

Module Description

Integrated Urban Development and Design

Title	Urban Development and Design					Module number	M 1.1.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator(s)	
First Semester	Annual	Weekly	6 CP	180 hours	English	Vertr.-Prof. Schneider, DI Schmidt, u.a.	

Type of module	Formal requirements for participation	Examination requirements
Lecture Seminar	--	Examination Seminar paper and presentation

Targets of qualification
Developing a general understanding and overview about integrated urban development, its overall meaning and implication related to the urban context in terms of physical space and the usability of space. Understanding the pillars of the master course “Integrated Urban Development and Design”. Academic and application-oriented reflection of the subject.

Content
The module introduces different perspectives on integrated urban development in the sense of a sustainable, resilient and holistic planning approaches. It covers national strategies like the Leipzig Charta with a closer look on their implementation. International examples that target new approaches and good practice worldwide are shown through the lens of different disciplines and aspects like new mobility, resource oriented development, environment, energy and sanitation in the global North and South.

Teaching and learning forms/ didactic concept
The lectures are given by different chairs from the Faculties of Architecture and Urbanism as well as the Faculty of Engineering who are involved in research and implemented projects on urban development. Reading material is provided on a course platform. A seminar is providing students to research and present projects from their home countries related to specific features of the content described above.

Additional information

Lectures/ courses included in the module	SWS	ECTS-CP
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Module Description

Lecture	2	3
Seminar	2	3

Module Description

Integrated Urban Development and Design

Title	Urban Sociology					Module number	M 1.2.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator(s)	
First Semester	Annual	Weekly	6 CP	180 hours	English	Prof. Eckardt Dr. Stratmann	

Type of module	Formal requirements for participation	Examination requirements
Lecture Seminar	--	Upon completion of course requirements (semester paper)

Targets of qualification
Students get to know basic terms and approaches in urban sociology and are introduced to concepts that are relevant for the discourse on integrated urban development in context of urban and rural development and its implications to building and planning activities in terms of sustainable urban development.

<p>M 1.2.1 Urban Sociology</p> <p>This lecture introduces the key ideas of urban sociology for the target group of those who have mostly a background in design-related fields. It will deliver a first understanding of the most important scholars in urban sociology from the classics (Simmel, Weber, Chicago School) to today’s research. The lecture will provide a general overview about principles in urban research. It will cover subjects related to the theory of science, the logics and paradigms of research, different procedures of research, methodological discourses and ethics of research. The lecture will be organized by firstly providing a lecture in a traditional style and secondly with practical exercises.</p> <p>M 1.2.2 Community based resilience</p> <p>The seminar focuses on how the notion of integrated urban development can contribute to sustainable urban development and on the principles and practice of creating (more) resilient cities and the limits of practice. The emergence of the post growth society is both, an overall concept framing roadmaps to sustainable and resilient cities, and a challenge to society and architecture, urban design and planning. Globalisation, urban resilience and changing lifestyles are brought together towards a sociology of a sustainable future. Potentials and instruments to rely to the social perspective of integrated planning approaches and adequate policies, migration, and environmental justice, equity and advocacy planning, citizen activation and democracy building are discussed in the seminar based on an application-related framework that build on perception, interpretation and social activity as places of social space.</p>
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Teaching and learning forms/ didactic concept
Lectures and seminars are taking place in class. Grades for presentation handed in as seminar paper. This course requires compulsory reading and writing between the meeting dates

Additional information

Module Description

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Lectures/ courses included in the module	SWS	ECTS-CP
Lecture	2	3
Seminar	2	3

Module Description

Integrated Urban Development and Design

Title	Real Estate Development					Module number	M 1.3.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
First Semester	Annual	Weekly	6 CP	180 hours	English	Prof. Nentwig	

Type of module	Formal requirements for participation	Examination requirements
Lecture Seminar	--	Upon completion of course requirements (semester paper)

Targets of qualification
Appliance and reflection of tools and methods of real estate development regarding the background of tasks and profiles inside urbanism taking into consideration economic, social and sustainability aspects.

Content
<p>The module ‘real estate development’ includes a lecture and a seminar. This lecture focusses main topics of real estate and urban development, analysis trends of the real estate market, economic calculation in phases of the development. The lecture includes the following aspects of real estate development:</p> <ul style="list-style-type: none"> ▪ Basics and methods ▪ Service descriptions ▪ Developer calculation ▪ Location and market analysis ▪ Social milieus / Target groups ▪ Special property (Hotel, Office, Retail,...) ▪ Residual value method <p>Constitutive on the lecture real estate Development a development task is the main topic of this course. Characteristics are market and location analysis, concepts for estimated usage and economic calculations.</p>

Teaching and learning forms/ didactic concept
The teaching is based on scripts. The application of the basic knowledge is processed on a seminar. The students have to finish a minor semester paper until the end of the semester. In the working process they are supported in consultations. The necessary technical infrastructure is provided by the learning platform moodle.

Additional information

Lectures/ courses included in the module	SWS	ECTS-CP
Lecture	2	3
Seminar	2	3

Module Description

Integrated Urban Development and Design

Title	Research Methods and Professional Communication					Module number	M 1.4.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
First Semester	Annual	M 1.4.1. Weekly M 1.4.2. Monthly 1 semester	6	180 hours	English	Academic Center Tore Dobberstein	

Type of module	Formal requirements for participation	Examination requirements
Seminar Exercises/Training	--	Paper and Presentation Paper and Presentation

Targets of qualification
<p>M 1.4.1: Academic Skills Students develop a comprehensive understanding and knowledge of techniques in scientific working and research methods. Critical reception of adequate literature and sources with the goal of writing own academic papers and texts and a well-written final thesis.</p> <p>M 1.4.2: Moderated Planning Processes Students are developing capacities to include and apply moderation techniques in planning processes as an important part of integrated urban development concepts.</p>

Content
<p>M 1.4.1: Academic Skills Academic writing and related skills like defining a research subject, conducting systematic searches and reading, selection of appropriate databases, refining research findings, applying appropriate citation styles. Knowledge about empirical urban research in theory and practice. Qualitative and quantitative research methods, interpretation of data and basic knowledge about statistics.</p> <p>M 1.4.2: Moderated Planning Processes</p> <ul style="list-style-type: none"> • Formal and informal planning processes • Roles and interests of different actors, stakeholder analysis • Cooperative planning strategies: potentials, political risks, legitimation • Fields of application, methods and tools • Role and facilitation of communication processes in decision making • Management of moderated planning processes • Mediation, negotiation and consensus building, conflict and change management

Teaching and learning forms/ didactic concept
<p>The seminar teaches fundamental tools to guide group meetings and planning workshops towards a productive output. Practical training units address techniques to visualize and to moderate planning related issues. The consensus on multi-interest decisions in the urban context is exercised in different role plays with the simulation of different scenarios to detect interests and analyse potentially conflicting positions. The implementation of informal planning strategies and dialogue based communication are discussed in the course.</p>

Module Description

Additional information

Lectures/ courses included in the module	SWS	ECTS-CP
Research Methods	2	3
Professional Communication (Moderated Planning Processes)	2	3

Module Description

Integrated Urban Development and Design

Title	Culture and Urbanism of China					Module number	M 1.5.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
First Semester	Annual	Blockwise monthly	3	90	English	Dr. Eduard Kögel	

Type of module	Formal requirements for participation	Examination requirements
Introductory Seminar	Students have to be enrolled in the study programme “ Advanced Urbanism ”	Presentations and papers

Targets of qualification
This introductory seminar prepares students enrolled in the study programme “ Advanced Urbanism ” for their study period, taking place at Tongji-University Shanghai in the third semester. The acquire basic knowledge about the Chinese planning system and Culture of China and are taking part in an intercultural training.

Content
History of China. History of Chinese Cities and Architecture. Differences and similarities in the German and Chinese Urban Planning System. Innovation in Urban Design and Infrastructure.

Teaching and learning forms/ didactic concept
Lectures are held on the above mentioned topics. Students are preparing small presentations and papers to get closer to the cultural context of China and issues of urban design and planning.

Additional information
Culture and Urbanism is mandatory for students in the study programme “ Advanced Urbanism ”

Lectures/ courses included in the module	SWS	ECTS-CP
	2	3

Module Description

Integrated Urban Development and Design

Title	Computational Urban Analysis and Simulation					Module number	M 2.1.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
Second Semester	Annual	Weekly, One semester	6	180 hours	English	Vertr. Prof. Schneider Jun. Prof. König	

Type of module	Formal requirements for participation	Examination requirements
Seminar Exercise		Submission of exercises (application of the different methods on a complex scenario)

Targets of qualification
After completing the module, students have acquired sound knowledge on how to represent cities as objects or processes in order to understand them from various perspectives. The students are provided with a sound theoretical basis about modelling, system dynamics, spatial analysis and parametric design. Furthermore, they are able to apply the methods on existing cities and future city plans.

Content
Cities are complex man-made objects. They consist of thousands of strongly interrelated spatial elements (such as streets, plots, buildings) which are both - influencing and influenced by - different human actors pursuing different goals. In order to understand how cities work and how they develop, models are necessary that are able to represent the interplay between the spatial elements and the human actors living in them and acting on them. Therefore, in this module, different computer-based methods such as urban systems modelling, spatial analysis and parametric design are introduced applied at practical examples. Furthermore, the strengths and limits of each method are discussed.

Teaching and learning forms/ didactic concept
The participants of this seminar are introduced to theoretical concepts in lectures. After each lecture different theoretical concepts are applied and trained in several practical exercises using individual software tools. After each class, the students have to work on their own on a more complex exercise (homework) for deepening their knowledge and skills. The course takes place partially in the classroom (lectures and exercise supervision) and partially online (additional information, tutorials, submission, review).

Additional information

Lectures/ courses included in the module	SWS	ECTS-CP
Computational Urban Analysis Parametric Urban Design Urban System Dynamics	4	6

Module Description

Integrated Urban Development and Design

Title	Study Project					Module number	M 2.2.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
First + Second Semester	Annual	Weekly	18	540 hours	English	Prof. Nentwig Vertr. Prof. Schneider DI Schmidt	

Type of module	Formal requirements for participation	Examination requirements
Preparatory Seminar with Exercises, Project	--	Exercises, Papers, Design proposals

Targets of qualification
Understanding and applying urban analysis tools, methods and techniques; denoting the specifics of social methods in urban research, critically reflecting contexts and applications of different methods to be included in integrated urban development concepts and applying it to research-based urban design simulation.

Content
<p>M 2.2.1. Introduction to Study Project: In this preparatory seminar, students are prepared for the study project that takes place in the following 2nd semester. This preparation module pursues to goals: first, an introduction to the theories and methods that will be used in the study project, second an introduction to the goals and the context of the project. After the course students understand the boundary conditions of a certain planning task and understand which theories and methods are suitable to be applied in this task.</p> <p>M 2.2.2. Study Project: In our study project we aim to decode and understand how functions and uses are interconnected with the idea of the urban morphology that constitutes the functional, environmental, social and spatial qualities of the ‘European City’, qualifying students to develop Integrated Development Concepts. The project includes non-academic experts and scientists to enforce the relevance of the project for real world case studies.</p>

Teaching and learning forms/ didactic concept
Presentations which will become a part of a final research paper; computer based modelling; creation of integrated development concept based on intervention in the urban scale.

Additional information
The course does not require any previous knowledge of scripting or programming and will focus on the general parametric modelling techniques using Grasshopper and Rhino3D

Lectures/ courses included in the module	SWS	ECTS-CP
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Introduction to Study Project (Introductory Seminar)	2	3
Study Project	10	15

Integrated Urban Development and Design

Title	Introduction to Master's Thesis					Module number	M 2.3.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
Second	Annual	Workshop	3	90 hours	English	Various Chairs	

Type of module	Formal requirements for participation	Examination requirements
Seminar / Exercise	--	Paper

Targets of qualification
With this seminar, students are prepared for a more qualified processes in defining a master's thesis topic. The logic of research is trained and applied in exercises that lead to a draft abstract and proposal for the master thesis. final thesis.

Content
that meets scientific standards and creates valuable research works for students and teachers alike. Students are guided through the logic of research, the definition of individual research interest and the more objective need to communicate specific knowledge related to a certain subject of interest by writing the

Teaching and learning forms/ didactic concept
This seminar is held as intensive workshop with lectures, discussions, exercises and group.

Additional information

Lectures/ courses included in the module	SWS	ECTS-CP
	2	3

Module Description

Integrated Urban Development and Design

Title	Model Project					Module number	M 3.1.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
First + Third semester	Annual	Weekly (M.3.1.1.) Monthly (3.1.2.)	33	990 hours		DI Schmidt	

Type of module	Formal requirements for participation	Examination requirements
Preparatory Seminar Practical Project (internship) Seminar + Forum	Students have to be enrolled in the study programme “ Reflective Urban Practice ”	Completion of course requirements (practical project/training, presentation, interim and final report)

<p>Targets of qualification</p> <p>Develop in-depth understanding and exchange about professional fields dedicated to integrated urban development in an international context. Self-positioning and self-understanding of participants professional role in the sense of ‘Reflective Practice’ in the context of urban strategies and interdisciplinary planning approaches. Individual Experience about ‘Good Practice’ through adequate professional project-based training and praxis reflection.</p>
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<p>Content</p> <p>M 3.1.1.: The Model Project Preparatory Course “Reflective Urban Practice” introduces course participants to current trends in urban development and interdisciplinary approaches that target on “good planning practice” in applied research, practice and administration (3 CP). The course prepares participants to streamline their existing experience for application at a Model Project Partner. The Model Project module (18 LP) includes:</p> <p>M 3.1.2.: The “Model Project” (24 CP) of the module takes place world-wide at a selected “Model Project Partner” (offices, institutions, administration) for the purpose of practical training. The internship arrangement (minimum 3 months) is related to urban design, planning, research and development. The training place is either proposed through the programme or the student, and approved through head of the module.</p> <p>M 3.1.3. The International Model Project Forum is prepared through a Seminar & Coaching and the forum event as such (6 CP) This part of the seminar is to reflect existing urban practice in a presentation that reveals to the “Model Project” students are participating in during their third semester. The seminar is hold through far-distance meetings and presentations. Finally, as a highlight of the academic training the students’ presentation is hold on the public academic event of our Model Project Forum in presence of our international Model Project Partners acting as experts and critiques.</p>
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<p>Teaching and learning forms/ didactic concept</p> <p>In the first part of the Model Project preparatory course students learn to how to link their existing professional experience to a broader field of professional activities related to planning and design. They present and reflect their professional experience. In a second part, the students are coached to further develop their specific interests and communicate them in their professional portfolio. The practical training is accompanied through a well-tested seminar in a virtual class-room, including a guided course with specific due dates, individual and groupwise online-</p>

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consultations, life-meetings of the entire group as well as video-based presentation-coaching through Adobe Connect. Course requirements include a final presentation, an interim report and a final report (25-30 p.) which are handed in online. The module closes with the "Model Project Forum", requiring the students attendance in Weimar or any selected place. The forum fosters a critical but practice -related discussion among students and model project partners who are attending as guest critiques.

Additional information

This module is the core module of the study programme "Reflective Urban Practice"

Lectures/ courses included in the module	SWS	ECTS-CP
Preparatory Seminar "Reflective Urban Practice"	2	3
Practical Project (internship) "Model Project"	16	24
Seminar + Conference "International Model Project Forum"	4	6

Module Description

Integrated Urban Development and Design

Title	Course offered in the Study Programme “Advanced Urbanism” at Tongji-University Shanghai					Module number	M 3.2.
Semester	Frequency	Interval/ duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
Third Semester	Annual	Daily	30	900 hours	English	Tongji-University Shanghai	

Type of module	Formal requirements for participation	Examination requirements
Project Seminar Lecture Exercise	Students have to be enrolled in the study programme “Advanced Urbanism”	According to course catalogue offered through College of Architecture and Urban Planning at Tongji-University

Targets of qualification
Students get a special insight of current urban development in the urban and rural-urban development of China. The Course also include cultural and language courses.

Content
Different formats are offered to understand Chinese urban development from different perspectives, including Urban Planning and Transportation, surveying old and new settlement development and approaching the profession of urban development from a specific cultural perspective.

Teaching and learning forms/ didactic concept
The teaching and learning forms and didactic concept is embedded in the institutional framework of Tongji-University College of Architecture and Urban Planning at Tongji-University. It includes a Design Project with surveying real world case studies and a design studio, seminars and lectures as well as exercises and intercultural components on Chinese culture and a Chinese language course.

Additional information

Lectures/ courses included in the module	SWS	ECTS-CP
Design Project	6	9
Urban Planning	2	3
Urban Transportation	2	3
Chinese History and Culture	2	3
Chinese Language	2	3
Elective Module	4	6
Academic Review & Thesis Discussion	2	3

Module Description

Integrated Urban Development and Design

Title	Master's Thesis					Module number	M 4.1.
Semester	Frequency	Interval/duration	ECTS – CP	Student workload	Language(s)	Module coordinator	
Fourth Semester	Annual	Weekly, one semester	30	900	English	Prof. Nentwig	

Type of module	Formal requirements for participation	Examination requirements
Final thesis (for master qualification, M.Sc.)	All other course grades have to be completed before formal registration for the master thesis	Master-colloquium, submission of final thesis, oral defense of thesis

Targets of qualification
The Master's thesis completes the scientific education of the programme. It is meant to exhibit the candidates ability to engage with an issue of the urban realm independently - within three months and through applying scientific methods.

Content
The Master's examination is the final examination of the degree programme in Integrated Urban Development and Design. It is to be ascertained by means of this examination whether the candidate has gained an overview of the methods and the content taught in the study programme and has the ability to apply, also in an interdisciplinary manner, his/her scientific knowledge to tasks in this field of knowledge. The Bauhaus-Universität Weimar will award a Master of Science degree (MSc) to candidates upon successful completion of the Master's examination.

Teaching and learning forms/ didactic concept
Candidates are admitted to write their Master's thesis only after submitting an application at the beginning of the appropriate semester. The examination schedule and registration period will be announced by means of a notice six weeks beforehand at the latest. The Master's colloquium provides the platform for presenting and discussing the Master's thesis/project. The successful completion of the Master's colloquium has to be submitted before the deadline for the completion of the Master's thesis.

Additional information
The Thesis Application Form needs to be submitted prior to thesis writing through the students to apply and then being approved for the Master's Thesis writing phase.

Lectures/ courses included in the module	SWS	ECTS-CP
Master's Collquium	2	3
Master's Thesis and Defense	18	27