

# **MODULE HANDBOOK**

M.Sc. Spatial Planning

Status: 04/18/2023







# **Module Structure**

Module	Modultitle
1	Spatial Planning Research in Theory and Practice
2	Master Project/Master Design Studio
3	Specialization
4	Master Thesis

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Е	Exercise	(WP)	Wahlpflichtfach
			(compulsory optional subject/elective module)
S	Studio	SE	Seminar
L	Lecture	Р	Project





Module 1: Spatial Planning Research in Theory and Practice										
Cour	se of study:	M.Sc.	Raumplanung/Spa	tial Pla	anning					
				Taug 1st-2		mester		Cred 8	its:	Time: 240 h
1	Module str	ucture	e							
	No.	Elen	nent/Course		Type		Cred	its	Hour	s per week
	1		ers, Topics and Pro ent Research in Sp ning		L (WF	9)	2		2	
	2	Rese	earch Colloquium		SE/E	(WP)	4		2	
	3	Mod	ule Examination				2			
2	Language of German/Er		ruction							
	In this module, in-depth knowledge of current research in the field of spatial planning as well as general research practice, epistemology and methodology is taught. Element 1 includes an overview of current projects, topics and issues in research on spatial planning at home and abroad. This encompasses an overview of the research landscape (funding institutions, research facilities, career paths), basic principles of writing research proposals, good scientific practice and an exemplary presentation of current research projects. In addition, scientific policy advice is addressed.  Element 2 consists of colloquia with seminar character, in which ongoing Master's theses are presented and discussed. In addition, thematic and methodological questions of spatial science research are addressed.									
4	Competencies In Element 1, students acquire the basics for a scientific-critical debate within the framework of the Master's programme and a self-reflective positioning in spatial research and spatial planning. In Element 2, students acquire knowledge of advanced working and research methods									
5	Examinations/Exercises  Module examination (graded)  1 course exercise (not graded)									
6	Type of examination/Course exercises  Module examination: exercises in course 2 (Exposé);  Course exercises: essay in course 1, active participation in course 2									
7	Prerequisite None									
8			i <mark>nd corresponding</mark> ule in M.Sc. Spatial							
9	Module cod Zimmerma		tor			Responsib Departmen				ng (09)

Abb	reviations		
Ε	Exercise	(WP) Wa	nlpflichtfach
		(coi	npulsory optional subject/elective module)
S	Studio	SE Ser	ninar
L	Lecture	P Pro	ject





Cou	rse of study	r: M.Sc. Spatial Pla	nning				
	gular cycle: Duration: ch semester 1 Semester		Taught: 1st-2nd Se	mester	Credits: 12	<b>Time:</b> 360 h	
1	Module s	tructure					
	No.	Element/Cours	e		Type	Credits	Hours per weel
	1	Master Project			P (WP)	10	8
	2	Master Design	Studio		S (WP)	10	8
	3	Module Examir	nation			2	
2	Language German/	e of instruction English					
	areas of the department. Students learn in a cooperative way to handle complex spatial problem by scientific means within a given time frame, to highlight possible solutions.  Element 1 (Master Project) focuses on the theoretical-analytical and conceptual side of planning taking up current issues of spatial research and spatial planning.  In element 2 (Master Design Studio) the focus lies on the spatial-conceptual planning at differen scales. The core of element 2 is a practical design task that addresses current issues of spatial development and planning.						
With its focus on problems, practice, processes and action within spatial planning the module fosters the self-motivated and independent work of students (inquiry-based learning). The module focuses on development of key competences such as communication, discussion and cooperation skills, consensus-building, as well as conflict management and project coordination. Element 1 (Master Project) enables the processing of theoretically and methodologically sophisticated questions according to scientific standards.  Element 2 (Master Design Studio) deals with the design process in an integrated and interdisciplinary approach based on current planning issues and challenges.							
5	Examinations/Exercises  Module examination (graded)  1 course exercise (not graded)						
6	Type of examination/Course exercises  Module examination: final report incl. defense; course exercise: Exposé (element 1) or  Module examination: design incl. defense; course exercise: design concept (element 2);  The Master Project and the Master Design Studio are normally elaborated in a group of between 4-6 students.						
7	Prerequisite None						
3		nodule and correspory module in M.Sc					
9		oordinator			Responsible de		

Abbreviations				
Е	Exercise	(WP)	Wahlpflichtfach	
			(compulsory optional subject/elective module)	
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L	Lecture	Р	Project	





Cour	se of study:	M.Sc. Spatial Planning				
	ı <mark>lar cycle</mark> Semester	Duration: 1-2 Semester	Taught: 1st-2nd Se	emester	Credits: 20	Time: 600 h
1	Module str	ucture				"
	No.	Element		Type	Credits	Hours per week
	1	Strategic urban and red	egional	SE (WP)	4	2
	2	Urban development		SE/E (WP)	4	2
	3	Open space and envir planning, adaptation change		SE/E (WP)	4	2
	4	Spatial Development research	and mobility	SE/E (WP)	4	2
	5	Real Estate Managem German)	ent (only	SE (WP)	4	2
	6	Renewable Energies (	Renewable Energies (only German)		4	2
	7	Housing and Land Pol	Housing and Land Policy		4	2
	8	Urban Transformation	Irban Transformation		4	2
	9	Partial course exercis	Partial course exercise A		2	
	10	Partial course exercis	е В		1	
	11	Partial course exercis	e C		1	
2	Language ( German/Er	of instruction nglish				
Course content In this module one double-course (4 Credits) and two single courses are chosen (2 Credits each). A double course has a common point of reference in terms of content and is usually offered by two lecturers from different research groups. A double seminar is assigned to at least one specialization. In-depth knowledge on key topics and challenges of urban and regional planning are taught. Students can deepen their knowledge in this module individually. The courses, with their close relationship to current issues in spatial research and planning, are especially relevant in preparation for elaboration during the Master's thesis.						
4	Competencies Within the framework of Module 3, students deepen their knowledge within the offered specializations. Students deal intensively with the state of the art in the specializations, learn appropriate methods and theories and can assess the relevance of what they have learned.					
5	1 partial co	ons/Exercises ourse exercise A (graded rse exercises B and C (g				

Abbreviations				
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6	Type of examination/Course exercises  Partial course exercise A: Oral examination (25 - 30 minutes) as examination performance for the double seminars (4 SWS).  Partial course exercises B and C (graded): A paper of max. 20,000 characters (including spaces, bu without table of contents, list of illustrations, bibliography, etc.) as an examination in each of the individual seminars (2 SWS).  The partial course exercises are associated with the courses. The form of examination will be announced in the lecture catalogue ("Vorlesungsverzeichnis"). Partial course exercises can refer to two courses of an element, when offered together and sharing a common application procedure. Courses that are not offered by the Department of Spatial Planning may be concluded with an examination type other than the announced exam type.			
7	Prerequisite None			
8	Type of module and corresponding program Compulsory module in the M.Sc. Spatial Planning			
9	Module coordinator Gruehn	Responsible department Department of Spatial Planning (09)		

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# **Description of Specializations**

# 1. Strategic Urban and Regional Development

# Language of instruction

German/English<sup>1</sup>

#### Course content

Traditionally, legally defined plans are at the center of the work of spatial planners. The immediate connection to action in form of measures and projects is excluded, as is the implementation of the plan. In planning practice, however, a return to the necessity of a planned, integrative approach can be observed. The obvious disadvantages of project-oriented planning lead to a debate about a renaissance of strategic planning. Strategies organize thinking about issues, indicate priorities and say why. They provide reference points to which actors can orient themselves. Depending on their level of abstraction, strategies can manifest themselves in vision statements as well as in programs and plans, and in concrete projects and individual actions. In the specialization "Strategic Urban and Regional Development" concepts, objectives, institutional arrangements and procedures of strategic spatial development and management at the local, regional and large-scale level are dealt with in a theoryguided form and on the basis of current case studies. Here the complementary interaction of formal and informal collaborative approaches and procedures are of particular importance, especially with regard to acceptance requirements. The thematic focus is on current issues, such as demography, housing, climate change, land use, and economic development.

#### Competencies

The focus imparts knowledge on the objectives and instruments of strategic planning and management. Students will acquire the expertise to evaluate success factors of strategic spatial planning and action based on empirical case studies and theoretical reflection in order to develop strategic development plans. At the same time, the students deepen their skills in presenting and writing about the acquired professional knowledge and results.

#### Responsible Individual

Wiechmann

<sup>1</sup> Some courses within the specializations will be taught in English and can be taken by all students as part of Module 3

Abbreviations

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# 2. Urban Design and Development/Städtebau

**Lehrveranstaltungssprache - Language of instruction**Deutsch/Courses only offered in German<sup>2</sup>

## Lehrinhalte - Course content

Cities and rural areas are in a constant state of change in view of current and future societal challenges. The responsible design and qualification of the built environment for a just, inclusive and stabilising development of urban, suburban and rural areas are the subject of the urban design specialisation. Against the background of these challenges, theoretical and practical knowledge is taught in order to develop concepts and strategies and to consciously help to shape the underlying processes. Different scale levels, methods of urban planning analysis and design, instruments of quality assurance and participation in urban development are an integral part of this integrated urban planning approach.

#### Kompetenzen - Competencies

Students deepen their theoretical knowledge of urban planning and urban design in connection with urban land use planning and quality assurance procedures in the context of neighbourhood, urban and real estate development. By dealing with urban planning processes, they acquire analytical, conceptual and design skills in the spatial and functional context of the city. At the same time, the students deepen their skills in presenting and writing about the acquired professional knowledge and results. The content also prepares students for their traineeship in the higher administrative service.

Verantwortliche\*r – Responsible Individual

Tribble

<sup>&</sup>lt;sup>2</sup> Some courses within the specializations might be taught in English and can be taken by all students as part of Module 3

Abbreviations

Abbieviations						
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# 3. Open Space and Environmental Planning, Adaptation to Climate Change

# Language of instruction

German/English<sup>3</sup>

#### Course content

As part of this focus, a range of different courses on the topics of open space, landscaping and environmental planning as well as Adaptation to Climate Change in Spatial Planning is offered. The focal point is on current topics (such as green-blue urban infrastructure, adaptation to climate change), and instrumental (effectiveness of planning instruments) as well as methodological aspects (modeling & simulation; design, planning and research methods).

#### Competencies

Students deepen their scientific knowledge and planning skills in the topics mentioned above and learn from current problems and research topics to develop methodologically sound solutions. At the same time, the students deepen their skills in presenting and writing about the acquired professional knowledge and results.

#### Responsible Individual

Gruehn

<sup>3</sup> Some courses within the specializations will be taught in English and can be taken by all students as part of Module 3 Abbreviations

E Exercise (WP) Wahlpflichtfach (compulsory optional subject/elective module)

S Studio SE Seminar
L Lecture P Project





# 4. Spatial Development and Mobility Research

# Language of instruction

German/English<sup>4</sup>

#### Course content

This specialization focuses on mobility, transport and spatial development, and the interplay between these concepts. Spatial development and mobility are linked and current challenges often require an integral vision to ensure sustainable urbanization and sustainable transport in the future.

Topics in this specialization include for example accessibility, encouraging sustainable travel, etc. The specialization focusses on theory, research in the field, as well as practical aspects. This specialization is possible in English and German.

#### Competencies

Students deepen their knowledge of spatial science and skills, get to know current regional and transport research topics and research designs and learn to design their own research projects. At the same time they will learn to undertake methodically challenging research projects and to link research findings with conceptual conclusions. At the same time, the students deepen their skills in presenting and writing about the acquired professional knowledge and results.

#### Responsible Individual

Heinen

<sup>4</sup> Some courses within the specializations will be taught in English and can be taken by all students as part of Module 3 Abbreviations

E Exercise (WP) Wahlpflichtfach (compulsory optional subject/elective module)

S Studio SE Seminar
L Lecture P Project





# 5. Immobilienmanagement/ Real Estate Management (In cooperation with TU Department "Electrical engineering and information technology)

## Lehrveranstaltungssprache - Language of instruction

Deutsch/Courses only offered in German<sup>5</sup>

#### Lehrinhalte - Course content

Gegenstand der Vertiefung ist das nachhaltige Management von Wohn- und Gewerbeimmobilien. Entsprechend des zentralen Lebenszyklusansatzes werden die Methoden und Instrumente zur Planung, Entscheidung und Kontrolle von Immobilien sowohl in der Entwicklungs- als auch in der Nutzungsphase vorgestellt und angewandt.

Im Mittelpunkt steht dabei das vermögensorientierte Management bestehender Immobilien, indem – aufbauend auf den klassischen Elementen der Bestandsentwicklung – die Immobilie anhand der künftigen Zahlungsströme dynamisch, zukunfts- und risikoorientiert und nachhaltig über die Restnutzungsdauer bewertet und entwickelt wird. Dazu werden Immobilienfinanzierungsinstrumente, staatliche Förderungen und Abgaben in die Vermögensbewertung ebenso integriert wie Methoden zur Erfassung des Investitionsrisikos und des Reporting. Wertschöpfungspotentiale zur nachhaltigen Weiterentwicklung und Optimierung der Immobilie werden in Verbindung mit Softwarelösungen für das digitale Immobilienmanagement vorgestellt und angewandt. Die divergierenden Akteursperspektiven – von der Kommune über die privatwirtschaftlichen Projektentwickler hin zu den Asset und Portfolio Managern in der Nutzungsphase – werden zielgerichtet mit aktuellen (technologieorientierten) Forschungsergebnissen und Megatrends des Immobilienmanagements verknüpft

#### Kompetenzen - Competencies

Die Studierenden erlernen die theoretischen Kenntnisse, die für das digitale Management und die (Weiter-) Entwicklung von Wohn- und Gewerbeimmobilien erforderlich sind. Anhand empirischer Fallstudien erfahren die Studierenden die Fach- und Handlungskompetenz zur Beurteilung der Erfolgsfaktoren sowie zum zieladäquaten Mitteleinsatz auf den verschiedenen Gebieten des digitalen Immobilienmanagements bis hinein zum Reporting. Diese Kompetenzen erproben die Studierenden sowohl auf der theoretischen Ebene wie auch praktisch anhand integrierter Übungen und realer Entscheidungssituationen im PC-Pool. Gleichzeitig vertiefen sie ihre Fähigkeiten, die erlangten Fachkenntnisse und -ergebnisse zu präsentieren und schriftlich darzustellen.

#### Verantwortliche\*r – Responsible Individual

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 $^5$  Some courses within the specializations might be taught in English and can be taken by all students as part of Module  $^3$ 

Abbreviations					
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# Erneuerbare Energien/Renewable Energies (In cooperation with TU Department "Architecture and Civil Engineering")

Lehrveranstaltungssprache - Language of instruction Deutsch/Course only offered in German

#### Lehrinhalte - Course content

Der Schwerpunkt greift die aktuellen Zielsetzungen für einen Umbau des deutschen Strom- und Wärmeversorgungssystems und der eingeleiteten Entwicklungsprozesse im Rahmen der Energiewende auf. Schwerpunkte sind hierbei zum einen die raumbezogenen Planungsprozesse auf kommunaler, regionaler und überregionaler Ebene zur Bedarfsermittlung sowie zur Auswahl und planerischen Ausweisung der erforderlichen Flächen, Standorte und Trassen. Zum anderen befasst sich der Schwerpunkt mit der akzeptanz- und transparenzsichernden Verfahrensgestaltung durch integrierte, koordinative Abstimmungsprozesse zwischen den unterschiedlichen Akteuren aus den Bereichen der Energiewirtschaft, der Energiefachplanung, der räumlichen Gesamtplanung und der zivilgesellschaftlichen Akteure. Zusätzlich bietet der Schwerpunkt über die Kooperation mit der Fakultät 08 die Möglichkeit vertieftes Fachwissen aus der Energietechnik (Elektrotechnik, Verfahrenstechnik) als Grundlage für diese Planungen zu erwerben. Die Kooperation mit dem Institut für Berg- und Energierecht an der Ruhr-Universität Bochum bietet die Gelegenheit zur Vertiefung energiewirtschaftlicher und energierechtlicher Fragestellungen und zum Erwerb des Zertifikats "Kompaktlehrprogramm Energiewirtschaft".

#### Kompetenzen - Competencies

Die Studierenden vertiefen ihre raumwissenschaftlichen Kenntnisse und Kompetenzen, ergänzen diese um Fachkenntnisse aus dem Bereich der Energietechnik, der Energiewirtschaft und des Energierechts und lernen aktuelle raum- und energiewissenschaftliche Forschungsthemen mit hoher Aktualität und starkem Anwendungsbezug kennen. Gleichzeitig vertiefen sie ihre Fähigkeiten, die erlangten Fachkenntnisse und -ergebnisse zu präsentieren und schriftlich darzustellen

Verantwortliche\*r – Responsible Individual Grigoleit

Abbreviations

E Exercise (WP) Wahlpflichtfach (compulsory optional subject/elective module)

S Studio SE Seminar

L Lecture P Project





# 7. Boden und Wohnen/Housing and Land Policy

Lehrveranstaltungssprache/Language of instruction German/English

#### Course content

Housing is one of the key functions of cities. The provision of housing is one of the major challenges of urban planning in many European countries. Housing scarcity affects not only affordable housing but also other submarkets. Aside from that, housing policy is challenged with a plethora of goals, some of which overlap or even clash. They span from affordability and inclusivity to resource management and climate neutrality.

Over the past few years, land has become crucial to govern for social and public welfare-oriented urban development. Spatial planning creates land for housing. This is declared as a political goal and a central task of spatial planning. On the one hand, it entails the provision of land through land policy as well as the establishment of framework conditions for sustainable urban development through housing policy. Land and housing are both part of the same value chain, but their respective policy fields follow different logics.

The specialization deals with the political and planning fields related to land and housing and, above all, with their complex and charged dependencies. The examination of land and housing does not stop at a purely institutional and instrumental view (these rather form the starting point and prerequisite of the courses). The seminars focus on social, economic, and urban design issues, as well as strategic aspects of land and housing policy. Housing" does not only consider the individual flat and the individual residential building but also includes the living environment ("neighbourhood") as well as urban and inter-regional land and housing market trends.

#### Competencies

In this specialization, students are enabled to better understand the development and relationship of land to housing and to conceptualise it in a problem-oriented manner. In addition to imparting knowledge on strategies, concepts and instruments of land and housing market policy, case studies from Germany and abroad are used to critically reflect on the impact and effectiveness of spatial planning measures. At the same time, the students deepen their skills in presenting and writing about the acquired professional knowledge and results.

#### Responsable Individual

Hartmann

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E Exercise (WP) Wahlpflichtfach		Wahlpflichtfach			
			(compulsory optional subject/elective module)		
S	Studio	SE	Seminar		
L	Lecture	Р	Project		





## 8. Urban Transformation

Lehrveranstaltungssprache/Language of instruction Englisch

#### Course content

All urban areas in European countries and beyond are facing huge spatial challenges. The drivers for urban transformation are manifold and include technological change and digitalization (smart cities), migration and demographic changes, climate change, increasing relevance of agglomeration economies, as well as post- and re-industrialization. The spatial impacts of these transformations are complex and in part contradictory. Growth in metrocities (or post-metropolis) goes hand in hand with functional and physical densification in de-centralized agglomerations. At the same time, we observe urban shrinkage, the growth of low-density suburbs and the rising relevance of what Sieverts called the Zwischenstadt (in-between city). The spatial implications of structural change and the organization of such transformation demand for deliberate strategies to plan, govern and revitalize urban areas, economically, socially and environmentally. In the scholarly literature, a wide range of new forms of interventions such as social innovation, collaborative governance, resilience, urban laboratories and urban strategy are discussed next to established approaches like learning regions or incremental planning.

#### Competencies

The specialization aims to attract highly qualified students, wishing to learn more about innovative strategies to transform cities and regions at a location offering brilliant in situ conditions to understand the complexity of governance and planning. The programme builds upon a full 4-year bachelor programme in spatial planning, as established at the TU Dortmund. The philosophy of the programme is based on the understanding of planning as a multi-disciplinary discipline. The course and projects in the programme seek to bridge international theories of structural change and spatial transformation with the practice of governance in cities and regions.

#### Responsable Individual

Zimmermann

Е	Exercise	(WP)	Wahlpflichtfach
			(compulsory optional subject/elective module)
S	Studio	SE	Seminar
L	Lecture	Р	Project





Module 4: Master Thesis								
Cour	se of studies	: M.Sc	. Spatial Planning					
	Regular cycle:Duration:Taught:Credits:Time:Each semester1 Semester2nd semester20600 h							
1	Module str	ucture						
	No.	Elem	ent/course		Туре		credits	Hours per week
	1	Mast	er thesis			(WP)	20	
2	Language of German/Er		ruction					
3	Course content The Master's thesis is a scientific work in the field of spatial planning. The work may have a theoretical, empirical or conceptual/creative focus. Students can make suggestions for the theme of the work.							
4	Competencies The Master thesis is to show that the student is able to work independently within a given period of four months on a complex spatial planning issue according to scientific standards and methods.							
5	Examinations Module examination (graded)							
6	Type of examination/Course exercise Course exercise: Presentation of the Master Thesis in a Research Colloquium in Module 1. Module examination: Master thesis (max. 175.000 characters, without spaces)							
7	Prerequisite none							
8	Type of module and corresponding program Compulsory module in the M.Sc. Spatial Planning ("Raumplanung")							
9	Module CoordinatorResponsible DepartmentChair of Examination BoardDepartment of Spatial Planning (09)							

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Е	Exercise (WP)		Wahlpflichtfach			
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S	Studio	SE	Seminar			
L	Lecture	Р	Project			