

Schedule of Lectures

„Sustainable Urban Technologies (SUT)“

for students of the second semester

summer term 2015

In case there are scheduling overlaps between weekly courses and block seminars, please contact the lecturer responsible for the weekly course. Please inform the lecturer that you would like to attend another course on a few dates. In general, you can then catch up on the contents of the weekly course that you have missed.

Mrs. van Wasen (beate.vanwasen@uni-due.de) is working in the central examination office at the University of Duisburg-Essen. For all specified courses you can usually register online for the examinations only. She is responsible for these registrations.

Current Information about the courses you find always in LSF!

Overview

Sustainable Urban Technologies				
No. of Module	Title of the Course/(language)	Lecturer	Time schedule	Type of course
4	Integrative Module II – Practically oriented seminar (compulsary)			
4	The Generation Project Emscher Conversion – Quality of Life and New Resources - practically oriented seminar	Moebus, Wehling	Mondays (weekly) Additionally (always 2 - 5pm): 16.4.2015; 23.4.2015; 30.4.2015	SE
5A	Intermediate Module - Sustainable Urban Technologies (students choose three of the following courses)			
5A.1	Sustainability Science & Urban Transitions (en)	Krumme/Kehrer	This course starts already at the end of the winter term 2014/15! 25.3.2015, Wednesday 26.3.2015, Thursday 27.3.2015, Friday 30.3.2015, Monday 31.3.2015, Tuesday 1.4. 2015, Wednesday 2.4.2015, Thursday (always between 9am and 4pm)	Block/SE (you have to visit all blocks)
5.A.2	Urban Planning and Quality of Life	Tran/Schmidt	Thursday 9am until 1pm	Seminar
5A.3	Urbanization of the developing world – views from geography (en)	Schneider	April, 17 (Friday); April, 24 (Friday) May, 8 (Friday) July, 22 (Wednesday) July, 23 (Thursday) (always 9 am – 5pm)	Blocks/SE (you have to visit all blocks)
5A.4	Intermodale Transport Chains I (en)	Noche	Thursday (6pm until 8pm)	Seminar (Duisburg)
5A.5	Water Treatment (en)	Panglich	Thursday (8.45 – 11.15 am) (Duisburg)	Lecture/ Exercise
5A.6	Spatial Pattern Analysis with ArcGIS: Analysing Trends and Clusters (en)	Sattler	27.7. until 31.7.2015 (always 9am to 4pm)	Blocks/SE (you have to visit all blocks)
5A.7	Operations Research (German) (de)	Kimms	Wednesday (12.00 – 2pm) (Duisburg)	Lecture
5A.8	Städtebau 3/5 (de)	Bau-wissenschaften	Tuesday (10.00-2.00pm)	Seminar
5A.9	Sustainable Water Management	Niemann	Thursday (12 -2.00pm)	Lecture

6A Interdisciplinary Complementary Module – Urban Culture, Society and Space II (students choose one of the following courses)				
6A.1	Low Carbon Society - Roadmapping for Sustainability Transitions at Local and Regional Level (English)	Schüle, Wuppertal Institut	15.05.2015 and 22.5.2015 (Friday: always between 9.30am and 12.00 am) 3.7.2015 and 17.7.2015 (Friday: always between 9.00am and 5.00pm) Optional Dates: 21.7.2015 (Tue) and 24.7.2015 (Fri) (always between 9.00am and 5.00pm)	SE/Block (you have to visit all blocks)
6A.2	Urban Imaginaries (en)	Gurr	7.4. – 10.4.2015 (9am – 4pm)	SE/Block (you have to visit all blocks)
6A.3	Städtische Ökonomie und Wirtschaftsförderung (de)	Wehling /Fricke	7.5.2015/ 11.6.2015/ 18.6.2015/ 25.6.2015 (always 2 -5pm) Excursion: 10.7. and 11.7.2015	Block/SE (you have to visit all blocks)
6A.4	Urban tourism in London's East End – Whitechapel case study	Wehling	April, 17 and 18 (introduction) May, 26 until 31 (excursion)	Exkursion

En= English; De = Deutsch

Module	Integrative Module II
Title of the course	Module 4: The Generation Project Emscher Conversion – Quality of Life and New Resources - practically oriented seminar (compulsory)
Lecturer	Moebus / Wehling
Type of Course	Project Seminar
Day of the week/Time	Mondays between 9:30 and 5pm and additionally (always 2 -5pm) on 16.4.2015; 23.4.2015; 30.4.2015
Campus Room	Essen, Schützenbahn consult LSF
Credits	10
Hours/per week (SWS)	4
Language	English/ German
Description	<p>Health is one of the main needs of humans. DeBlockants of health include the social, economic and cultural environment as well as the physical environment. The <i>Emscher conversion</i> – as one of Europe’s biggest infrastructure projects – aims at the reconstruction of an 80-kilometre open wastewater conduit to a restored natural waterway. This reconstruction comprises technical, social, cultural, political, economic, and environmental aspects. Thus, the assessment of direct and indirect health impacts of the conversion requires an interdisciplinary approach.</p> <p>Using the real-life project <i>Emscher conversion</i> as an excellent example to study the complex structure of urban settings, this practice-oriented seminar includes methods and techniques from epidemiology, engineering (i.e. water, logistics) and social sciences as well as city planning and urban design. Aim is to allow students to develop a comprehensive picture and understanding of urban settings and development. Main tasks of the three- to five-person groups include the selection of suitable urban districts of the <i>Emscher</i> region by analyzing topographic maps, the characterization of selected districts according to historical developments, structural, social, environmental and health conditions, using secondary and primary data. By matching these data students will find specific district related problems as well as most suitable and convincing conditions and solutions.</p>

Link LSF: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=246130&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Modul	5A: Intermediate Module - Sustainable Urban Technologies
Veranstaltungsname	5A.1: Sustainability Science & Urban Transitions
Lecturer	Krumme/ Kehler
Day of the week Time	<p>Attention!! This course starts already at the end of the winter term 2014/15.</p> <p>25.3.2015, Wednesday 26.3.2015, Thursday 27.3.2015, Friday 30.3.2015, Monday 31.3.2015, Tuesday 1.4. 2015, Wednesday 2.4.2015, Thursday (always between 9am and 4pm)</p>
Campus Room	Essen Consult LSF
Credits	5
Language	English

Details for the winter term: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=249339&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Details for the summer term:

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=246200&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

<p>Description</p>	<p>Motivational Background: With this seminar we want to close gaps between conceptual ideas of sustainable development, trends in the international discussion of green/ alternative urban systems and the actual scientific basis/ the findings of the international research community, particularly from the emerging sustainability science as well as transition research. Learning Goal: <i>We provide a scientifically coherent basis in order to understand, integrate and evaluate current dominant as well as alternative developments in society, economics and technology, particularly for the urban system background and the grand sustainability challenge.</i> The seminar will be based on scientific presentations, group works/discussions and the interactive mapping and correlation of results and upcoming questions, in order to provide you with profound knowledge about sustainability science, especially for the urban system background. Based on this knowledge, we will deduce new/ innovative development and planning processes and discuss how enabling factors can be used effectively for the purpose of establishing/developing new ways/examples of urban transition management towards sustainability. In a first step the seminar will thus provide essential insights in the emerging frameworks and findings of sustainability science in a practical and concrete way. Generally the seminar will build its concept upon fundamental principles of and strategies derived from modern ecological science (Ecosystem Services Approach, Ecosystem Approach, as well as Ecological Economics). Doing so, system capacity based (socio-cultural, socio-economic and industrial) developments become more tangible for the background of so called “strong sustainability models”. In a second part the seminar will transfer the lessons learned to sustainable development perspectives of urban systems and give answers how those transitions can be understood, planned and measured. Crucial issues reflected are amongst others:</p> <ul style="list-style-type: none"> • <i>Why are cities critical key players in the field of a global sustainable development?</i> • <i>How can cities be mobilized on the way towards a transformation of our socioeconomic system, oriented on long term social and ecological capabilities?</i> • <i>How can we extract use of typical “urban advantages” (industry, knowledge, density, accessibility, social and business networks, technological infrastructures and means etc..) to make cities actually the most sustainable form of human living?</i> <p>In a final phase enabling factors for the desired transitions are identified and discussed, that could effectively trigger alternative pathways for worldwide urban systems, understood against the background of an integrative Quality of Life Approach (QoL). The seminar concentrates therefore beside profound theoretical state of the art literature research on concrete case studies from cities and urban systems all over the globe. In the seminar we therefore favour a bilateral strategy both on so called hard and soft skills/ leverages, respectively push and pull factors, for sustainable urban transition management: technological (e.g. smart city strategies) as well as socioeconomic (e.g. sharing economies) and socio-cultural aspects (e.g. transition town movement).</p>
<p>Registration</p>	<p>doerte.ringel@uni-due.de</p>

Details for the winter term: <https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=249339&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Details for the summer term:

<https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=246200&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	5A: Intermediate Module - Sustainable Urban Technologies
Veranstaltungsname	5A.2: Urban Planning und Quality of Life (en)
Lecturer	Tran
Day of the week Time	Thursday 9.00 am until 1.00pm
Campus Room	Essen Siehe LSF
Credits	5
Language	Englisch
Description	This course provides students with fundamental knowledge and technical skills used by urban planners to generate, evaluate, and implement ideas, plans, and projects. Seminars encourage students, as members of collaborative teams, to think creatively and apply interdisciplinary, problem-solving methods to planning issues and projects.
Registration	minh-chau.tran@uni-due.de

Link LSF:

<https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung&veranstaltung.veranstid=248538&purge=y&topitem=lectures&subitem=editlecture&asi=2u82aOXscQ5DGKMXStpk>

Modul	5A: Intermediate Module - Sustainable Urban Technologies
Veranstaltungsname	5A.3: Urbanization of the developing world – views from geography (en)
Lecturer	Schneider
Type of Course	SE/Block
Day of the week Time	April, 17 (Friday); April, 24 (Friday) May, 8 (Friday) July, 22 (Wednesday) July, 23 (Thursday) Always 9 am – 5pm
Campus Room	Campus Essen Consult LSF
Credits	5
Hours/per week (SWS)	2
Language	English
Description	Urbanization in developing countries shows a number of characteristics different from those in the developed part of the world: the process is more rapid, it gives rise to large mega-cities, functional re-organization of urban space is paralleled by processes of diffusing centrality, fragmentation and socio-spatial disparities. Informality and its articulation with formality is of utmost importance. The focus will be on livelihood strategies and housing provision in a fragmented urban space. The distinctive features of urbanization in the developing world will be dealt with in a combination of lectures and seminar work providing basic information and analyzing selected city examples.
Registration	helmut.schneider@uni-due.de

Link LSF:

[https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung&veranstaltung.veranstid=244415&purge=y&topitem=lectures&subitem=editlecture&asi=6fDG\\$XbFES9iM5ZZxS7h](https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung&veranstaltung.veranstid=244415&purge=y&topitem=lectures&subitem=editlecture&asi=6fDG$XbFES9iM5ZZxS7h)

Module	5A: Intermediate Module - Sustainable Urban Technologies
Title of the course	5A.4: Intermodale Transportketten I – Intermodale Transport Chains I
Lecturer	Noche
Type of Course	SE
Day of the week Time	Thursday 6pm until 8pm
Campus Room	Duisburg Look LSF
Credits	5
Hours/per week (SWS)	2
Language	English
Description	This research seminar is dedicated to the analysis of interconnected urban logistics systems, with a particular focus on social, economic and ecological dimensions of the sustainable development in urban areas. A holistic approach to urban mobility and an understanding of the science of logistics as the study of flows in networks should guide students in grasping the complexity of current and future challenges facing urban systems.
Registration	Aimen Remida: auo@hotmail.de

LSF:

<https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=245963&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Modul	5A: Intermediate Module - Sustainable Urban Technologies
Veranstaltungsname	5A.5: Water Treatment (en)
Lecturer	Panglisch
Type of Course	Lecture
Day of the week	Thursday
Time	8:45 - 10.15am (Excercise 10.15 – 11am)
Campus	Duisburg
Room	MB 242
Credits	5
Hours/per week (SWS)	2
Language	English
Description	<p>(Only in German available)</p> <p>Nach einem Überblick über die verfahrenstechnischen Prozesse und mögliche Kombinationen werden in der Veranstaltung schwerpunktmäßig die Grundlagen zu folgenden verfahrenstechnischen Prozessen behandelt:</p> <ul style="list-style-type: none"> Oxidation Ionenaustausch Adsorption Flockung Filtration (konventionelle Verfahren) Gasaustausch Entkarbonisierung Membranverfahren Sedimentation Schlammbehandlung
Registration	stefan.panglisch@uni-due.de

Link LSF:

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=245771&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=245759&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	5A: Intermediate Module - Sustainable Urban Technologies
Title of the course	5A.6: Spatial Pattern Analysis with ArcGIS: Analysing trends and Clusters (English)
Lecturer	Sattler
Type of Course	Blocks/SE
Time of Blocks	27.7. until 31.7.2015 (always 9am to 4pm)
Campus Room	Essen SR102
Credits	5
Hours/per week (SWS)	2
Language	English
Description	The course gives an introduction to basic concepts of spatial pattern analysis using tools in the Spatial Statistics Toolbox and some special extensions (e.g. Patch Analyst, Network Analyst) to identify patterns, trends and relationships
Registration	birgit.sattler@uni-due.de

LSF:

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=250787&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	5A: Intermediate Module - Sustainable Urban Technologies
Title of the course	5A.7: Operations Research (German)
Lecturer	Kimms
Type of Course	Lecture
Day of the week Time	Wednesday 12:00 – 2pm
Campus Room	Duisburg LA Audimax
Credits	5
Hours/per week (SWS)	3
Language	German
Description	Consult LSF
Registration	alf.kimms@uni-due.de

Link LSF:

<https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=244768&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	5A: Intermediate Module - Sustainable Urban Technologies
Title of the course	5A.8: Städtebau 3/5 (Deutsch)
Lecturer	Bauwissenschaften, Diverse
Type of Course	Seminar
Time	Tuesday, 10.00-14.00
Campus Room	Essen Look LSF
Credits	5
Hours/per week (SWS)	4
Language	Deutsch/ German
Description	Information here: https://www.uni-due.de/staedtebau/
Registration	Dr. Minh-Chau Tran (minh-chau.tran@uni-due.de)

LINK:

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=251049&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	5A: Intermediate Module - Sustainable Urban Technologies
Title of the course	5A.9: Sustainable Water Management
Lecturer	Niemann
Type of Course	Lecture
Time	Thursday 12 until 2pm
Campus Room	Essen Look LSF
Credits	5
Hours/per week (SWS)	2
Language	Deutsch/Englisch
Description	Consult LSF
Registration	Prof. André Niemann (timo.wortberg@uni-due.de)

LINK: <https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=245243&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Seminar (In English):

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=242878&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	6A: Interdisciplinary Complementary Module - Urban Culture, Society and Space II
Veranstaltungsname	6A.1: Low Carbon Society - Roadmapping for Sustainability Transitions at Local and Regional Level (en)
Lecturer	Ralf Schüle, Wuppertal Institut
Type of Course	SE/Block
Day of the week Time	15.05.2015 and 22.5.2015 (Friday: always between 9.30am and 12.00 am) 3.7.2015 and 17.7.2015 (Friday: always between 9.00am and 5.00pm) Optional Dates: 21.7.2015 (Tue) and 24.7.2015 (Fri) (always between 9.00am and 5.00pm)
Campus Room	Campus Essen and in July Wuppertal Institut Consult LSF
Credits	5
Hours/per week (SWS)	2
Language	Englisch
Description/ Kommentar	Many European member states have committed to very ambitious emission reduction targets until the year 2050. In this regard, the question occurs what structural technological, political and institutional conditions are required in order to improve climate action in different types of urban settlements. Currently, cities and regions are experiencing far-reaching socio-economic transformations (e.g. economic, structural, demographical as well as social change) that need to be adjusted and managed towards a more sustainable climate action. Against this background, the seminar will address the current challenges and perspectives of modern climate and energy policy at local and/or regional levels. It will convey an overview of opportunities and boundaries of ambitious climate action programmes and will identify interlinkages and potential contradictions to other relevant fields of governance at the local level. Furthermore, it will address functions and interest constellations of different public and private agents in national multilevel governance systems. Starting with a German background and depending on the interest of the seminar participants, the seminar will also analyse local conditions for ambitious climate policies in other OECD and/or non-OECD countries.
Registration	elke.hochmuth@uni-due.de

Link LSF:

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung&veranstaltung.veranstid=244413&purge=y&topitem=lectures&subitem=editlecture&asi=q7IJHNcqtIAOAOoNGve>

Module	6A: Interdisciplinary Complementary Module - Urban Culture, Society and Space II
Veranstaltungsname	6A.2: Urban Imaginaries (en)
Lecturer	Gurr
Type of Course	Seminar/Block
Day of the week	7.4.2014 – 10.4.2014
Time	9am – 4pm
Campus	Campus Essen
Room	Consult LSF
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	<p>This seminar will engage with key theoretical issues as well as with a broad range of representations of the city. The first part of the course will engage with key theoretical issues in the study of urban representations (functions of urban imaginaries, the role of imaginaries in the perception of cities, approaches in urban literary and cultural studies, problems of representation, questions of mediality). In the second part of the semester, we will discuss poetic as well as narrative representations, ranging from Swift, Gay and Pope in the 18th century via Wordsworth, Hazlitt, Shelley and other Romantics, Matthew Arnold, Charles Dickens and other Victorian writers, classic 20th-century texts such as Joyce's <i>Ulysses</i>, Eliot's <i>Waste Land</i>, Dos Passos' <i>Manhattan Transfer</i> all the way to recent experimental fiction. Depending on the interests of the participants, other media and genres (graphic novels, film, multimedia, computer games ...) can also be considered. The selection of texts can be agreed upon in the course.</p> <p>A reader with a first selection of texts will be available in the copy-shop in Reckhammerweg from early March onwards. All participants are to read the first two texts in the reader for the first session.</p>
Registration	jens.gurr@uni-due.de und online

Link LSF:

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=241955&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	6A: Interdisciplinary Complementary Module - Urban Culture, Society and Space II
Veranstaltungsname	6A.3: Einführung in Themen der Wirtschaftsförderung in Theorie und Praxis (de)
Lecturer	Prof. Wehling und Jochen Fricke, Essener Wirtschaftsförderungsgesellschaft mbH
Type of Course	SE/Block
Day of the week Time	7.5.2015/ 11.6.2015/ 18.6.2015/ 25.6.2015 (always 2 -5pm) Excursion: 10.7. and 11.7.2015
Campus Room	Campus Essen, Siehe LSF
Credits	5
Hours/per week (SWS)	2
Language	Deutsch
Description/ Kommentar	In dieser Veranstaltung sollen grundlegende Ziele und Konzepte der kommunalen Wirtschaftsförderung vermittelt werden. Diese werden an ausgewählten Beispielen in der Stadt Essen unter den jeweiligen spezifischen wirtschaftlichen und planerischen Rahmenbedingungen erhoben, analysiert und bewertet.
Registration	hans-werner.wehling@uni-due.de

LSF-Link:

<https://campus.uni-duisburg-essen.de/lfs/rds?state=verpublish&status=init&vmfile=no&publishid=251132&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

Module	6A: Interdisciplinary Complementary Module - Urban Culture, Society and Space II
Veranstaltungsname	6A.4: Urban tourism in London's East End - Whitechapel case study (en)
Lecturer	Wehling
Type of Course	SE
Day of the week Time	17. und 18. April (jeweils 10 bis 16 Uhr) Exkursion: 26. Bis 31. Mai 2015
Campus Room	Essen Siehe LSF
Credits	5
Hours/per week (SWS)	2
Language	English
Description/ Kommentar	hans-werner.wehling@uni-due.de

LSF:

<https://campus.uni-duisburg-essen.de/lsf/rds?state=verpublish&status=init&vmfile=no&publishid=251134&moduleCall=webInfo&publishConfFile=webInfo&publishSubDir=veranstaltung>

The Modular Construction of the Masters Programme "Sustainable Urban Technologies"

Sem.	WS/SS	Module	CP	CH	Masters Programme "Sustainable Urban Technologies"	
1.	WS	1	15	8	Module 1: Integrative Module I - Introduction to Urban Systems 1.1: Key issues in Urban Systems (lecture) 1.2: Introduction: Sustainable Urban Technologies (lecture/seminar) 1.3: Introduction: Urban Culture, Society and Space (lecture/seminar) 1.4: Introduction: First Steps into Urban Planning (lecture/seminar) Module 2A: Introductory Module - Sustainable Urban Technologies (students have to choose 2 from various courses on offer) Module 3A: Interdisciplinary Complementary Module - Urban Culture, Society and Space I	
			3	2		
			4	2		
			4	2		
		2+3	10+5	4+2		
2.	SS	4	10	4	Module 4: Integrative Module II - "Healthy City" practically oriented seminar (internal) Module 5A: Intermediate Module - Sustainable Urban Technologies (students have to choose 3 from various courses on offer) Module 6A: Interdisciplinary Complementary Module - Urban Culture, Society and Space II	
		5+6	15+5	6+2		
3.	WS	7	20		Module 7: Internship Project (external, three months) Module 8A: Advanced Module - Sustainable Urban Technologies (students have to choose 2 from various courses on offer)	
		8	10	4		
4.	SS	9	25		Modul 9: Masters Thesis <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> Oral Examination </div>	
			5			
Σ disciplinary (without MA Thesis/Colloq.)			35	14	Annotations (1) Interdisciplinary Complementary Modules: These will be specially offered courses from the "other" masters programme (2) Introductory Modules, Intermediate Modules, Advanced Modules: There will be several classes on offer (5 CP each), individual specialisation	
Σ Integration			25	12		
Σ Complementary			10	4		
Masters Thesis + Oral Examination			30			
Practical Project/Internship (Module 7)			20			
Σ			120	30		