (F).

Degree

Title: Master of Science within the Major of the Built Environment, 120 credits, or

Master of Science within the Major of Architecture, 120 credits

For both master's degrees, the student must meet the requirements according to the national degree requirements and have completed 120 credits, of which no more than 30 credits are optional electives.

To obtain the degree of master of science with a major in the Built Environment, 120 högskolepoäng

Requires at least 90 credits at the advance level, of which the following must be included:

- at least 60 ECTS credits at advanced level including mandatory and conditionally elective courses
- 30 ECTS credits degree project within the Major of The Built Environment

To obtain the degree of master of science with a major in Architecture, 120 högskolepoäng

Requires at least 90 higher education credits, of which the following must be included:

- at least 60 ECTS credits at advanced level including mandatory and conditionally elective courses
- 30 ECTS credits degree project within the Major of Architecture

When the master's programme is a final part of the degree programme in Civil Engineering and Urban Management or of the degree programme in Energy and Environment, there may be additional requirements according to the corresponding study programmes. For example, a master of science degree in the above degree programmes should include mathematics and science subjects for a minimum of 45 higher education 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, Sustainable Urban Planning and Design, 120 credits (THSSM), Programme syllabus for studies starting in autumn 2020

General courses

Year 1

Mandatory courses (22.5 Credits)

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG2126</td>
<td>Theory of Science and Research Methodology for Planning and Design</td>
<td>7.5 hp Second cycle</td>
</tr>
<tr>
<td>AG2805</td>
<td>Sustainable Planning and Design</td>
<td>15.0 hp Second cycle</td>
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</table>

Conditionally elective courses

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD2862</td>
<td>Sustainable Urban Planning and Design Studio 1.2- Situations</td>
<td>15.0 hp Second cycle</td>
</tr>
<tr>
<td>AD2865</td>
<td>Introduction to Urban Economics</td>
<td>7.5 hp Second cycle</td>
</tr>
<tr>
<td>AD2867</td>
<td>Sustainable Urban Planning and Design Studio 1.1- Textures</td>
<td>15.0 hp Second cycle</td>
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<tr>
<td>AE2507</td>
<td>Strategic Environmental Assessment</td>
<td>7.5 hp Second cycle</td>
</tr>
<tr>
<td>AG2116</td>
<td>City Networks in Regional Contexts</td>
<td>7.5 hp Second cycle</td>
</tr>
<tr>
<td>AG2127</td>
<td>Planning Theory and Urban Governance</td>
<td>7.5 hp Second cycle</td>
</tr>
<tr>
<td>AG2128</td>
<td>Urban Development and Planning</td>
<td>7.5 hp Second cycle</td>
</tr>
<tr>
<td>AG2171</td>
<td>Futures Studies and Forecasts</td>
<td>7.5 hp Second cycle</td>
</tr>
<tr>
<td>AG2804</td>
<td>Transport, Communication and Sustainable Development</td>
<td>7.5 hp Second cycle</td>
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</table>

Year 2

Conditionally elective courses

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits Edu. level</th>
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<tbody>
<tr>
<td>code</td>
<td>Course name</td>
<td>Credits</td>
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</tr>
<tr>
<td>AD2863</td>
<td>Sustainable Urban Planning and Design Studio 2.1 - Urban Ecologies</td>
<td>22.5 hp</td>
</tr>
<tr>
<td>AD2EXU</td>
<td>Degree Project in Urban Planning and Design, Second Cycle</td>
<td>30.0 hp</td>
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<tr>
<td>AG2129</td>
<td>Project Sustainable Urban Planning - Strategies for Urban and Regional</td>
<td>15.0 hp</td>
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<tr>
<td></td>
<td>Development</td>
<td></td>
</tr>
<tr>
<td>AG212X</td>
<td>Degree Project in Urban and Regional Planning, Second Cycle</td>
<td>30.0 hp</td>
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<tr>
<td>AG2130</td>
<td>Applied Urban and Regional Analysis</td>
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<td>AG2134</td>
<td>Contemporary Urban Theory, Advanced Course</td>
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<tr>
<td>AG2803</td>
<td>Ecosystem Support and Environmental Justice</td>
<td>7.5 hp</td>
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<tr>
<td>AG2809</td>
<td>Project Sustainable Urban Planning - Assessments, Plans and Processes</td>
<td>15.0 hp</td>
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<tr>
<td>AL250X</td>
<td>Degree Project in Strategies for Sustainable Development, Second Cycle</td>
<td>30.0 hp</td>
</tr>
<tr>
<td>AL2511</td>
<td>Resilience Thinking in Sustainable Planning</td>
<td>7.5 hp</td>
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**Supplementary information**
Appendix 2: Specialisations

Master's Programme, Sustainable Urban Planning and Design, 120 credits (THSSM), Programme syllabus for studies starting in autumn 2020

This programme has no specialisations.