

Course Catalogue for Winter Semester 2019/2020

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Module: Urban Development and Design

2 SWS/ 3 CP

Prof. Dr.-Ing. Bernd Nentwig, Dipl.-Ing. Philippe Schmidt, M.Sc.,

Guest Prof. Meg Walker and other lecturers

L Urban Development and Design (118220204)

target group: Master Integrated Urban Development and Design, Erasmus
 language: English
 time/ location: Mondays, 17:00 – 18:30 | green:house, Bauhausstr. 9 C, Room 004
 start: 21.10.2019
 registration: through online platform BISON

Content

The understanding of a well-balanced urban development regarding social, economic and environmental needs is one of the main outlines of European Urban Policies to promote more sustainable cities. In 2007 the responsible ministers for urban development from 27 countries declared the Leipzig Charter as guiding principle to reach a stronger cohesion of the different factors that would be necessarily be more streamlined to reach such sustainable development. Integrated Urban Development Concepts since then have become a main instrument of urbanists to guide this process.

Urban and architectural qualities under the objective of climate adaptation and protection, renewable resources and resource conservation as well as long-term intergenerational perspectives are just some of the topics that have to be negotiated for more comprehensive future cities. For the disciplines concerned with urban design this means to develop a holistic view on the city and an understanding between the different disciplines, also in terms of a social equilibrium in urban space.

For this purpose the lectures in this module are framing different objectives of the Master's Programme »Integrated Urban Development and Design« with the idea to support the "urban curator" to develop a holistic view on the city and an understanding between the different disciplines. The lecture introduces different perspectives on integrated urban development in the sense of multi-disciplinary planning approaches with a closer look on their implementation. Creative strategies and selected examples of "good practice" show how different approaches can be implemented through the lens of different disciplines, bringing together an academic and application-oriented reflection of the subject.

This year's IUDD lectures will be a combination of online-lectures, invited guest lecturers and a placemaking symposium that is related to different approaches of requalifying our cities in terms of managing change and paradigm shifts. The goal of the lectures is to develop a general understanding and overview about how urban development and urban design can be considered in an interdisciplinary and integrated approach.

Module: Project Development

2 SWS/ 3 CP

Prof. Dr.-Ing. Bernd Nentwig

L Real Estate Development (118220202)

target group: Master Integrated Urban Development and Design, Erasmus
 language: English
 time/ location: Tuesdays, 09:15 – 10:45 | green:house, Bauhausstr. 9 C, Room 004
 start: 15.10.2019 (The opening takes place at 11:00 am)
 registration: through online platform BISON

Content

This course consists of lecture series and complementary seminar, which offers an opportunity integrating architect, urban planner, designer all together to explore different topics of real estate development.

The lecture series will focus on the main topics of real estate and urban development, such as analyzing trends of the real estate market, offering economic perspectives in various phases of project development, introducing different property types together with different social milieus.

Additional to this lecture series, there is an accompanied seminar 'Integrated Real Estate Development Seminar' which allows you to exercise the knowledge which you collect from the lectures.

In order to acquire 6 Credit Points in total, you must attend both lecture and seminar.

Module: Real Estate Development

2 SWS/ 3 CP

Prof. Dr.-Ing. Bernd Nentwig, Shimin Huang, M.Sc.

S Real Estate Development (118220202)

target group: Master Integrated Urban Development and Design, Erasmus
language: English
time/ location: Tuesdays, 11:00 – 12:30 | green:house, Bauhausstr. 9 C, Room 004
start: 15.10.2019
registration: through online platform BISON

Content

This course consists of lecture series and complementary seminar, which offers an opportunity integrating architect, urban planner, designer all together to explore different topics of real estate development.

The lecture series will focus on the main topics of real estate and urban development, such as analyzing trends of the real estate market, offering economic perspectives in various phases of project development, introducing different property types together with different social milieus.

Additional to this lecture series, there is an accompanied seminar 'Integrated Real Estate Development Seminar' which allows you to exercise the knowledge which you collect from the lectures.

In order to acquire 6 Credit Points in total, you must attend both lecture and seminar.

Module: Introduction to Study Project

2 SWS/ 3 CP

Vertr.-Prof. Dr. Sven Schneider, Abdulmalik Abdulmawla,

Fuchkina, Ekaterina , Dipl.-Arch.

S Parametric Urban Design and Analysis (118222405)

target group: Master Integrated Urban Development and Design, Erasmus
language: English
time/ location: Tuesdays, 15:15 – 16:45 | Belvederer Allee 1 A, Mediapool 003
start: 15.10.2019
registration: through online platform BISON

Content

Cities are complex human-made objects. They consist of thousands of elements and need to satisfy numerous human needs. The definition of urban form (street network, plots, building volumes) is a crucial step in the planning of cities because it has the longest lasting effect on their social, economic and ecological performance. Thus, this step needs to be undertaken with greatest care. In this course we will deal with computational methods to support this process. Firstly, you will learn to create parametric models, that allow to quickly generate a large amount of design variants. Secondly, you will get introduced to spatial analysis methods (density, visibility and accessibility) in order to identify different (human centered) qualities of the generated urban forms. The theories and methods you learn in this class provide the basic theoretical and technological framework for integrated urban development and design, which we will further deepen in the study project in the next semester.

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The knowledge provided through online seminars will be deepened in consultations and documented in several exercises. No prior technical knowledge is required.

Module: *Introduction to Study Project*

2 SWS/ 3 CP

Jun.-Prof. Dr. Reinhard König

S Urban Modeling and Simulation (UMS) (119223303)

target group: Master Integrated Urban Development and Design, Erasmus
language: English
time/ location: Wednesdays, 11:00 – 12:30, Belvederer Allee 1 A, Mediapool 003
start: 16.10.2019
registration: through online platform BISON

Content:

The participants of this seminar are introduced to urban simulation methods. We deal with the modeling of complex spatial systems on the regional and urban level. In this context computational analysis methods for urban fabric (e.g. for pedestrian movement or economic potentials) and models for computing interactions between land uses are introduced. By means of system dynamics models we can simulate temporal changes of “stocks and flows”.

Remarks

The knowledge provided through online seminars will be deepened in consultations and documented in several exercises. No prior technical knowledge is required.

Module: *Urban Development and Design*

2 SWS/ 3 CP

Adj. Prof. Meg Walker

S History and Theory of Public Space (119223702)

target group: Master Integrated Urban Development and Design, Master MediaArchitecture, Sustainable Transport Planning, Erasmus
language: English
time/ location: Mondays, 11:00 – 12:30 am, green:house, Bauhausstr. 9 C, Room 004
start: 15.10.2019
registration: through online platform BISON
[Bauhaus.Module](#)

Content

Placemaking is a transdisciplinary approach to the shaping of public space and urban settlements to support the needs and desires of communities. Placemakers benefit from a holistic understanding of urbanism and especially how people experience and transform “place” and, in turn, are transformed by it. This seminar course lays some of the foundation for students of placemaking to equip them with a broad understanding of public space, its place in cities and urban settlements, and the various approaches that have developed over the past sixty years to study its use and role. It also looks at how the concept of “place” as a focus of study has evolved in the past few decades, especially in philosophy and humanistic geography, with the renewed interest in human experience as integrally rooted in place. Students in this course will develop a knowledge of the broad themes and debates in a variety of disciplines—geography, philosophy, sociology, urbanism-- that relate to the use, creation and transformation of public space as “place” and its impact on people, both individually and in communities. Students will also become familiar with the theories and skills that planners, designers and policy-makers draw upon to critically evaluate public space so as to inform placemaking decisions. Through readings, discussions, hands-on workshops, diaries and practical applications, students will acquire the theoretical and historical knowledge necessary to evaluate places and begin to formulate placemaking proposals. This course is required for participants taking part in the Placemaking Lab.

MODEL PROJECT

Module: Model Projects

2 SWS/ 3 CP

Dipl.-Ing. Philippe Schmidt M.Sc.

S Reflective Urban Practice – Model Project Preparatory Course (118223705)

target group: Master Integrated Urban Development and Design (IUDD – RUP) 1st Semester
language: English
time/ location: Mondays, 09:15 – 10:45 , green:house, Bauhausstr. 9 C, Room 004
start: 14.10.2019
registration: through online platform BISON

Content

The Model Project Preparatory Course “Reflective Urban Practice” introduces course participants to current trends in urban development and interdisciplinary approaches that target on “good practice” in applied research, practice and administration. With the diverse professional fields existing in the field of urban development and design participants are prepared to streamline their existing experience for the application at a Model Project Partner. The seminar serves as preparation for the application and placement phase prior to the Model Project semester in autumn/winter 2019. The “Model Project” (24 CP) is the praxis semester that 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 the coordinator of the Model Projects.

Learning Objectives

Besides an introduction to the 'Model Projects Integrated Urban Development and Design' students learn how to link their existing professional experience and interests 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 and actively take part in the targeted application for the reflective practice semester. First semester students are also attending the Model Project Forum to get first-hand impressions of content and form of different experiences from last semester's Model Projects.

Participation is mandatory for first semester students in Integrated Urban Development and Design - Reflective Urban Practice (IUDD-RUP). Class based on continuous and active participation.

Module: Model Projects

4 SWS/ 6 CP

Prof. Dr.-Ing. Bernd Nentwig, Dipl.-Ing. Philippe Schmidt, M.Sc.

S Model Project Forum and Seminar (744294)

target group: Master Integrated Urban Development and Design (IUDD – RUP), 3rd Semester
language: English
time/ location: Online seminar, final rehearsal and forum in Weimar, dates to be announced
start: Participants will be informed via E-Mail
registration: Online on moodle platform when course starts

Content

In this module, the International Model Project Forum is prepared in different steps. The seminar's goal is to exchange about and learn from different projects in the field of urban practice where third semester students have been involved during their Model Project semester in the winter semester 2018/19. The seminar challenges students to contextualise the own individual practical work and research experience into a broader context of reflective urban practice and research. This allows participants to deepen the understanding between practice and theory, to contribute real-world-experience in a reflective way and to develop a own set of interdisciplinary approaches within their individual professional role. The seminar also prepares students to hold a lecture dedicated to the International Model Project Forum, which closes as a highlight of the academic training. For this public academic event International Model Project Partners are invited to the forum as senior experts and critiques to the student presentations.

Course structure and requirements

The seminar mainly consist of three phases and is accompanied through a virtual class-room, including a guided course with specific due dates, individual and groupwise online-consultations, life-meetings of the entire group and P2P-meetings 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 pages) which is handed in online and as a printed version. After final rehearsals the module closes with the 19th International “Model Project Forum” (end of April 2019), requiring

students attendance in Weimar or any selected place where the forum takes place. The forum fosters a critical but practice -related discussion among students and model project partners who are attending as guest critiques.

Learning Objectives

In this module students develop an in-depth understanding and exchange about professional fields dedicated to integrated urban development in an international context. Participants reflect the self-positioning and self-understanding of their professional role in the sense of 'Reflective Practice' related to urban strategies and interdisciplinary planning approaches. The final goal is to focus individual experiences about 'Good Practice' through adequate professional project-based training and praxis reflection.

Participation is mandatory for third semester students in Integrated Urban Development and Design, Reflective Urban Practice.

Class based on continuous and active participation.

EXERCISE COURSES

Module: Research Methods and Professional Communication **2 SWS/ 3 CP**

Dipl.-Kaufm. Tore Dobberstein

E Moderating Urban Planning Processes (118223704)

target group: Master Integrated Urban Development and Design
language: English
time/ location: Thursdays, 09:15 – 15:00, green:house, Bauhausstr. 9 C, Room 004
start: 24.10.2019 (Blocks)
 Further dates: 07.11.2019, 14.11.2019, 28.11.2019
registration: through online platform BISON

Content

Integrated development and design processes require skills to effectively communicate with multiple urban actors, ranging from project stakeholders to citizen audiences. Fundamental knowledge of moderation is an important asset for the work with different interest groups in the urban sphere. The exercise course introduces basic moderation skills to meet today's challenges in the field integrated urban development and design, such as cooperative planning, mediation, and project evaluation. This includes the accurate detection of different interests, strategies for multi-interest decisions, and to work with potentially conflicting positions.

The lecture teaches tools to guide group meetings and planning workshops towards a productive output. Practical exercise sessions address techniques to visualise and to moderate planning related issues. The implementation of informal planning strategies and dialogue based communication are discussed in the course.

Module: Research Methods and Professional Communication **2 SWS/ 3 CP**

Dr. Lisa Vollmer.

E Academic Skills (118223501)

target group: Master Integrated Urban Development and Design
language: English
time/ location: Tuesdays 13:30 – 15:00, green:house, Bauhausstr. 9 C, Room 004
start: 16.10.2019
registration: through online platform BISON

Content

At the beginning we will deal with the process of production of scientific knowledge as such considering basic 'rules' of scientific work. As learning by doing is usually a successful way which makes us experiencing the specific demands of a research process you will work in the course in small teams defining and planning your own research project. Starting the practical work we will first deal with different sources of information, how to decode and evaluate them as well as how to quote and organize them properly in scientific working and writing. Now having an idea how and where to gather information you will define your own research question and develop a research concept step by step going from a proper wording of the research question to the selection of fitting research methods, time planning and documentation.

Module: *Culture and Urbanism of China*

2 SWS/ 3 CP

Dr. Eduard Kögel

S Chinese Culture and Society in the Perspective of Urban Development and Architecture (118223701)

target group: Master Integrated Urban Development and Design, Erasmus
language: English
time/ location: Wednesdays, 13:30 – 15:00 pm, green:house, Bauhausstr. 9 C, Room 004
start: 04.12.2019
further courses: 11.12.2019, 18.12.2019
registration: through online platform BISON

Content

Over the last 40 years, society and cities in the People's Republic of China have changed dramatically. At the beginning of the 1980s China was still considered a developing country, but today it is one of the world powers whose voice is clearly audible in many parts of the world. Urban and cultural development in the context of architecture and planning show the possibilities and dreams of a society. In the case of China, the realities and constraints of a mass society, which must find its way between individualisation and equality, are also reflected in design, which in turn has an impact on social and political developments. So what does design look like that has to find a way between these poles that takes into account the different conditions in the metropolis and the hinterland?

The seminar provides background information, discusses scenarios and draws a picture of future challenges. But it also asks what can be learned and under what conditions solutions can be exported from China.

MASTER - COLLOQUIUM

Module: *Masters' Thesis*

2 SWS/ 3 CP

Dr. Lisa Vollmer / Professors

Master - Colloquium EU/AdUrb

target group: Master EU, Master AdUrb
language: English
time/ location: Block course/ see notice-board
start: Please see notice-board
registration: Not necessary, all students accepted for the Master examination have to participate

Content

The course is the platform for presentation and discussion of the Masters theses. The candidates will present the intermediate results of their work on their individual topics. Suggestions for further action will be made by fellow students and academics attending the colloquium. Admission for the Master examination is required for participation. Performance record (attestation) will be achieved by giving an oral presentation.

ELECTIVE COURSES

Module: *Elective*

4 SWS/ 6 CP

Adj. Prof. Meg Walker, **Dipl.-Ing. Philippe Schmidt M.Sc.**

S Placemaking Lab: The Analysis of Public Space (119223702)

target group: Master Integrated Urban Development and Design, Master MediaArchitecture, Sustainable Transport Planning, Erasmus
language: English
time/ location: Fridays 09:15 – 10:45 am, green:house, Bauhausstr. 9 C, Room 004
start: 20.10.2019
registration: through online platform BISON
Bauhaus.Module

Content

The workshop course introduces students to tools and techniques for analyzing the public realm in cities and the behavior of people within it. Students will learn that the design or transformation of new and existing public spaces and the development of management

strategies depend on rigorous analyses of existing urban conditions and the needs and activity patterns of public space users. Students will learn to observe public spaces through the use of statistical data collection, interviews, surveys, photography, and video. Students will learn to analyze spatial characteristics involving use, circulation, programming, amenities, landscape, etc. Students will use conceptual diagrams, mapping, and architectural drawings to communicate findings, and propose programming and design solutions.

Module: Elective

4 SWS/ 6 CP

Prof. Dr. Uwe Plank-Wiedenbeck, Maximilian Rünker, M.A.,
Dipl.-Ing. Julius Uhlmann, Dipl.-Ing. Philippe Schmidt M.Sc.)

L International Case Studies (2909021)

target group: Master Integrated Urban Development and Design, Erasmus
language: English
time/ location: Mondays, 19:30 – 20:30 | Coudraystraße 11, Lecture Hall 001
start: 07.10.2019
registration: through online platform BISON
Bauhaus.Module

Content

Part A: How can we achieve sustainable mobility and make cities more liveable? The question will be answered by presenting best practice solutions worldwide. Guest lectures about planning practices in an international context, particularly in urban areas. Detailed information about the eight guest lectures (speakers and topics etc.) will be announced.

Part B: At least one student trip (about three to four days) to a European city (e.g. Copenhagen – cyclist capital, Hamburg – Town planning Harbour city, Berlin – German Aerospace Centre etc.). Detailed information about the excursions (destination, venue, timetable etc.) will be announced.

Costs (transport, admission fees, etc.) will need to be paid by the participants!

Literature:

SCHILLER; KENWORTHY: An introduction to sustainable transportation – Policy, planning and implementation (2018) | HUTTON: Planning sustainable transport (2013) | TUMLIN: Sustainable transportation planning – Tools for creating vibrant, healthy, and resilient communities (2012) | Various articles in the journal INTERNATIONAL TRANSPORTATION

The opening meeting takes place on 14.10.2019 at 19:00.

The number of participants is limited to 25.

Please apply via: vsp@bauing.uni-weimar.de until 16.10.2019, 23:55 (max. 1 page size A4).

Module: Elective

2 SWS/ 3 CP

Eng. Mohamed Abdel Aziz M.Sc.

S Introduction to GIS (744282)

target group: Master Integrated Urban Development and Design, Erasmus
language: English
time/ location: Thursdays, 13:30 – 15:00, green:house, Bauhausstr. 9 C, Room 004
start: 19.10.2019
registration: through online platform BISON

Content

Geographic Information Systems (GIS) are a useful tool for multiple disciplines and user groups. In urban development and planning, different constituencies like local authorities interact through GIS e.g. applying it in environmental agencies, transportation, energy, resource and waste management, retail, disaster management, and socio-economics. Collecting, managing, analysing and visualising data with GIS as an information sharing tool can help in different stages of planning processes – from identifying problems to evaluating different planning proposals. Working with GIS allows to create easy understandable maps and to enable communication processes.

This course introduces different practices and applications of GIS in the wider context of urban development. It suits various users from different backgrounds who are interested in spatial information and mapping. Next to a theoretical insight to GIS, in practical applications participants will learn how to create maps by using ESRI ArcGIS software and get an insight in how experts are using GIS for different purposes related to questions of planning and design. Assignments and short tests have to be accomplished during the exercise based seminar.

Module: Elective

2 SWS/ 3 CP

Prof. Dr.-Ing. Bernd Nentwig, Shimin Huang, M.Sc.

**S Educational architecture: Insight, Innovation, Inspiration
(119220203)**

target group: Master Integrated Urban Development and Design, Erasmus
language: English
time/ location: Wednesday, 09:15 – 10:45 | green:house, Bauhausstr. 9 c, Room 004
start: 16.10.2019
registration: through online platform BISON

Content

In next summer semester 2020, we will offer an innovative space design and development project in the metropolis of Shenzhen, which aims at creating cutting-edge spaces for educational institutions, research centers and will be constructed in real scale. Considering the complexity of global interrelations, integrating innovative urban strategies with spatial design and the intricacy of multi-cultural settings, in this winter semester, we therefore offer a preparation seminar to this upcoming semester project.

Aiming at exploring insight of innovative spaces and hunting for the inspiration, this seminar consists of 3 components:

- a) Academic discussion of developing an educational innovative locality for creative milieus in various scales: from macro urban setting to meso neighborhood, for instance, how can urban stakeholders foster an innovation-friendly environment through policy making, urban design and real estate management? From single architecture to micro room design, for example, how can architects cooperate with psychologists, together with artist and digital media designers, getting inspiration from educationalists, to play an important role in creating innovative educational space? This section invites an open discussion about the related essential and required criteria for creating an innovative space which simultaneously inspires the users.
- b) Empirical dialogue of the state-of-the-art global case studies. This section offers an overview of related case studies from all over the world. Each one of the case studies will be discussed in depth, together with its urban governance background as well as its architectural design.
- c) Culture exchange. When the West meets the East, there are many differences and contrasts that need to be mediated. In this section, 3 guest lecturers from Europe and China will be invited to give different insights of university planning in their own urban context. This section also includes an introduction to a basic insight of Chinese culture which allows your design to be contextualized into local climates and settings.

These 3 components stimulate the synergy of producing a convincing design scheme which fits into the current market niche.

Through this seminar, you will be prepared both academically and culturally to the project and the fully funded excursion to Shenzhen in the summer semester 2020.

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Professorships of the bauhaus.intitute for experimental architecture
(alphabetical order by subject)

**Professur Bauformenlehre
(Building Morphology)**

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**Professur Baumanagement und Bauwirtschaft
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**Professur Bauphysik
(Building Physics)**

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**Junior Professorship Computational Architecture
(Computational Architecture)**

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**Professur Entwerfen und Baukonstruktion
(Design and Building Construction)**

Prof. Dipl.-Ing. Johannes Kuehn
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**Professur Entwerfen und Tragwerkskonstruktion
(Design and Structural Systems)**

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**Experimentelle Werkstätten Architektur
(experimental architecture)**

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(Computer Science in Architecture)**

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