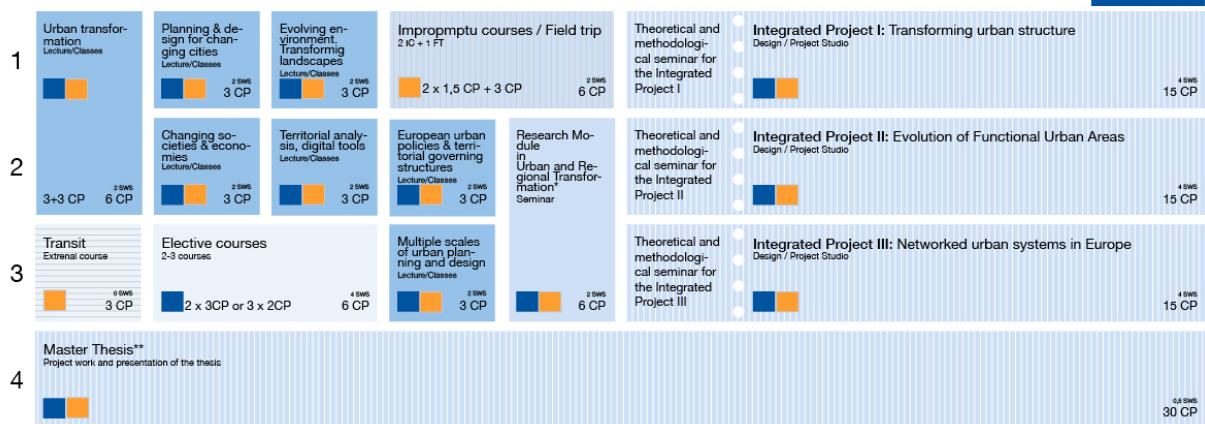


Module Guide of the Study Programme European M.Sc. in Transforming City Regions Final version (7,0)

Faculty of Architecture
RWTH Aachen University
version 7,0
29-05-2019

Curriculum Framework for Master of Science in Transforming City Regions according to the examination regulations (Prüfungsordnung)



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* Depending on the field of study this course can last 1 or 2 semesters. In any case it is 6CP. Two semesters are recommended.
** Master thesis shall be prepared within one semester time. The presentation and defence of the thesis will take place at the end of the 4th semester.

- RWTH Partners
- External Partners
- External course
- Projects
- Core courses - compulsory modules
- Elective compulsory modules
- Elective modules

Programme starts in winter semester

Transforming City Regions (TCR) is a European Master programme that integrates many disciplines in order to educate professionals being able to respond to the challenges of the evolving European territories of different scales with the respect to the environment, using the technical excellence and solution-oriented approach, understanding the economic efficiency and respecting the social needs.

The TCR programme is one of the few programmes designed anew at the RWTH Aachen University in order to respond to the European territorial challenges with the particular focus on project-and-design-oriented education which will equip graduates with not only recent and solid knowledge but also with the tools and methodologies that will help to face the problems of changing European cities and regions. Engineering and design-oriented profile of the graduates, despite clear interdisciplinary orientation, is deeply rooted in the tradition of the Faculty of Architecture RWTH Aachen University and gives also a strong identity to the programme.

General teaching philosophy

The TCR programme is solution-oriented and this is why the cooperation with European institutions, organisations, cities/regions and businesses is crucial for the practical and decision-making skills of the graduates.

The core of the Master's program is formed by three major integrated project works. The increasingly complexity of the territories and issues with different structural and content-related priorities and the link with the foundations of other disciplines are supposed to lead to integrative thinking and conceptual thinking. These projects are characterised by a broad range of methodological, procedural, morphological, landscape-architectural, environmental, legal, and economics aspects.

First three semesters are generally structured in the way that half of the ECTS CP will be available through the integrated project dealing with the complex urban problem which will differ from a smaller to a greater scale. The remaining half of the ECTS CP will be available through the core courses, elective modules, research module, field trip/improptu courses and transit course.

The European dimension of the courses is ensured in three different ways:

- through Europeanisation of the teaching staff,
- through the cooperation with the European institutions, organisations and companies, and
- through ensuring the European study cases for the integrated projects.

Thanks to interdisciplinary approach and European perspective the graduates will be prepared to work for:

- private sector (development agencies, investment banks, technical infrastructure companies, territorial analyses, urban planning offices, companies dealing with structural funds etc.),
- advise public authorities and institutions, including local, regional, national, European and global level, as well as
- cooperate with the civil society organisations and NGOses in different cultural contexts and within wide spectrum of urban issues.

The European perspective will be for the graduates a big advantage on the job market, no matter which European country is considered, and also no matter what kind of business, institution or organisation they would like to work for.

General module information:	
Module title	Urban Transformation
Module title (German)	
Representative	TCR Key Lecturer (Visiting Professor)
Credit Points	6 CP
Language	English
Module level	Master
Duration	2 semesters
Frequency	Winter semester (Urban Transformation 1) and summer semester (Urban Transformation 2)
Total hours (h)	180
Contact hours (SWS)	4
Self-study (h)	120
Content	The module presents dynamics of urban areas in Europe, discusses in this context a new definition of the city and elaborates contemporary processes shaping cities and urban areas: territorial, demographic, socio-economic and environmental. The models explaining the nature and consequences of this change form important part of the module as well as theories aiming at explaining them. The territorial background of the topic of the module stretches to the regional scale and urban networks. The aspects of the urban transformation include mobility patterns, heritage issues and culture of cities, new technologies, social infrastructure and the quality of life.
Learning Objectives	The objective of the module is to explore and understand dynamics of the processes that can be observed in urban areas with a particular focus on those located in Europe. The students shall be able to apply this knowledge in their projects on real world case studies.
Requirements	—
Verification methods Rating	Course assignment and exam According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
STB (Chair for Urban Design)	Urban Transformation 1	Classes (Übung)	2	
STB (Chair for Urban Design)	Urban Transformation 2	Classes (Übung)	2	
	Exam Urban Transformation 1			3
	Exam Urban Transformation 2			3
Category:	Compulsory module			

Modelling:				
			SWS	FS
AK:	Course Urban Transformation 1	PV	2	1
	Course Urban Transformation 2	PV	2	2
			CP	FS
PK:	Exam Urban Transformation 1	PV	3	1
	Exam Urban Transformation 2	PV	3	2

Literature	
	<p>Batty, M. 2013. <i>The New Science of Cities</i>. Cambridge, MA, London: MIT Press.</p> <p>Bosselmann, P. 2008. <i>Urban Transformation</i>. Washington, DC: Island Press.</p> <p>Burdett, R., Sudjic, D. (eds.) 2007. <i>The Endless City</i>. London: Phaidon.</p> <p>Dijkstra, L., Poelman, H., 2012, <i>Cities in Europe. The New OECD-EC Definition</i>. Regional Focus 01/2012. Luxembourg: European Commission.</p> <p>Forrester, J. 1969. <i>Urban Dynamics</i>. Cambridge, MA: MIT Press.</p> <p>Geddes, P. 1915. <i>Cities in Evolution. An Introduction to the Town Planning Movement and to the Study of Civics</i>. London: Williams & Norgate.</p> <p>Kivell, P. 1993. <i>Land and the City: Patterns and Processes of Urban Change</i>. London: Routledge.</p> <p>Mumford, L. 1961. <i>The City in History: Its Origins, its Transformation and its Prospects</i>. New York: Harcourt, Brace & World.</p> <p>Portugali, J. 2000. <i>Self-Organisation and the City</i>. New York: Springer.</p>

General module information:	
Module title	Planning and design for changing cities
Module title (German)	
Representative	Univ. Prof. Dipl.-Ing. Christa Reicher
Credit Points	3 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Winter semester
Total hours (h)	90
Contact hours (SWS)	2
Self-study (h)	60
Content	The module will present the methods and tools of designing cities and regions within the framework of different planning and design European cultures. This issue will be discussed against the background of values and principles in urban design and planning. The role of good design in quality of life will be elaborated as well as impact of new technologies on design. The heritage planning will be tackled as an important aspect of contemporary design.
Learning Objectives	The objective of the module is to give students deeper knowledge and understanding of the methods and tools in urban design and planning and the consequences of the design. The students shall be able to use this knowledge in their practical works on real world case studies.
Requirements	—
Verification methods Rating	Paper According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
STB (Chair for Urban Design)	Planning and design for changing cities	Classes (Übung)	2	
	Exam Planning and design for changing cities			3
Category:	Compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Planning and design for changing cities	PV	2	1
			CP	FS

PK:	Exam Planning and design for changing cities	PV	3	1
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Literature	<p>Alexander, Ch. 1964. <i>Notes on the Synthesis of Form</i>. Cambridge, MA: Harvard University Press.</p> <p>Alexander, Ch. 2002. <i>The Nature of Order</i>. Berkeley, CA: Center for Environmental Structure.</p> <p>Carmona, M., Heath, T., Oc, T., Tiesdell, S. 2010. <i>Public Places Urban Spaces, Second Edition: The Dimensions of Urban Design</i>. Elsevier.</p> <p>Giedion, S. 2003. <i>Space, Time and Architecture: The Growth of a New Tradition</i>. Fifth Edition (First 1941). Cambridge, MA: Harvard University Press.</p> <p>Kostof, S. 1991. <i>The City Shaped: The Urban Patterns and Meanings Through History</i>. London: Thames and Hudson.</p> <p>Lynch, K. 1981. <i>A Theory of Good City Form</i>. Cambridge, MA: The MIT Press.</p> <p>Mumford, E. 2009. <i>Defining Urban Design: CIAM Architects and the Formation of a Discipline, 1937-69</i>. Yale University Press.</p>
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General module information:	
Module title	Evolving environment. Transforming landscapes.
Module title (German)	
Representative	Univ.-Prof. Dr.- Ing. Frank Lohrberg
Credit Points	3 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Winter semester
Total hours (h)	90
Contact hours (SWS)	2
Self-study (h)	60
Content	All aspects of changing natural environment will form the content of the course. Special attention will be paid to climate change, human impact on environment and their implication for urban and regional planning. Also the questions of water management, air quality, energy efficiency and land use policies will be elaborated. EU policies dealing with the environmental and landscape issues will be presented.
Learning Objectives	The module shall give students an overview of the impact of the natural environment on design and planning cities and regions. This knowledge shall develop their awareness of the concept of sustainability, resilience and risk mitigation strategies in development o cities and regions.
Requirements	—
Verification methods Rating	Paper According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
Various units	Evolving environment. Transforming landscapes.	Classes (Übung)	2	
	Exam Evolving environment. Transforming landscapes.			3
Category:	Compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Evolving environment. Transforming landscapes.	PV	2	1
			CP	FS

PK:	Exam Evolving environment. Transforming landscapes.	PV	3	1
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Literature	<p>Couch, Ch., Leontidou, L., Petschel-Held, G. (eds.) 2007. <i>Urban Sprawl in Europe. Landscapes, Land-Use Change and Policy</i>. Oxford: Blackwell Publishing.</p> <p>European Environmental Agency, EEA. 2006. <i>Urban sprawl in Europe. The ignored challenge</i>. EEA Report, No 10/2006. European Commission, DG Joint Research Centre.</p> <p>Lohrberg, F., Licka, L., Scazzosi, L. & Timpe, A. (eds.) 2015. <i>Urban Agriculture Europe</i>. Berlin: Jovis Verlag.</p> <p>OECD. 2010. <i>Cities and Climate Change</i>. OECD Publishing. Available at: http://dx.doi.org/10.1787/9789264091375-en.</p> <p>Steiner, F.R., Thomsson, G.F., Carbonell, A. (eds.) 2016. <i>Nature and Cities: The Ecological Imperative in Urban Design and Planning</i>. Lincoln Institute of Land Policy</p> <p>Watson, D., Adams, M. 2010. <i>Design for Flooding: Architecture, Landscape, and Urban Design for Resilience to Climate Change</i>. Hoboken, NJ: John Wiley & Sons.</p>
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General module information:	
Module title	Changing societies and economies
Module title (German)	
Representative	Univ.-Prof. Dr. phil. Dipl.-Ing. Stefan Bösch
Credit Points	3 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Summer semester
Total hours (h)	90
Contact hours (SWS)	2
Self-study (h)	60
Content	The content of the course presents the tools and instruments of urban sociology as well as the present knowledge about contemporary societies, including the concept of knowledge societies, and their transformation. The economic issues will be described in the perspective of the organisation of human societies. Against this background the economic theories, methodologies and tools will be elaborated. The political context of the economy will be also noticed. Finally, the forecasting methods in social and economic change will be discussed.
Learning Objectives	The objective of the module is to present students an overview of the methods of studying and interpreting social processes and their connection to the space - urban, rural, regional and European. These processes shall be linked to the evolving economies of the contemporary world.
Requirements	—
Verification methods Rating	Papers According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
Various units	Changing societies and economies	Classes (Übung)	2	
	Exam Changing societies and economies			3
Category:	Compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Evolving environment. Transforming landscapes.	PV	2	2

			CP	FS
PK:	Exam Evolving environment. Transforming landscapes.	PV	3	2

Literature	<p>Castells, M. 2001. <i>The Rise of Network Society</i>. Second Edition. Oxford: Blackwell.</p> <p>Chang, H-J. 2014. <i>Economics: The User's Guide</i>. London: Penguin Books Ltd.</p> <p>Friedmann, J. 1986. <i>The world city hypothesis</i>. <i>Development and Change</i>, 17: 69-83.</p> <p>Heilbroner, R., Millberg, W. 2012. <i>The Making of Economic Society</i>. Boston: Pearson.</p> <p>Jacobs, J. 1970. <i>The Economy of Cities</i>. Vintage/Ebury.</p> <p>Krugman, P. 1996. <i>The Self-Organizing Economy</i>. Cambridge, MA: Blackwell.</p> <p>Maddison, A. 2006. <i>The World Economy. Volume 1: A Millennial Perspective. Volume 2: Historical statistics</i>. Paris: OECD Publishing.</p> <p>Sennett, R. 1977. <i>The Fall of Public Man</i>. New York: Knopf.</p> <p>Sennet, R. 2018. <i>Building and Dwelling. Ethics for the City</i>. London: Allen Lane.</p> <p>Stiglitz, J.E., Sen, A., Fitoussi, J-P. 2009. <i>Report by the Commission on the Measurement of Economic Performance and Social Progress</i>. The Commission, Paris. Dostępne online: http://www.stiglitz-sen-fitoussi.fr/en/index.htm.</p>
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General module information:	
Module title	Territorial analysis, digital tools
Module title (German)	
Representative	Univ.-Prof. Dr.- Ing. Jakob Beetz
Credit Points	3 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Summer semester
Total hours (h)	90
Contact hours (SWS)	2
Self-study (h)	60
Content	The module will present the methods and tools in territorial analysis, especially in the real world institutions. The students shall learn how the data is collected, selected, verified and interpreted, how to use the data for the analysis and forecasting. They will be presented the concept of open data and methods of the verification of the sources. The connection of the data, especially so called big data in designing and planning development of the cities and region will be elaborated. In this context some development concepts like smart/innovative cities will be discussed.
Learning Objectives	The objective of the module is to present students modern tools for territorial analysis and make them aware of the possible application of these tools in the context of transforming cities and regions. Additionally, the objective of the module is to make students aware of how to select and use the data, especially the big data.
Requirements	—
Verification methods Rating	Course assignment According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
Various units	Territorial analysis, digital tools	Classes (Übung)	2	
	Exam Territorial analysis, digital tools			3
Category:	Compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Territorial analysis, digital tools	PV	2	2

			CP	FS
PK:	Exam Territorial analysis, digital tools	PV	3	2

Literature	<p>Bailey, T.C., Gatrell, A.C. 1995. <i>Interactive Spatial Data Analysis</i>. Essex: Longman Scientific & Technical.</p> <p>Townsend, A.M. 2014. <i>Smart Cities. Bid data, civic hackers and the quest for a new utopia</i>. New York, London: WW Norton & Company.</p>
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General module information:	
Module title	European urban policies and territorial governing cultures
Module title (German)	
Representative	Univ. Prof. Dipl.-Ing. Christa Reicher
Credit Points	3 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Summer semester
Total hours (h)	90
Contact hours (SWS)	2
Self-study (h)	60
Content	The module will elaborate the European institutions, their framework and programmes towards cities and regions. The main European documents defining urban policies such as European Urban Agenda, Leipzig Charter and Toledo Declaration as well as global official paper such as Sustainable Development Goals or New Urban Agenda will be studied and discussed. Also the governing cultures across Europe and the transformation of the models of urban governance will be examined and evaluated. Finally the overview of the tools and instruments of urban governance and urban development across Europe will be studied.
Learning Objectives	The objective of the module is to ensure deeper insight into European policies towards cities and regions and the way they respond to change and how they fit into the global urban agenda. The students shall understand the political aspect of design and planning and recognise and evaluate the territorial governing models and their relation to urban and regional transformation.
Requirements	—
Verification methods Rating	Course assignments According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
STB (Chair for Urban Design)	European urban policies and territorial governing cultures	Classes (Übung)	2	
STB (Chair for Urban Design)	Exam European urban policies and territorial governing cultures			3
Category:	Compulsory module			
Modelling:				
			SWS	FS

AK:	Course: European urban policies and territorial governing cultures	PV	2	2
			CP	FS
PK:	Exam European urban policies and territorial governing cultures	PV	3	2

Literature	<p>Arnstein, S.R. 1969. <i>A Ladder of Citizen Participation</i>. Journal of the American Institute of Planners, 35 (4): 216-224.</p> <p>Barca, F. 2009. <i>An Agenda for a Reformed Cohesion Policy. A place-based approach to meeting European Union challenges and expectations</i>. Independent Report prepared at the request of Danuta Hubner, Commissioner for Regional Policy. Available at: http://www.europarl.europa.eu/meetdocs/2009_2014/documents/regi/dv/barca_report_/barca_report_en.pdf</p> <p>European Commission. 2001. <i>European Governance - A White Paper</i>. Official Journal of the European Communities C 287/1, 12.10.2001. Available at: http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52001DC0428&from=EN.</p> <p>European Commission. 2014. <i>Investment for Jobs and Growth. Promoting Development and Good Governance in EU Regions and Cities</i>. Sixth Report on Economic, Social and Territorial Cohesion. Brussels. Available at: http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion6/6cr_en.pdf</p> <p>Hooghe, L., Marks G. 2001. <i>Multi-Level Governance and European Integration</i>. New York, Toronto, Oxford: Rowman & Littlefield Publishers, Inc.</p> <p>Manent, P. 1998. <i>The City of Man</i>. Princeton, NJ: Princeton University Press.</p> <p>Manent, P. 2013. <i>Metamorphoses of the City. On the Western Dynamic</i>. Cambridge, MA: Harvard University Press.</p> <p>Metzger, J., Allmendinger, P., Oosterlynck, S. (eds.) 2015. <i>Planning Against the Political. Democratic Deficits in European Territorial Governance</i>. New York and London: Routledge.</p> <p>Piattoni, S. 2010. <i>The Theory of Multi-level Governance. Conceptual, Empirical, and Normative Challenges</i>, Oxford University Press.</p> <p>Van den Brande, L. 2014. <i>Multilevel Governance and Partnership</i>. The Van den Brande Report, Prepared at the Request of the Commissioner for Regional and Urban Policy Johannes Hahn. Available at: http://ec.europa.eu/regional_policy/upload/documents/Commissioner/VandenBrandeReport_08102014.pdf</p>
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General module information:	
Module title	From neighbourhood to global networks: multiple scales of urban planning and design
Module title (German)	
Representative	Univ.-Prof. Dr.-Ing. Agnes Förster
Credit Points	3 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Winter semester
Total hours (h)	90
Contact hours (SWS)	2
Self-study (h)	60
Content	The content of the module consists of the description, elaboration and comprehension of multi-scalar character of urban structures and different approaches and urban planning tools applicable to various scales. On the urban scale special attention will be paid to the regeneration, reuse and adaptation of urban structures, on regional scale to the sustainability issues, including land-use policies while on the European scale the focus will be on territorial cohesion and urban networks.
Learning Objectives	The objective of the module is to instil into the students the awareness of the different aspects and different scales of urban structures and the relation between them. The students shall also be conscious of the transboundary urban structures and be able to interpret of European urban structure especially in the context of urban policies and planning tools.
Requirements	—
Verification methods Rating	Course assignment According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
Various units	From neighbourhood to global networks: multiple scales of urban planning and design	Classes (Übung)	2	
	Exam From neighbourhood to global networks: multiple scales of urban planning and design			3
Category:	Compulsory module			
Modelling:				
			SWS	FS

AK:	Course: From neighbourhood to global networks: multiple scales of urban planning and design	PV	2	3
			CP	FS
PK:	Exam From neighbourhood to global networks: multiple scales of urban planning and design	PV	3	3

Literature	<p>Hensher D.A., Button, K. (eds.). <i>Transport Geography and Spatial Systems</i>. Handbook 5 of the <i>Handbook in Transport</i>. Kidlington: Pergamon/Elsevier Science.</p> <p>Kauffman, S. 1995. <i>At Home in the Universe. The Search for Laws of Self-Organization and Complexity</i>. New York: Viking.</p> <p>Kunzmann, K.R., Wegener, M. 1991b. <i>The pattern of urbanisation in Western Europe</i>. <i>Ekistics</i>, 58: 282-291.</p> <p>Sassen, S. 1991. <i>The Global City</i>. Nowy Jork: Princeton University Press.</p> <p>Sievert ,T. 2003. <i>Cities Without Cities: An Interpretation of the Zwischenstadt</i>. Taylor & Francis.</p>
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General module information:	
Module title	Integrated Project I: Transforming Urban Structure
Module title (German)	
Representative	Key Lecturer (Visiting Professor)
Credit Points	15 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Winter semester
Total hours (h)	450
Contact hours (SWS)	4
Self-study (h)	390
Content	<p>The particular case study can change every year. This depends on the selection of the relevant case in European cities.</p> <p>The students will be working in the groups of 4-6 on the specific case study in two different European cities. In each city 3-4 cases will be selected.</p> <p>The module is structured in 5 following phases:</p> <ol style="list-style-type: none"> (1) study of the theoretical and methodological background of the topic which shall deepen individual understanding and conceptualisation of the problem reflected in the case study; this part will be organised in the seminar form and shall not exceed 1 SWS; (2) analytical phase of the real case study which involves examination of the different aspects of the problem: spatial, social, environmental, technical, economic; (3) workshop work on the site, which consists of practical experience, development of the initial possible solutions and application of all appropriate design methods; this phase includes 2-weeks workshop on site; (4) finalisation of the project and discussion with all involved interdisciplinary professionals representing different fields of study; (5) presentation of the project and public discussion on proposed solutions and design. <p>The complete project including summary of the theoretical study, analysis, proposed solution, design and implementation instruments can be offered to the hosting city.</p>

Learning Objectives	The goal of the module is to equip students with the design and solution-oriented skills which can assist with the transformation of urban structure at the neighbourhood/district scale, which is the easiest to be spatially identified and therefore will help them to perceive the very nature of urban dynamics. Students shall prove they can conceptualise the problem, analyse real case study, apply appropriate methodologies and design techniques, develop scenarios for the future transformation and prepare design which can help with the implementation of this scenario. The additional objective is to prepare students to team working while taking the individual responsibility for the specific task. Finally, as a result of the module the students shall be able to deliver a convincing public presentation of their project and debate their solution with the audience.
Requirements	Theoretical and methodological seminar: Transforming Urban Structure
Verification methods Rating	Project work (75%) and presentation (25%) According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
STB (Chair for Urban Design)	Integrated Project I: Transforming Urban Structure	Project	4	
	Exam Integrated Project I: Transforming Urban Structure			15
Category:	Elective compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Integrated Project I: Transforming Urban Structure	LV	4	1
			CP	FS
PK:	Exam Integrated Project I: Transforming Urban Structure	PV	15	1
	Seminar Project I: Transforming Urban Structure	Module component (MB)		1

Literature	Clark, J., Wise, N. (eds.) 2019. <i>Urban Renewal, Community and Participation</i> . Springer. Ferm, J., Tomaney, J. 2018. <i>Planning for the regeneration of towns and cities</i> . Routledge. Inam, A. 2014. <i>Designing Urban Transformation</i> . New York: Routledge. Karadimitriou N, de Magalhaes C.S., Verhage R. 2013. <i>Planning, Risk, and Property Development: Urban Regeneration in England, France and the Netherlands</i> . Abington.
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General module information:	
Module title	Integrated Project II: Evolution of Functional Urban Areas
Module title (German)	
Representative	Key Lecturer (Visiting Professor)
Credit Points	15 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Summer semester
Total hours (h)	450
Contact hours (SWS)	4
Self-study (h)	390
Content	<p>The particular case study can change every year. This depends on the selection of the relevant case in European cities.</p> <p>The students will be working in the groups of 4-6 on the specific case study in two different European cities. In each city 3-4 cases will be selected.</p> <p>The module is structured in 5 following phases:</p> <ol style="list-style-type: none"> (1) study of the theoretical and methodological background of the topic which shall deepen individual understanding and conceptualisation of the problem reflected in the case study; this part will be organised in the seminar form and shall not exceed 1 SWS; (2) analytical phase of the real case study which involves examination of the different aspects of the problem: spatial, social, environmental, technical, economic; (3) workshop work on the site, which consists of practical experience, development of the initial possible solutions and application of all appropriate design methods; this phase includes 2-weeks workshop on site; (4) finalisation of the project and discussion with all involved interdisciplinary professionals representing different fields of study; (5) presentation of the project and public discussion on proposed solutions and design. <p>The complete project including summary of the theoretical study, analysis, proposed solution, design and implementation instruments can be offered to the hosting city.</p>

Learning Objectives	The goal of the module is to equip students with the design and solution-oriented skills which will be dealing with the scale of functional urban areas, ongoing redefinition of the city and change of urban form seen from the regional perspective. Students shall prove they can conceptualise the problem, analyse real case study, apply appropriate methodologies and design techniques, develop scenarios for the future transformation and prepare design which can help with the implementation of this scenario. The additional objective is to prepare students to team working while taking the individual responsibility for the specific task. Also important skill is to be prepared to the discussion with the representatives of different disciplines while having clear spatial perspective. Finally, as a result of the module the students shall be able to deliver a convincing public presentation of their project and debate their solution with the audience.
Requirements	Theoretical and methodological seminar: Evolution of Functional Urban Areas
Verification methods Rating	Project work (75%) and presentation (25%) According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
STB (Chair for Urban Design)	Integrated Project II: Evolution of Functional Urban Areas	Project	4	
	Exam Integrated Project II: Evolution of Functional Urban Areas			15
Category:	Elective compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Integrated Project II: Evolution of Functional Urban Areas	LV	4	2
			CP	FS
PK:	Exam Integrated Project II: Evolution of Functional Urban Areas	PV	15	2
	Seminar Project II: Evolution of Functional Urban Areas	Module component (MB)		2

Literature	Batty, M. 2013. <i>The New Science of Cities</i> . MIT Press: Cambridge, MA & London. Dijkstra, L., Poelman, H., 2012, <i>Cities in Europe. The New OECD-EC Definition</i> . Regional Focus 01/2012. Luxembourg: European Commission. Hall, P., Pain, K. 2006. <i>The Polycentric Metropolis. Learning from Mega-City Regions in Europe</i> . Earthscan. Inam, A. 2014. <i>Designing Urban Transformation</i> . New York: Routledge. Sievert, T. 2003. <i>Cities Without Cities: An Interpretation of the Zwischenstadt</i> . Taylor & Francis.
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General module information:	
Module title	Integrated Project III: Networked Urban Systems in Europe
Module title (German)	
Representative	Univ. Prof. Dipl.-Ing. Christa Reicher
Credit Points	15 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Winter semester
Total hours (h)	450
Contact hours (SWS)	4
Self-study (h)	390
Content	<p>The particular case study can change every year. This depends on the selection of the relevant case in European cities.</p> <p>The students will be working in the groups of 4-6 on the specific case study in two different European cities. In each city 3-4 cases will be selected.</p> <p>The module is structured in 5 following phases:</p> <ol style="list-style-type: none"> (1) study of the theoretical and methodological background of the topic which shall deepen individual understanding and conceptualisation of the problem reflected in the case study; this part will be organised in the seminar form and shall not exceed 1 SWS; (2) analytical phase of the real case study which involves examination of the different aspects of the problem: spatial, social, environmental, technical, economic; (3) workshop work on the site, which consists of practical experience, development of the initial possible solutions and application of all appropriate design methods; this phase includes 2-weeks workshop on site; (4) finalisation of the project and discussion with all involved interdisciplinary professionals representing different fields of study; (5) presentation of the project and public discussion on proposed solutions and design. <p>The complete project including summary of the theoretical study, analysis, proposed solution, design and implementation instruments can be offered to the hosting city.</p>

Learning Objectives	The goal of the module is to equip students with the design and solution-oriented skills which will focus on the continental scale of urban transformation and will be dealing with the problems like transboundary urban structures, interpretation of European territorial mega-structures or urban networks of different kinds. Students shall prove they can conceptualise the problem, analyse real case study, apply appropriate methodologies and design techniques, develop scenarios for the future transformation and prepare design which can help with the implementation of this scenario. The additional objective is to prepare students to team working while taking the individual responsibility for the specific task. Also important skill is to be prepared to the discussion with the representatives of different disciplines while having clear spatial perspective. Finally, as a result of the module the students shall be able to deliver a convincing public presentation of their project and debate their solution with the audience.
Requirements	Theoretical and methodological seminar: Networked Urban Systems in Europe
Verification methods Rating	Project work (75%) and presentation (25%) According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
ISL (Chair for Urban Design)	Integrated Project III: Networked Urban Systems in Europe	Project	4	
	Exam Integrated Project III: Networked Urban Systems in Europe			15
Category:	Elective compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Integrated Project III: Networked Urban Systems in Europe	LV	4	3
			CP	FS
PK:	Exam Integrated Project III: Networked Urban Systems in Europe	PV	15	3
	Seminar Project III: Networked Urban Systems in Europe	Module component (MB)		3

General module information:	
Module title	Impromptu design courses / Field trip
Module title (German)	
Representative	Dean for Students' Affairs
Credit Points	6 CP
Language	English / German (for <i>Impromptu design courses</i>)
Module level	Master
Duration	1 semester
Frequency	Winter semester / Summer semester (for <i>Impromptu design courses</i>)
Total hours (h)	180
Contact hours (SWS)	2
Self-study (h)	150
Content	<p>There will be two impromptu courses for the students. They will offer changing topics from year to year, which aim at enhancing students creativity. The detailed definition, understanding and interpretation of the topic within the wider scientific or artistic framework as well as the way of presenting this topic depends on students' idea. No final product is defined to present the topic.</p> <p>The field trip delivers students real world case studies which should reflect the problem, which can be discussed from the urban design and planing perspective. The field trip shall last at least one week.</p>
Learning Objectives	<p>The impromptu design courses aim at strengthening students' individual creativity and identify the best way modes of their expression. This should help students in the future to define the best position in the team work.</p> <p>The field trip introduces students to the on site analysis methods and understanding of the real world urban problems. It also aims at strengthening integration of the group and ability to define one's own position within the working group.</p>
Requirements	—
Verification methods Rating	<p>Project works (50%) for <i>Impromptu design courses</i> and report for the <i>Field trip</i> (50%)</p> <p>According to §7 of the <i>General Examination Regulations</i></p>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
All units	Impromptu design course 1	Project (Stegreif)	0,5	
All units	Impromptu design course 1	Project (Stegreif)	0,5	

ISL (Chair for Urban Design)	Field trip	Excursion	1	
	Exam Impromptu design course 1			1,5
	Exam Impromptu design course 2			1,5
	Exam Field trip			3
Category:	Elective compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Impromptu design course 1	LV	0,5	1
	Course: Impromptu design course 2	LV	0,5	1
	Course: Field trip	LV	1	1
			CP	FS
PK:	Exam: Impromptu design course 1	PV	1,5	1
	Exam: Impromptu design course 2	PV	1,5	1
	Exam: Field trip	PV	3	1

General module information:	
Module title	Research Module in Urban and Regional Transformation
Module title (German)	
Representative	Dean for Students' Affairs
Credit Points	6 CP
Language	English / German / other languages
Module level	Master
Duration	1 or 2 semester(s)
Frequency	Winter and/or summer semester
Total hours (h)	180
Contact hours (SWS)	2
Self-study (h)	150
Content	The content of the module depends on the topic which students selected and the project they joined. Under the guidance of the scientific supervisor they will be assisting with the specific tasks within an ongoing research project at the university or at the partners' institutions.
Learning Objectives	The objective of the module is to introduce students to the real research projects and engage them into the tasks that can contribute to the real project. Students can select the topic according to their individual interests. They all however can develop their methodological competence, individual responsibility and team working abilities.
Requirements	—
Verification methods Rating	Portfolio According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
All units	Research Module in Urban and Regional Transformation	Seminar	2	
	Exam Research Module in Urban and Regional Transformation			6
Category:	Elective compulsory module			
Modelling:				
			SWS	FS
AK:	Course: Research Module in Urban and Regional Transformation 1a	LV	1	2

	Course: Research Module in Urban and Regional Transformation 1b	LV	1	3
			CP	FS
PK:	Exam: Course: Research Module in Urban and Regional Transformation	PV	6	3

General module information:	
Module title	Transit Urban Planning - Focus responsible research and innovation
Module title (German)	
Representative	Dean for Students' Affairs
Credit Points	3 CP
Language	English / German / other languages
Module level	Master
Duration	1 semester
Frequency	Winter semester
Total hours (h)	90
Contact hours (SWS)	0
Self-study (h)	90
Content	The module takes place out of the Faculty - at the summer school, professional workshop, professional internship or other activity of that kind.
Objective	The objective of the module is to develop both self-organisation skills of the students and their commitment to their area of interest, communities, institutions and professional environment. The responsible use of the knowledge they get from the university shall contribute to their formation as a professionals.
Requirements	—
Verification methods Rating	Various According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
University / External	Transit (Focus RRI)	Various	0	
	Exam Transit (Focus RRI)			3
Category:	Elective module			
Modelling:				
			SWS	FS
AK:	Course: Transit (Focus RRI)	LV	0	3
			CP	FS
PK:	Exam: Transit (Focus RRI)	PV	3	3

General module information:	
Module title	Master Thesis MT Transforming City Regions
Module title (German)	
Representative	Dean for Students' Affairs
Credit Points	30 CP
Language	English
Module level	Master
Duration	1 semester
Frequency	Summer semester
Total hours (h)	
Contact hours (SWS)	0,5
Self-study (h)	
Content	The Master thesis shall demonstrate that the student can independently respond to the task within an area of transformation of cities and regions. This includes the formulation of the topic, conceptualisation of the problem, composition of the research methods and scientific tools, elaboration of the literature and preparing the design (if appropriate). The master thesis shall have an evident scientific content, it can also additionally deal with the practical case study mirroring researched problem.
Objective	The objective of the master thesis is to ensure that the skills and knowledge students acquired during the first 3 semesters of their studies allow them to respond to urban and regional problems with the professional excellence and social responsibility. The demonstration of the use of the methodologies learnt and instruments required to deal with this problem shall convince the supervisor that the students can perceive and solve complex spatial problems.
Requirements	81 ECTS
Verification methods Rating	Project work According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
Various units	Master Thesis	Thesis	0,5	
	Exam Master Thesis MT Transforming City Regions			30
Category:	Elective compulsory module			
Modelling:				
			SWS	FS

AK:	Course: Master Thesis MT Transforming City Regions	LV	0,5	4
			CP	FS
PK:	Exam: Master Thesis MT Transforming City Regions	PV	30	4

General module information:	
Module title	Elective courses
Module title (German)	
Representative	Dean for Students' Affairs
Credit Points	6 CP
Language	English / German
Module level	Master
Duration	1 semester
Frequency	Winter semester / Summer semester
Total hours (h)	180
Contact hours (SWS)	4
Self-study (h)	120
Content	The elective module enables students to take courses offered at the Faculty of Architecture or generally at the RWTH University according to their own priorities. The offer of the courses will be updated annually.
Objective	The aim of optional courses is to help students to enhance their individual profile and strengthen their knowledge in the fields related to their main field of study.
Requirements	—
Verification methods Rating	Various According to §7 of the <i>General Examination Regulations</i>

Teaching components:				
Teaching unit	Name	Form	SWS	CP
All units FA / University	Elective course 1	Various	2	
	Elective course 2	Vairous	2	
	Exam Elective course 1			3
	Exam Elective course 2			3
Category:	Elective module			
Modelling:				
			SWS	FS
AK:	Course: Elective course 1	PV	2	3
	Course: Elective course 2	PV	2	3
			CP	FS

PK:	Exam: Elective course 1	PV	3	3
	Exam: Elective course 2	PV	3	3