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 11 (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 2010/2011. 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.

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 perspect-ive and relate them to their social, economical, 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 hp and consists of three terms of
coursework and one term for the degree project, together 2 years. The course-work 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 specialisation tracks, Urban Planning and Design (UPD), Urban and Regional Planning
(URP) and Environment and Planning (EP). The three tracks 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 en-viron­mental determinants that contribute to the development of a
sustainable society.

Eligibility and selection
The general admission requirements are the same for all programmes General admission requirements (http://www.kth.
se/studies/master/application?l=en)

The specific admission requirement for students that apply for the Urban Planning and Design (UPD) specialisation
track is a completed Bachelor’s degree in architecture, landscape architecture or urban planning. The previous study
should include at least 30 hp in the field of urban design.

The specific admission requirement for students that apply for the Urban and Regional Planning (URP) specialisation
track is a completed Bachelor’s degree in architecture or landscape architecture, civil engineering in the built
environment or equivalent, urban and regional planning or social sciences relevant to the scope of the specialisation
track. The previous study should comprise at least 30 hp in the field of urban, transport or regional planning, national/
regional economy, geo-informatics or environmental sciences.

The specific admission requirement for students that apply for the Environment and Planning (EP) specialisation track
is a completed Bachelor’s degree in architecture or landscape architecture, civil engineering in the built environment or
equivalent, urban and regional planning, social or natural sciences relevant to the scope of the specialisation track. The
previous study should comprise at least 30 hp in the field of urban, transport or regional planning, or environmental
sciences.
The selection process for the Masters programme Sustainable Urban Planning and Design is based on a total evaluation of the following selection criteria: university, grade point average (GPA), relevant academic courses and motivation letter. Working experience is an advantage but not a requirement. For students with a degree in architecture or landscape architecture, the portfolio is considered in the selection process.

Implementation of the education

Structure of the education

The academic year covers 40 weeks, starting in September and divided into two terms, which each consists of two study periods. Each study period concludes with a regular examination period of at least one week. In addition, three re-exam periods are scheduled, after Christmas, after the regular examination period of study period 4 (end of May) and before the start of a new academic year (August). If no exams are scheduled, the regular examination period can be used for seminars and concluding studios.

The first term starts with a common introduction for all specialisation tracks in Sustainable Planning and Design. In the second period a number of primary courses are offered which provide core knowledge for the specialisations. The second and third term comprise courses that provide students with deeper knowledge and skills in the specialisation tracks. The Urban Planning and Design (UPD) specialisation track consists of a series of studios in which students practice their design skills. The Urban and Regional Planning (URP) specialisation track offers courses with a focus on analysis, conceptualisation and implementation of development potentials for cities and regions. The Environment and Planning specialisation track (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. Each of the specialisation tracks includes a project in the third term. The projects are adapted to the skills and knowledge that are gained in the individual specialisation tracks, but they are coordinated in terms of study area, tasks and schedule in order to facilitate an exchange of expertise between students in the three specialisation tracks. 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.

All courses in the program, including the Master’s Degree project, are graded on a scale A-F, where A-E are passing grades with A as the highest grade. For some sections in the courses a grading system of pass (P) or fail (F) can be applied, for example for attendance. The grade reflects the students’ performance in relation to the goals of the course (goal oriented grading).

Conditions for participation in the programme

Students who have been admitted to the programme have to attend the registration meeting in order to enrol for the programme. If a student is not able to attend the registration meeting for reasons beyond his/her control he/she should register not later than two weeks after the start of the courses.

Students will be registered for their preferred specialisation track. During the first period students can change specialisation track, provided that seats are available and the student is eligible for the specialisation track he/she wants to change to.

After registration in the programme, students will be registered for term 1 and 2. For registration in term 3 students should have completed at least 45hp. For registration for the degree project students should have completed at least 60 hp of the compulsory courses. Through signing the attendance list during the first week of the course, students will be registered for the course. If a student for reasons beyond his/her control is not able to attend during the first week he/she has to contact the course administrator.
Recognition of previous academic studies

The Royal Institute of Technology has a policy for recognising previous academic studies. The course that the student wants to be recognised should be similar to a course in the curriculum of the specialisation track in which the student is registered in terms of contents, level and number of credits. Moreover, the courses that the student wants to be recognised should not be part of the bachelor program that was basis for admission to the masters program. The decision on recognising documented results is taken by the vice dean of education at the School of Architecture and the Built Environment upon application by the student.

Studies abroad

The programme offers no opportunities for studies abroad except for the Master’s Degree project where the student can choose to carry out a study at an organisation outside Sweden. However, the School of Architecture and the Built Environment has no resources to provide support so the student should make such arrangements.

For Swedish students in the programme, however, there are opportunities for exchange under existing agreements.

Degree project

The degree project comprises 30hp and provides students with the opportunity to investigate a problem in depth under the supervision of experienced practitioners and researchers. Students in the Urban Planning and Design (UPD) specialisation track can choose between a degree project in either Urban Planning and Design or Regional Planning. Students in the Urban and Regional Planning (URP) are expected to conduct a degree project in Regional Planning while students in Environment and Planning (EP) are expected to conduct a degree project in Environmental Strategic Analysis. If a student intends to carry out a degree project within another field of studies, he/she should apply for exemption from the Head of Education.

The degree project is graded on a scale A-F, where A-E are passing grades with A as the highest grade. The grading of degree projects is based on an overall assessment of working process, scientific contents and presentation.

Degree

Students who have fulfilled all course requirements in the Masters programme (120 ECTS) will be awarded a "Teknologie masterexamen", translated into English as "Degree of Master of Science (two years)".

An application for the degree certificate should be submitted to the programme coordinator, together with a copy of a student union card, copy of receipts or a certificate from the student union office, and an attested photocopy of the previous university degree (B.Sc. or a B. Eng, or equivalent). The degree certificate will be mailed to the student’s permanent address by registered mail.

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 2011

Track, Urban and Regional Planning (HSSA)

**Year 1**

**Mandatory courses (60.0 credits)**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD2845</td>
<td>Principles of Real Estate and Urban Economics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2116</td>
<td>City Networks in Regional Contexts</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2126</td>
<td>Theory of Science and Research Methodology for Planning and Design</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2127</td>
<td>Planning Theory and Urban Governance</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2128</td>
<td>Urban Development and Planning</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2171</td>
<td>Futures Studies and Forecasts</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2805</td>
<td>Sustainable Planning and Design</td>
<td>15.0</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

**Year 2**

**Recommended courses**

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG210X</td>
<td>Degree Project in Regional Planning, Second Cycle</td>
<td>30.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2119</td>
<td>Applied Analysis and International Planning</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2120</td>
<td>Social and Cultural Issues in Planning</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2129</td>
<td>Project Sustainable Urban Planning - Strategies for Urban and Regional Development</td>
<td>15.0</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>
Track, Urban Planning and Design (HSSB)

Year 1

Mandatory courses (60.0 credits)

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD2845</td>
<td>Principles of Real Estate and Urban Economics</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AD2850</td>
<td>Compositions in Urban Design</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AD2855</td>
<td>Contemporary Trends in Urban Planning and Design II</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2124</td>
<td>Contemporary Trends in Urban Planning and Design I</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2125</td>
<td>Defining the Elements of Urbanism</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2126</td>
<td>Theory of Science and Research Methodology for Planning and Design</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2805</td>
<td>Sustainable Planning and Design</td>
<td>15.0</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

Year 2

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>AD2UPX</td>
<td>Degree Project in Urban Planning and Design, Second Cycle</td>
<td>30.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG210X</td>
<td>Degree Project in Regional Planning, Second Cycle</td>
<td>30.0</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

Recommended courses

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AD2860</td>
<td>Project Sustainable Urban Design - Public Places and Spaces</td>
<td>15.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2108</td>
<td>Urban Theory, Advanced Course</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2120</td>
<td>Social and Cultural Issues in Planning</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

Track, Environment and Planning (HSSC)

Year 1

Mandatory courses (60.0 credits)

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE2507</td>
<td>Strategic Environmental Assessment</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>Course code</td>
<td>Course name</td>
<td>Credits</td>
<td>Edu. level</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------------------------------------------------</td>
<td>---------</td>
<td>-----------------</td>
</tr>
<tr>
<td>AG2126</td>
<td>Theory of Science and Research Methodology for Planning and Design</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2127</td>
<td>Planning Theory and Urban Governance</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2171</td>
<td>Futures Studies and Forecasts</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2804</td>
<td>Transport, Communication and Sustainable Development</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2805</td>
<td>Sustainable Planning and Design</td>
<td>15.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2806</td>
<td>Environmental Aspects of the Built Environment</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>

### Year 2

#### Recommended courses

<table>
<thead>
<tr>
<th>Course code</th>
<th>Course name</th>
<th>Credits</th>
<th>Edu. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG2803</td>
<td>Ecosystem Support and Environmental Justice</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2809</td>
<td>Project Sustainable Urban Planning - Assessments, Plans and Processes</td>
<td>15.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG280X</td>
<td>Degree Project in Environmental Strategies, Second Cycle</td>
<td>30.0</td>
<td>Second cycle</td>
</tr>
<tr>
<td>AG2811</td>
<td>Planning for Resilience</td>
<td>7.5</td>
<td>Second cycle</td>
</tr>
</tbody>
</table>
Appendix 2: Specialisations

Master's Programme, Sustainable Urban Planning and Design, 120 credits (THSSM), Programme syllabus for studies starting in autumn 2011

Track, Urban and Regional Planning (HSSA)

Urban and Regional Planning focuses on strategic issues related to the long-term development of cities and regions. Planning in this context can be described as an integrated activity that combines various areas of expertise in processes that take into account cross-border and multi-scalar realities, and the various stakeholders involved (i.e. public administrations, private companies, NGOs and citizens).

It refers especially to the complex interaction and interdependency between human activities and the physical environment, as well as to institutional contexts and societal processes on different scales that affect the social, economic and environmental conditions for urban and regional development.

For students who choose this specialisation, the programme offers a combination of problem-based teaching and learning that aims to: train students practical skills in planning, including a broad set of working methods; give the students a profound understanding of planning practice; and offer theoretical training that provides students with a conceptual framework that allows them to apply a critical standpoint towards trends and traditions in urban and regional planning. Explicit focus is put on developing the generic skills of a reflective planner with a broad understanding of processes and implications concerning increasingly complex urban and regional change.

Track, Urban Planning and Design (HSSB)

The Urban Planning and Design track aims at taking a lead in the integration of the professional traditions of Urban Planning and Urban Design. Acknowledging their different knowledge foundations as well as the difference in pedagogical traditions in their professional training, this specialisation track aims to draw the best from each, whilst reaching in many ways beyond the two disciplines: the generative strength of urban design which enables one to structure and visualise the urban proposals in space and time will be combined with the analytic rigour of urban planning (analysis and policy role).

It is our belief that our teaching methodologies will form an advanced competence that inspires professional development through experimentation and innovation, grounded on a solid base of knowledge.

The Urban Planning and Design track combines theoretical and design studio courses that reach beyond the existing conventions of urban planning and urban design. Included are courses in urban theory, sustainable planning and design, social issues and real estate finance that provide students with a broad understanding of the forces that shape urbanisation at local and regional level, and on a global scale. The structure of the curriculum is based on the development of design strategies for solving a wide range of contemporary urban problems.

Rigorous sequence of studio work lies at the heart of the programme and covers a broad range of topics in both Nordic-European and international settings. Stockholm serves as an urban planning and experimental design lab for problem solving and development, and as a testing ground for new urban typologies. The studios are integrated and thematically coordinated with the theoretical courses. Particular emphasis is placed upon the Masters’ thesis work, structured around the process of thorough research and practice in the second year of study.
Track, Environment and Planning (HSSC)

If we want society to develop in such a way that our cities can sustain a good life for their citizens without depleting nature, then we face unparalleled challenges. In any highly urbanized country, extensive city transformation proves imperative. Which planning processes and which urban structures enable transformation? How can planners avoid path dependency? Which new skills and abilities do planners need?

Within a framework of planning at municipal, city, regional or national level, there is a need for environmental planners to develop policies into scenarios or plans, assess the contributions of policies, plans and programmes to urban sustainable development, and to manage the collaboration of actors within the planning process.

Long-term: The ability to produce planning documents in the form of images of the future and scenarios, that “filter” long-term urban sustainable development aims through the field of influence of planning and planners, and use natural and social science theory and methodology to ensure that the images and scenarios, if realised, would contribute to urban sustainable development. Thus, being able to produce more action-oriented and relevant documents as basis for continued planning.

Short-medium term: The ability to identify, manage and use relevant social and natural science based tools for assessing and evaluating the expected outcomes of policies, plans and programmes in relation to long term urban sustainable development objectives. In addition, to give assessment-based feedback to the relevant actors.

Short-medium term: The ability to identify the relevant and necessary actors of a governance network or project-type organisation that is needed to realise a plan. Secondly, to organise, manage or co-ordinate such a team once its members are identified. Thirdly, to be able to identify and utilise tensions and potential conflicts beyond quick consensus.