

# PRÜFUNGSORDNUNG

## Weiterbildender Master-Studiengang **Urban Agglomerations**

Master of Science (M.Sc.)

Fachbereich 1 / Faculty 1:  
Architektur • Bauingenieurwesen • Geomatik  
Architecture • Civil Engineering • Geomatics

**Prüfungsordnung des Fachbereichs 1: Architektur • Bauingenieur-wesen • Geomatik der Fachhochschule Frankfurt am Main - University of Applied Sciences für den weiterbildenden Master-Studiengang „Urban Agglomerations“ (M.Sc.) vom 12. Juni 2013**

Aufgrund des § 44 Abs. 1 Nr. 1 des Hessischen Hochschulgesetzes (HHG) in der Fassung vom 14. Dezember 2009 hat der Fachbereichsrat des Fachbereichs 1: Architektur • Bauingenieurwesen • Geomatik der Fachhochschule Frankfurt am Main – University of Applied Sciences am 12. Juni 2013 die nachstehende Prüfungsordnung für den Master-Studiengang „Urban Agglomerations“ (M.Sc.) beschlossen.

Die Prüfungsordnung entspricht den Allgemeinen Bestimmungen für Prüfungsordnungen mit den Abschlüssen Bachelor und Master an der Fachhochschule Frankfurt am Main – University of Applied Sciences (AB Bachelor/Master) vom 10. November 2004 (Staatsanzeiger für das Land Hessen 2005 S. 519), geändert am 11. Februar 2009 (Hochschulanzeiger Nr. 13/26.08.2009) zuletzt geändert am 11. Juli 2012 (veröffentlicht am 25.09.2012 auf der Internetseite in den Amtlichen Mitteilungen der Fachhochschule Frankfurt am Main – University of Applied Sciences) und ergänzt sie.

Die Prüfungsordnung wurde durch das Präsidium am 7. Juli 2014 gemäß § 37 Abs. 5 HHG genehmigt.

**Die Genehmigung ist befristet für die Dauer der Akkreditierung bis zum 30.09.2020.**

**§ 1 Regelstudienzeit und Leistungspunkte**

- (1) Die Regelstudienzeit des Master-Studiengangs beträgt vier Semester.
- (2) Das Studium ist ein modular aufgebautes Vollzeitstudium und umfasst insgesamt 120 ECTS-Leistungspunkte (Credits).

**§ 2 Anzahl und Inhalte der Module**

- (1) Der Studiengang umfasst 10 Module.
- (2) Jedem Modul sind ECTS-Punkte (Credits) zugeordnet. Die Modulübersicht und die Modulbeschreibungen sind den Anlagen 2 und 3 zu entnehmen.
- (3) Alle Module außer dem Modul UA 5 werden in englischer Sprache gelehrt. Die Prüfungen aller Module außer dem Modul UA 5 werden in englischer Sprache abgelegt. Das Modul UA 5 kann auf Antrag beim Prüfungsausschuss auch durch ein anderes Modul der Vermittlung von Fremdsprachen- und Kommunikationskompetenzen mit einem Umfang von 5 ECTS ersetzt werden.

**§ 3 Art des Studiengangs, Entgeltpflicht und Anerkennung von erbrachten Prüfungsleistungen**

- (1) Bei dem Master-Studiengang handelt es sich um einen entgeltpflichtigen weiterbildenden Master-Studiengang.
- (2) Die Höhe des zu leistenden Entgelts richtet sich nach der jeweils gültigen, vom Präsidium der Fachhochschule Frankfurt am Main – University of Applied Sciences festgelegten Entgeltordnung.
- (3) Bei dem Master-Studiengang handelt es sich um einen Weiterbildungsstudiengang der Fachhochschule Frankfurt am Main – University of Applied Sciences mit einem Austauschsemester an einer internationalen Partnerhochschule. Die Module UA 1, UA 2, UA 3, UA 4, UA 5, UA 6, UA 7, UA 8 und UA 10 (Master Thesis) werden an der

Fachhochschule Frankfurt am Main – University of Applied Sciences erbracht. Das Modul UA 9 wird an einer internationalen Partnerhochschule erbracht.

- (4) Die Prüfungen werden an der Hochschule abgelegt, an der das jeweilige Modul erbracht wird.
- (5) Die Prüfungsleistungen, die an den internationalen Partnerhochschulen erbracht werden, werden von der Fachhochschule Frankfurt am Main – University of Applied Sciences anerkannt.

#### **§ 4 Akademischer Grad**

- (1) Nach bestandener Masterprüfung verleiht die Fachhochschule Frankfurt am Main den akademischen Grad eines Master of Science (M.Sc.).

#### **§ 5 Zulassungsvoraussetzungen**

- (1) Für die Zulassung zum Master-Studiengang ist ein erster berufsqualifizierender Hochschulabschluss mit einer Regelstudienzeit von mindestens sechs Semestern beziehungsweise mit mindestens 180 ECTS-Punkten (Credits) nachzuweisen oder ein mindestens gleichwertiger ausländischer Abschluss entsprechend den EU-Standards.
- (2) Der erste Abschluss muss nachweislich in einem Studiengang Architektur, Bauingenieurwesen, Stadt- und Regionalplanung, Landschafts- und Umweltplanung, Vermessungswesen, Geoinformation oder einem anderen raum- und planungsbezogenen Studiengang erworben worden sein.
- (3) Nachzuweisen ist ein Jahr berufliche Praxis. Auf diese kann nur in Ausnahmefällen verzichtet werden. Darüber entscheidet das Auswahlgremium nach Abs. 6.
- (4) Weiterhin ist mit der Bewerbung ein Motivationsschreiben in englischer Sprache (mit Angaben zu bisherigen Erfahrungen, Interessen sowie beruflichen Zielen nach Abschluss des Masterstudiums), ein Lebenslauf und ein Empfehlungsschreiben einer Hochschullehrerin oder eines Hochschullehrers einzureichen.
- (5) Englische Sprachkenntnisse sind nachzuweisen in Form von TOEFL 213 oder IELTS 6 oder Cambridge First Certificate (A). Ausgenommen sind Bewerberinnen und Bewerber, deren Muttersprache Englisch ist, sowie Absolventinnen und Absolventen von englischsprachigen Studienprogrammen.
- (6) Die Auswahl wird auf Grundlage der schriftlich vorliegenden Unterlagen von einem Auswahlgremium der Fachhochschule Frankfurt am Main – University of Applied Sciences getroffen. Diesem Auswahlgremium gehören die Studiengangsleiterin oder der Studiengangsleiter sowie mindestens eine weitere oder ein weiterer hauptamtlich im Studiengang Lehrende oder Lehrender an. Auswahlkriterien sind die Qualität des ersten Hochschulabschlusses und der beruflichen Praxis sowie die Konsistenz des persönlichen Motivationsschreibens.
- (7) Die Immatrikulation wird erst dann gültig, wenn das vom Präsidium der Fachhochschule Frankfurt am Main – University of Applied Sciences festgesetzte Entgelt entrichtet wurde.

#### **§ 6 Prüfungen**

- (1) Die Art und die Dauer der Modulprüfungsleistungen und die gegebenenfalls zu erbringenden Vorleistungen sind in den Modulbeschreibungen (Anlage 3) festgelegt.
- (2) Die Dauer von mündlichen Prüfungen und Kolloquien beträgt mindestens 20 und höchstens 60 Minuten, die Dauer von Klausurarbeiten beträgt mindestens 2 und höchstens 3 Zeitstunden.

- (3) Modulprüfungen können nur von Studierenden, die in dem Studiengang eingeschrieben sind und das festgesetzte Entgelt bezahlt haben, abgeleistet werden.

### **§ 7 Wiederholbarkeit von Prüfungsleistungen**

- (1) Nicht bestandene Modulprüfungsleistungen können zweimal wiederholt werden.
- (2) Die Modulprüfungsleistung UA 10 (Master Thesis) kann nur einmal wiederholt werden.
- (3) Eine bestandene Modulprüfungsleistung kann nicht wiederholt werden.

### **§ 8 Bewertung der Prüfungsleistungen, Gesamtnote**

- (1) Bei der Bildung der Gesamtnote für das Master-Zeugnis werden die Einzelnnoten der Module UA 3, UA 4, UA 5, UA 8 einfach, die Module UA 1, UA 2, UA 6 und UA 7 zweifach, das Modul UA 9 sechsfach sowie das Modul UA 10 (Master Thesis) zwölffach gewichtet.
- (2) Zusätzlich zur absoluten Bewertung wird für die Gesamtnote ein ECTS-Rang vergeben.

### **§ 9 Master Thesis und Kolloquium**

- (1) Der Umfang für die Bearbeitung der Master Thesis einschließlich des Kolloquiums beträgt 30 ECTS-Punkte. Der Zeitraum von der Ausgabe der Master Thesis bis zur Abgabe der Master Thesis beträgt 18 Wochen.
- (2) Die Meldung zur Master Thesis beinhaltet gleichzeitig die Meldung zum Kolloquium.
- (3) Bei der Meldung zur Master Thesis sind vorzulegen:
  1. der Nachweis, dass die Module UA 1, UA 2, UA 3, UA 4, UA 5, UA 6, UA 7, UA 8 erfolgreich abgeschlossen sind,
  2. die schriftliche Einverständniserklärung der Referentin oder des Referenten, dass sie oder er die Betreuung der Master Thesis übernimmt.
- (4) Die Bearbeitung der Master Thesis kann auf schriftlichen Antrag der Kandidatin oder des Kandidaten aus Gründen, die sie oder er nicht zu vertreten hat, von der oder dem Vorsitzenden des Prüfungsausschusses einmal verlängert werden, höchstens aber um 8 Wochen.
- (5) Die Master Thesis ist in englischer Sprache zu verfassen und inklusive aller Anlagen dreifach in Papierform und zusätzlich im PDF-Format auf geeignetem Datenträger im Prüfungsamt abzugeben.
- (6) Das Bestehen der Master Thesis ist Voraussetzung für die Durchführung des Kolloquiums. Das Kolloquium wird als Kollegialprüfung von zwei Prüfenden durchgeführt, von denen in der Regel einer die Referentin oder der Referent, der zweite die Koreferentin oder der Koreferent ist. Als Koreferentin oder Koreferent kann auch eine hauptamtlich Lehrende oder ein hauptamtlich Lehrender einer der internationalen Partnerhochschulen gewählt werden. Die Dauer des Kolloquiums beträgt mindestens 30 und höchstens 60 Minuten.
- (7) Die Endnote des Modul Master Thesis berechnet sich zu 2/3 aus der Note der Master Thesis und zu 1/3 aus der Note des Kolloquiums.

## **§ 10 Zeugnis, Urkunde und Diploma Supplement**

- (1) Das Zeugnis über den erfolgreichen Abschluss des Master-Studiengangs enthält sämtliche Modulnoten, das Thema der Master Thesis, die Gesamtnote und den ECTS-Rang.
- (2) Das Zeugnis und die Master-Urkunde werden in Englisch ausgestellt.
- (3) Ein Diploma Supplement wird entsprechend der Anlage ausgestellt.

## **§ 11 Inkrafttreten und Übergangsregelung**

- (1) Diese Prüfungsordnung tritt am 01. September 2014 zum Wintersemester 2014/15 in Kraft und wird auf einem zentralen Verzeichnis auf der Internetseite der Fachhochschule Frankfurt am Main - University of Applied Sciences veröffentlicht.
- (2) Die Prüfungsordnung des Fachbereich 1: Architektur • Bauingenieurwesen • Geomatik für den Master-Studiengang "Urban Agglomerations" vom 6. Februar 2008 (Hochschulanzeiger Ausgabe 11 – Teil 2/15.2.2008) wird mit Wirkung zum 31. August 2014 aufgehoben. Absatz (3) bleibt unberührt.
- (3) Studierende, die ihr Studium vor dem Wintersemester 2014/15 aufgenommen haben, können ihr Studium bis spätestens zum Ende des Sommersemesters 2016 (zum 30.09.2016) nach der in Absatz 2 genannten Prüfungsordnung fortsetzen oder bis dahin jederzeit unwiderruflich den Wechsel in die mit Wirkung vom 1. September 2014 gültige Prüfungsordnung erklären. Gleichwertige Leistungen werden anerkannt.

Frankfurt am Main, \_\_\_\_\_

Prof. Dr. Martina Klärle

Dekanin des Fachbereiches 1: Architektur • Bauingenieurwesen • Geomatik – Architecture • Civil Engineering • Geomatics

Frankfurt University of Applied Sciences

## **Anlagen**

Anlage 1: Course Structure

Anlage 2: Module Overview

Anlage 3: Module Descriptions

Anlage 4: Diploma Supplement

## Anlage 1 zur Prüfungsordnung

### **Course Structure “Urban Agglomerations” (M.Sc.)**

Semester 1 (30 ECTS)	UA 1 <b>Urban Planning and Development</b> 10 ECTS	UA 2 <b>Urban Culture and Governance</b> 10 ECTS	UA 3 <b>GIS and Remote Sensing</b> 5 ECTS	UA 4 <b>Scientific Methods and Academic Skills</b> 5 ECTS	UA 5 <b>Deutsche Sprache und Kommunikation</b> 5 ECTS		
Semester 2 (30 ECTS)	UA 6 <b>Interdisciplinary Project Work</b> 10 ECTS	UA 7 <b>Urban Infrastructure</b> 10 ECTS	UA 8 <b>Urban Ecology and Environment</b> 5 ECTS				
Semester 3 (30 ECTS)	UA 9 <b>International Exchange Course</b> 30 ECTS						
Semester 4 (30 ECTS)	UA 10 <b>Master Thesis</b> 30 ECTS						

## Anlage 2 zur Prüfungsordnung

### Module Overview "Urban Agglomerations" (M.Sc.)

Number	Module Title	ECTS	Duration (in sem.)	Examination of the module	Language
UA 1	<b>Urban Planning and Development</b>	10	1	Project work (12 weeks) and colloquium (min. 20, max. 30 minutes)	English
UA 2	<b>Urban Culture and Governance</b>	10	1	Written assignment (8 weeks)	English
UA 3	<b>GIS and Remote Sensing</b>	5	1	Written exam (150 minutes)	English
UA 4	<b>Scientific Methods and Academic Skills</b>	5	2	Written assignment (8 weeks), partial exam (50%) Oral presentation, partial exam (50%)	English
UA 5	<b>Deutsche Sprache und Kommunikation</b>	5	2	Klausur (150 Minuten), Teilprüfung (50%) Mündliche Prüfung, Teilprüfung (50%)	Deutsch
UA 6	<b>Interdisciplinary Project Work</b>	10	1	Project work (12 weeks) and colloquium (min. 20, max. 30 minutes)	English
UA 7	<b>Urban Infrastructure</b>	10	1	Written assignment (8 weeks)	English
UA 8	<b>Urban Ecology and Environment</b>	5	1	Project work (12 weeks) and colloquium (min. 20, max. 30 minutes)	English
UA 9	<b>International Exchange Course</b>	30	1	Depending on the requirements at the partner university	English
UA 10	<b>Master Thesis</b>	30	1	Master Thesis (18 weeks) and colloquium (min. 30, max. 60 minutes)	English

## Anlage 3 zur Prüfungsordnung

### **Module Description "Urban Agglomerations" (M.Sc.) Module UA 1**

Module title	<b>Urban Planning and Development</b>
Module number	<b>UA 1</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to other study programmes	Urban Agglomerations
Duration of the module	1 semester
Status of the module	Compulsory module
Recommended semester during the study programme	1
Credit points (Cp) of the module	10 ECTS
Prerequisites for module participation	None
Prerequisites for module examination	None
Module examination	Project work (12 weeks) and colloquium (min. 20, max. 30 minutes)
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i></p> <p>Familiarity with trends, characters and problems of global urbanisation          Awareness of social, cultural, economic as well as geographic diversity in urbanisation and housing development worldwide          Knowledge of theory and practice, of instruments and of physical, functional and infrastructural concepts for urban and city-regional development          Understanding of key problems confronting urban development today and of fundamental approaches of how to develop more ecologically oriented cities          Understanding of the concept of Inclusion in the urban planning process and awareness of Universal Design, its theory and practical application in a city-regional context</p> <p><i>Key qualifications</i></p> <p>Capacity of critical and reflected argumentation          Familiarity with and respect for intercultural diversity          Capacity to structure and develop a given project assignment          Basic competences of data analysis, research and academic writing          Presentation and communication skills</p>
Contents of the module	Urbanization and Housing in a Global Context Urban and City-regional Development Sustainable Cities Inclusive Cities and Universal Design
Teaching methods of the module	Lectures, seminar, written assignments, project work, field trips
Total workload	300 hours
Language of the module	English
Frequency of the module	Once a year

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 2

Module title	<b>Urban Culture and Governance</b>
Module number	<b>UA 2</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to other study programmes	Urban Agglomerations
Duration of the module	1 semester
Status of the module	Compulsory module
Recommended semester during the study programme	1
Credit points (Cp) of the module	10 ECTS
Prerequisites for module participation	None
Prerequisites for module examination	None
Module examination	Written assignment (8 weeks)
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i></p> <p>Ability to understand, formulate and critically evaluate the central concerns of social and intercultural aspects of urbanization, urbanity and diversity, identity and place, including the ongoing demographic changes and the effects of a globalizing world</p> <p>Knowledge of different international, national and local models and transdisciplinary approaches to city-regional organization and planning, concepts of governance and administration, legal instruments, financial tools, future challenges</p> <p>Knowledge of problems, potentials, strategies and instruments of land management within the context of urban development</p> <p>Awareness of the role of different stakeholders and public participation in governance and urban land management processes</p> <p><i>Key qualifications</i></p> <p>Ability to cooperate in teams and to develop and express an individual position</p> <p>Communication and presentation skills</p> <p>Academic writing skills</p> <p>Knowledge of research methods and academic standards</p>
Contents of the module	Social and Cultural Challenges of Cities Urban and City-regional Governance Practice and Instruments of Land Management
Teaching methods of the module	Lectures, seminar, readings, discussions, presentations
Total workload	300 hours
Language of the module	English
Frequency of the module	Once a year

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 3

Module title	<b>GIS and Remote Sensing</b>
Module number	<b>UA 3</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to other study programmes	Urban Agglomerations
Duration of the module	1 semester
Status of the module	Compulsory module
Recommended semester during the study programme	1
Credit points (Cp) of the module	5 ECTS
Prerequisites for module participation	None
Prerequisites for module examination	None
Module examination	Written exam (150 minutes)
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i></p> <p>Knowledge of theory and practice of Geographical Information Systems (GIS) within the context of urban agglomerations</p> <p>Understanding the key concepts of Remote Sensing, the efficient selection, pre-processing and classification of Remote Sensing data</p> <p>Knowledge of the optimal analysis of image data for purposes of urban and city-regional development</p> <p><i>Key qualifications</i></p> <p>General IT competences</p> <p>Ability to capture, visualize and interpret digital data</p>
Contents of the module	GIS Remote Sensing
Teaching methods of the module	Lectures, exercises
Total workload	150 hours
Language of the module	English
Frequency of the module	Once a year

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 4

Module title	<b>Scientific Methods and Academic Skills</b>
Module number	<b>UA 4</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to other study programmes	Urban Agglomerations
Duration of the module	2 semesters
Status of the module	Compulsory module
Recommended semester during	1 + 2

the study programme	
Credit points (Cp) of the module	5 ECTS
Prerequisites for module participation	None
Prerequisites for module examination	None
Module examination	Written assignment (8 weeks), partial exam (50%) Oral presentation, partial exam (50%)
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i></p> <p>Profound knowledge about scientific tools and different methods of academic research</p> <p>Competences of academic writing and thesis development</p> <p>Ability to present a self-developed topic in front of a public audience</p> <p>Ability to moderate group meetings and public discussions</p> <p><i>Key qualifications</i></p> <p>Substantial know-how of the research, presentation and moderation related computer programmes and digital technologies</p>
Contents of the module	Methods of Scientific Research and Academic Writing Presentation and Moderation Skills
Teaching methods of the module	Lectures, seminar, exercises
Total workload	150 hours
Language of the module	English
Frequency of the module	Once a year

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 5

Modultitel	<b>Deutsche Sprache und Kommunikation</b>
Modulnummer	<b>UA 5</b>
Studiengang	Urban Agglomerations M.Sc.
Verwendbarkeit des Moduls	Urban Agglomerations
Dauer des Moduls	2 Semester
Status	Pflichtmodul
Empfohlenes Semester im Studienverlauf	1 + 2
Credits des Moduls	5 ECTS
Voraussetzungen für die Teilnahme am Modul	Keine
Voraussetzungen für die Teilnahme an der Modulprüfung	Keine
Modulprüfung	Klausur (150 Minuten), Teilprüfung (50%) Mündliche Prüfung, Teilprüfung (50%)
Lernergebnis / Kompetenzen	<p><i>Fachkompetenzen</i></p> <p>Befähigung in deutscher Sprache im beruflichen Kontext kommunizieren, lesen und schreiben zu können</p> <p><i>Überfachliche Kompetenzen</i></p>

	Besondere Kompetenzen in verbaler Kommunikation und freiem Sprechen Präsentationsfähigkeiten
Inhalte des Moduls	Deutsche Sprache und Kommunikation
Lehrformen des Moduls	Seminar, Übungen, Präsentationen
Arbeitsaufwand (h)/ Gesamtworkload des Moduls	150 Stunden
Sprache	Deutsch
Häufigkeit des Angebots	Jährlich

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 6

Module title	<b>Interdisciplinary Project Work</b>
Module number	<b>UA 6</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to other study programmes	Urban Agglomerations
Duration of the module	1 semester
Status of the module	Compulsory module
Recommended semester during the study programme	2
Credit points (Cp) of the module	10 ECTS
Prerequisites for module participation	None
Prerequisites for module examination	None
Module examination	Project work (12 weeks) and colloquium (min. 20, max. 30 minutes)
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i></p> <p>Ability to carry out scientific work and research on a given professional topic, following a sound methodology and with respect to the different technical, social and cultural dimensions of city-regions and urban agglomerations</p> <p>Competence to work individually as well as within interdisciplinary and intercultural teams and projects, to organize individual and group project work, and to finalize the results in a scientific report and project documentation</p> <p><i>Key qualifications</i></p> <p>Capacity to structure and develop a given assignment</p> <p>Technical report writing skills</p> <p>Group moderation and mediation capacities</p> <p>Competences in intercultural communication</p> <p>Leadership competences</p> <p>Project management skills</p> <p>Presentation skills</p>
Contents of the module	Interdisciplinary Project Work
Teaching methods of the module	Seminar, project work, presentations
Total workload	300 hours
Language of the module	English
Frequency of the module	Once a year

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 7

Module title	<b>Urban Infrastructure</b>
Module number	<b>UA 7</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to other study programmes	Urban Agglomerations
Duration of the module	1 semester
Status of the module	Compulsory module
Recommended semester during the study programme	2
Credit points (Cp) of the module	10 ECTS
Prerequisites for module participation	None
Prerequisites for module examination	None
Module examination	Written assignment (8 weeks)
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i></p> <p>Knowledge of theories and practice of technical infrastructure in water supply and sewage systems, with a particular focus on management, operation and finance possibilities</p> <p>Knowledge of theories and practice of technical infrastructure in waste management within the context of city-regions and urban agglomerations</p> <p>Knowledge of scientific methods and practical applications for planning, design and services of transportation systems for the flowing and the parking traffic, public transport, bicycle and pedestrian traffic in city-regions</p> <p><i>Key qualifications</i></p> <p>Competences of academic writing</p> <p>Presentation skills</p> <p>Teamwork competences</p>
Contents of the module	Water Management Wastewater Management Waste Management Traffic Management
Teaching methods of the module	Lectures, seminar
Total workload	300 hours
Language of the module	English
Frequency of the module	Once a year

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 8

Module title	<b>Urban Ecology and Environment</b>
Module number	<b>UA 8</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to	Urban Agglomerations

other study programmes	
Duration of the module	1 semester
Status of the module	Compulsory module
Recommended semester during the study programme	2
Credit points (Cp) of the module	5 ECTS
Prerequisites for module participation	None
Prerequisites for module examination	None
Module examination	Project work (12 weeks) and colloquium (min. 20, max. 30 minutes)
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i></p> <p>Knowledge of the technical, functional, ecological and aesthetic basics of landscape and environmental development and greening in urban agglomerations</p> <p>Knowledge of theories and practice of energy supply and energy efficiency within cities</p> <p><i>Key qualifications</i></p> <p>Capacity to structure and develop a given project assignment</p> <p>Competences of academic writing</p> <p>Ability to organize and moderate teamwork</p> <p>Presentation and communication competences</p>
Contents of the module	<p>Urban and Regional Open Spaces</p> <p>Urban Climate and Environmental Management</p> <p>Energy Efficiency and Supply for Cities</p>
Teaching methods of the module	Lectures, seminar, project work, field trips
Total workload	150 hours
Language of the module	English
Frequency of the module	Once a year

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 9

Module title	<b>International Exchange Course</b>
Module number	<b>UA 9</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to other study programmes	Urban Agglomerations
Duration of the module	1
Status of the module	Compulsory module
Recommended semester during the study programme	3
Credit points (Cp) of the module	30 ECTS
Prerequisites for module participation	None
Prerequisites for module examination	Depending on the requirements at the partner university

Module examination	Depending on the examination requirements at the partner university
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i>            Deepened knowledge in selected matters and specialized fields of urban agglomerations – such as social-cultural aspects, public participation, project management, sustainable urban and regional development, infrastructure provision, planning methods and others – depending on the selected master programme at one of the international partner universities</p> <p><i>Key qualifications</i>            Competences of intercultural reflection and sensibility            Awareness of diversities and/or similarities of the global development phenomena by exposure to an international socio-cultural and academic environment            Profound foreign and professional language abilities            Intercultural flexibility and knowledge about international network-building</p>
Contents of the module	Studies at a postgraduate level with contents referring to urban agglomerations, depending on the specific lectures, seminars or projects offered at the chosen partner university
Teaching methods of the module	Depending on the courses offered at the partner university
Total workload	900 hours
Language of the module	English or other, depending on the language of the programme at the partner university
Frequency of the module	Each semester

## Module Description "Urban Agglomerations" (M.Sc.)

### Module UA 10

Module title	<b>Master Thesis</b>
Module number	<b>UA 10</b>
Study programme	Urban Agglomerations M.Sc.
Applicability of the module to other study programmes	Urban Agglomerations
Duration of the module	1 semester
Status of the module	Compulsory module
Recommended semester during the study programme	4
Credit points (Cp) of the module	30 ECTS
Prerequisites for module participation	Passed modules UA 1   UA 2   UA 3   UA 4   UA 5   UA 6   UA 7   UA 8   Written Report on International Exchange Course
Prerequisites for module examination	UA 1   UA 2   UA 3   UA 4   UA 5   UA 6   UA 7   UA 8   UA 9
Module examination	Master Thesis (18 weeks) and colloquium (min. 30, max. 60 minutes)
Intended learning outcomes / Acquired competences	<p><i>Professional qualifications</i>            Competence to carry out individual and independent scientific work on a specific topic, applying scientific methods and developing solutions with respect to the different technical, social and cultural dimensions of cities and urban agglomerations.</p> <p><i>Key qualifications</i>            Ability to develop systematic, substantial and original academic research work            Capacity to synthesize information, build new knowledge and draw conclusions to attain a higher level understanding</p>

	Capacity to design a research proposal and to use a set of different research tools Academic writing skills Presentation and communication skills
Contents of the module	Elaboration of the Master Thesis
Teaching methods of the module	Individual research work
Total workload	900 hours
Language of the module	English
Frequency of the module	Each semester

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## Diploma Supplement

This Diploma Supplement model was developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the supplement is to provide sufficient independent data to improve the international "transparency" and fair academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.) It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this supplement is appended. It should be free of any value judgements, equivalence statements or suggestions about recognition. Information in all sections should be provided. Where information is not provided, an explanation should give the reason why

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### 1. HOLDER OF THE QUALIFICATION

#### 1.1 Family name / 1.2 First name

<Nachname>, <Vorname>

#### 1.3 Date, place, country of birth

<TT Monat Langtext, englisch, JJJJ> <Geburtsort, Geb.-land>

#### 1.4 Student ID number or code

<Matrikelnr>

### 2 QUALIFICATION

#### 2.1 Name of qualification / Titel conferred (full, abbreviated; in original language)

Master of Science (M.Sc.)

#### 2.2 Main field(s) of study

Urban Agglomerations

#### 2.3 Institution awarding the qualification (in original language)

Fachhochschule Frankfurt am Main - University of Applied Sciences

Faculty 1: Architecture • Civil Engineering • Geomatics

#### Status (type / control)

University of Applied Sciences / State Institution

#### 2.4 Institution administering studies (in original language)

(same)

#### Status (type / control)

(same)

#### 2.5 Language(s) of instruction/examination

English

### 3. LEVEL OF QUALIFICATION

#### 3.1 Level

Second degree (2 years) by research with thesis>

#### 3.2 Official length of programme

2 years with a total of 120 ECTS credits

#### 3.3 Access requirements

First degree equivalent to EU first degree standards (minimum 180 ECTS credits) awarded by a higher education institution in architecture, civil engineering, urban, regional, landscape or environmental planning, surveying, geomatics or other planning-related disciplines and proof of good English proficiency

### 4. CONTENTS AND RESULTS GAINED

#### 4.1 Mode of study

Full-time

#### 4.2 Programme requirements/ Qualification profile of the graduate

- a broad intercultural perception of urban problems, experiences and practices as well in developed as in developing countries
- a knowledge of theories and practice, of instruments, and of physical, functional, and infrastructural concepts for urban and city-regional development
- a knowledge of theories and practice for planning, design, and management of technical infrastructure in urban agglomerations
- the capacity and methodologies to collect, to analyse and to present information necessary for decision-making
- a broad understanding of project organisation and project management from a scientific as well as a practical point of view
- the ability to understand, formulate and critically evaluate central concerns of intercultural aspects of urbanisation, of migration, segregation, globalisation
- a comprehension of various approaches to public participation in urban processes
- the ability to approach and to solve complex urban problems in interdisciplinary teams, in cooperation with local authorities, planning departments, and city-regional corporations

#### 4.3 Programme details

See "Master Final Examination Certificate" for the list of course modules and the respective examinations, including the topic and the grading of the Master Thesis

#### 4.4 Grading scheme

General grading scheme cf. Sec. 8.6 –  
In addition the ECTS grading scheme is used which operates with the levels A (best 10%), B (next 25%), C (next 30%), D (next 25%), E (next 10%).

#### 4.5 Overall classification (in original language)

Gesamtnote <Note als Zahl mit einer Nachkommastelle>, <Note als Langtext>  
based on the accumulation of grades received during the study programme and the final thesis  
cf. "Master Final Examination Certificate"

## **5. FUNCTION OF THE QUALIFICATION**

### **5.1 Access to further study**

The degree qualifies to apply for admission to doctoral studies.

### **5.2 Professional status**

The degree qualifies for various positions in the following fields: public and private services, urban and regional authorities, development corporations, freelance consultants, real estate agencies, research institutes, and others operating in planning, development, management and operation of cities, city-regions and large urban agglomerations.

## **6. ADDITIONAL INFORMATION**

### **6.1 Additional information**

The Master Programme has an integrated international component with a compulsory International Exchange Course (30 ECTS) at an international partner university.

### **6.2 Further information sources**

On the institution: [www.fh-frankfurt.de](http://www.fh-frankfurt.de)

On the programme: [www.urban-agglomerations.eu](http://www.urban-agglomerations.eu)

For national information sources cf. Sect. 8.8

## **7. CERTIFICATION**

This Diploma Supplement refers to the following documents:

Master Certificate dated <DATE>

Master Final Examination Certificate dated <DATE>

**(Official Stamp/ seal)**

Certification Date: <DATE>

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Chairperson Examination Committee

## 8. INFORMATION ON THE GERMAN HIGHER EDUCATION SYSTEM<sup>1</sup>

### 8.1 Types of Institutions and Institutional Status

Higher education (HE) studies in Germany are offered at three types of Higher Education Institutions (HEI).<sup>2</sup>

- *Universitäten* (Universities) including various specialised institutions, offer the whole range of academic disciplines. In the German tradition, universities focus in particular on basic research so that advanced stages of study have mainly theoretical orientation and research-oriented components.

- *Fachhochschulen* (Universities of Applied Sciences) concentrate their study programmes in engineering and other technical disciplines, business-related studies, social work, and design areas. The common mission of applied research and development implies a distinct application-oriented focus and professional character of studies, which include integrated and supervised work assignment in industry, enterprises or other relevant institutions.

- *Kunst- und Musikhochschulen* (Universities of Art/Music) offer studies for artistic careers in fine arts, performing arts and music; in such fields as directing, production, writing in theatre, film and other media; and in a variety of design areas, architecture, media and communication.

Higher Education Institutions are either state or state-recognised institutions. In their operations, including the organisation of studies and the designing and award of degrees, they are both subject to higher education legislation.

### 8.2 Types of Programmes and Degrees Awarded

Studies in all three types of institutions have traditionally been offered in integrated "long" (one-tier) programmes leading to *Diplom-* or *Magister Artium* degrees or completed by a *Staatsprüfung* (State Examination).

Within the Framework of the Bologna-Process one-tier study programmes are successfully being replaced by a two-tier study system. Since 1998, a scheme of first- and second-level degree programmes (Bachelor and Master) has been introduced to be offered parallel to or instead of integrated "long" programmes. These programmes are designed to provide enlarged variety and flexibility to students in planning and pursuing educational objectives, they also enhance international compatibility of studies.

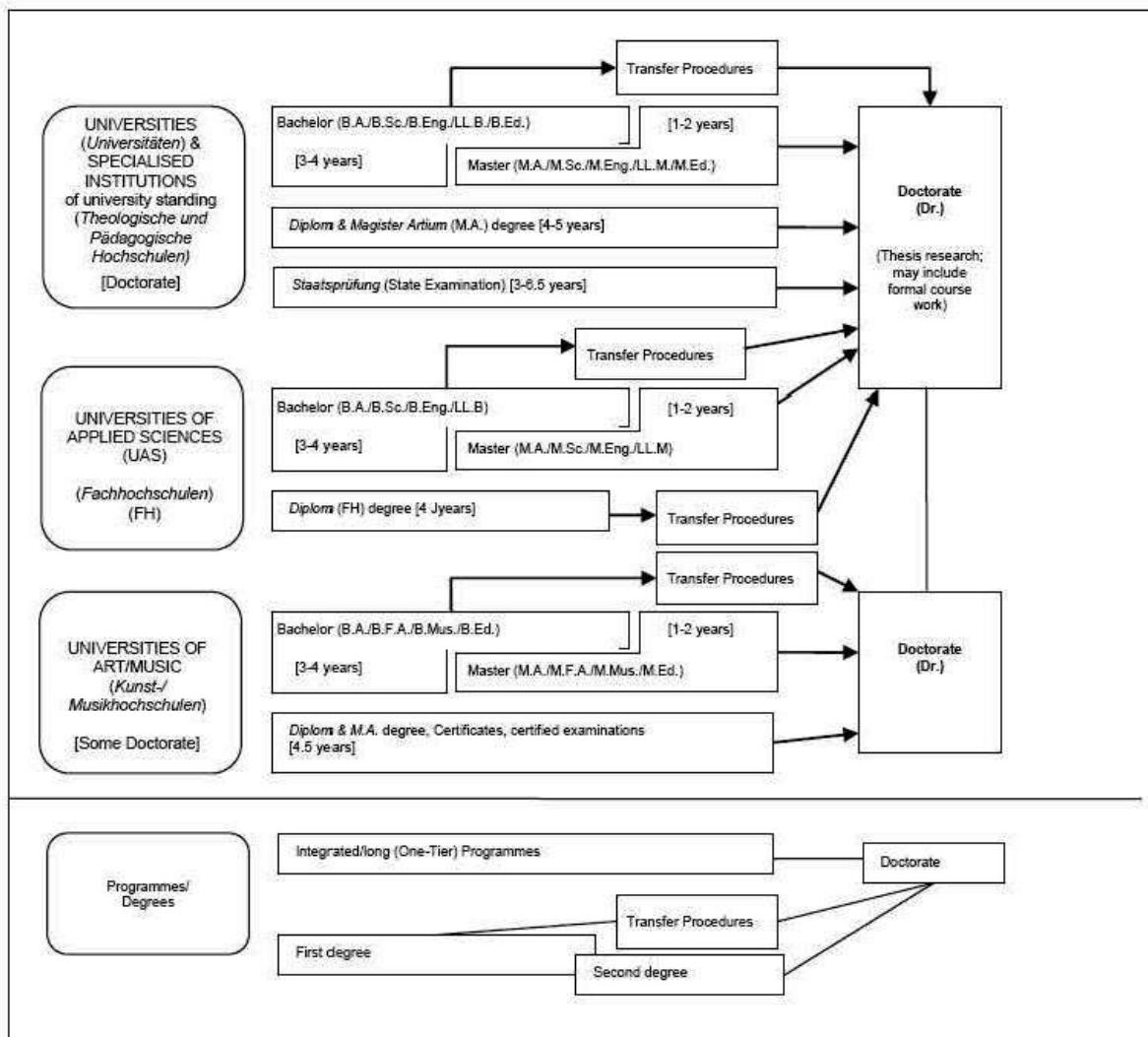
The German Qualification Framework for Higher Education Degrees<sup>3</sup> describes the degrees of the German Higher Education System. It contains the classification of the qualification levels as well as the resulting qualifications and competencies of the graduates.

For details cf. Sec. 8.4.1, 8.4.2, and 8.4.3 respectively. Table 1 provides a synoptic summary.

### 8.3 Approval/Accreditation of Programmes and Degrees

To ensure quality and compatibility of qualifications, the organisations of studies and general degree requirements have to conform to principles and regulations established by the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany (KMK).<sup>4</sup> In 1999, a system of accreditation for programmes of study became operational under the control of an Accreditation Council at national level. All new programmes have to be accredited under this scheme; after a successful accreditation they receive the quality-label of the Accreditation Council.<sup>5</sup>

Table 1: Institutions, Programmes and Degrees in German Higher Education



## **8.4 Organisation and Structure of Studies**

The following programmes apply for all three types of institutions. Bachelor's and Master's study courses may be studies consecutively, at various higher education institutions, at different types of higher education institutions and with phases of professional work between the first and the second qualification. The organisation of the study programmes makes use of modular components and of the European Credit Transfer System (ECTS) with 30 credits corresponding to one semester.

### **8.4.1 Bachelor**

Bachelor degree study programmes lay the academic foundations, provide methodological skills and lead to qualifications related to the professional field. The Bachelor degree is awarded after 3 to 4 years.

The Bachelor degree programme includes a thesis requirement. Study courses leading to the Bachelor degree must be accredited according to the Law establishing a Foundation of the Accreditation of Study Programmes in Germany.<sup>6</sup>

First degree programmes (Bachelor) lead to Bachelor of Arts (B.A.), Bachelor of Science (B.Sc.), Bachelor of Engineering (B.Eng.), Bachelor of Laws (LL.B.), Bachelor of Fine Arts (B.F.A.), Bachelor of Music (B.Mus.) or Bachelor of Education (B.Ed.).

### **8.4.2 Master**

Master is the second degree after another 1 to 2 years. Master study programmes may be differentiated by the profile types "practice-oriented" and "research-oriented". Higher Education Institutions define the profile.

The Master degree study programme includes a thesis requirement. Study programmes leading to the Master degree must be accredited according to the Law establishing a Foundation of the Accreditation of Study Programmes in Germany.<sup>7</sup>

Second degree programmes (Master) lead to Master of Arts (M.A.), Master of Science (M.Sc.), Master of Engineering (M.Eng.), Master of Laws (LL.M.), Master of Fine Arts (M.F.A.), Master of Music (M.Mus.) or Master of Education (M.Ed.). Master study programmes which are designed for continuing education may carry other designations (e.g. MBA).

### **8.4.3 Integrated "Long" Programmes (One-Tier): *Diplom degrees, Magister Artium, Staatsprüfung***

An integrated study programme is either mono-disciplinary (*Diplom* degrees, most programmes completed by a *Staatsprüfung*) or comprises a combination of either two major or one major and two minor fields (*Magister Artium*). The first stage (1.5 to 2 years) focuses on a broad orientations and foundations of the field(s) of study. An Intermediate Examination (*Diplom-Vorprüfung* for *Diplom* degrees; *Zwischenprüfung* or credit requirements for the *Magister Artium*) is a prerequisite to enter the second stage of advanced studies and specialisations. Degree requirements include submission of a thesis (up to 6 month duration) and comprehensive final written and oral examinations. Similar regulations apply to studies leading to a *Staatsprüfung*. The level of qualification is equivalent to the Master level.

- Integrated studies at *Universitäten* (U) last 4 to 5 years (*Diplom* degree, *Magister Artium*) or 3 to 6.5 years (*Staatsprüfung*). The *Diplom* degree is awarded in engineering disciplines, the natural sciences as well as economics and business. In the humanities, the corresponding degree is usually the *Magister Artium* (M.A.). In the social sciences, the practice varies as a matter of institutional traditions. Studies preparing for the legal, medical and pharmaceutical professions are completed by a *Staatsprüfung*. This applies also to studies preparing for teaching professions in some *Länder*.

The three qualifications (*Diplom*, *Magister Artium* and *Staatsprüfung*) are academically equivalent. They qualify to apply for admission to doctoral studies. Further prerequisites for admission may be defined by the Higher Education Institution, cf. Sec. 8.5.

- Integrated studies at *Fachhochschulen* (FH)/Universities of Applied Sciences (UAS) last 4 years and lead to a *Diplom* (FH) degree. While the FH/UAS are non-doctorate granting institutions, qualified graduates may apply for admission to doctoral studies at doctorate-granting institutions, cf. Sec. 8.5.

- Studies at Kunst- and Musikhochschulen (Universities of Art/Music etc.) are more diverse in their organisation, depending on the field and individual objectives. In addition to Diplom/Magister degrees, the integrated study programme awards include Certificates and certified examinations for specialised areas and professional purposes.

## **8.5 Doctorate**

Universities as well as specialised institutions of university standing and some Universities of Art/Music are doctorate-granting institutions. A formal prerequisite for admission to doctoral work is a qualified Master (UAS and U), a *Magister* degree, a *Diplom*, a *Staatsprüfung*, or a foreign equivalent. Particularly qualified holders of a Bachelor or a *Diplom* (FH) degree may also be admitted to doctoral studies without acqui-

sition of a further degree by means of a procedure to determine their attitude. The Universities and the doctorate-granting institutions regulate entry to a doctorate as well as the structure of the procedure to determine aptitude. Admission further requires the acceptance of the dissertation research project by a professor or supervisor.

## **8.6 Grading Scheme**

The grading scheme in Germany usually comprises five levels (with numerical equivalents; intermediate grades may be given): "Sehr Gut" (1) – Very Good; "Gut" (2) – Good; "Befriedigend" (3) – Satisfactory; "Ausreichend" (4) – Sufficient; "Nicht ausreichend" (5) – Non-Sufficient/Fail. The minimum passing grade is "Ausreichend" (4). Verbal designations of grades may vary in some cases and for doctoral degrees.

In addition institutions partly already use an ECTS grading scheme.

## **8.7 Access to Higher Education**

The General Higher Education Entrance Qualification (*Allgemeine Hochschulreife, Abitur*) after 12 to 13 years of schooling allows for admission to all higher educational studies. Specialised variants (*Fachgebundene Hochschulreife*) allow for admission to particular disciplines. Access to *Fachhochschulen* (UAS) is also possible with a *Fachhochschulreife*, which can usually be acquired after 12 years of schooling. Admission to Universities of Art/Music may be based on other or require additional evidence demonstrating individual aptitude.

Higher Education Institutions may in certain cases apply additional admission procedures.

## **8.8 National Sources of Information**

- *Kultusministerkonferenz (KMK)* [Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany; Lennéstrasse 6, D-53113 Bonn; Fax: +49[0]228/501-229; Phone: +49[0]228/501-0

- "Documentation and Educational Information Service" as German EURYDICE-Unit, providing the national dossier on the education system (<http://www.kmk.org/documentation/zusammenarbeit-auf-europaeischer-ebene-im-edydice-informationsnetz.html>; E-Mail: eurydice@kmk.org)

- *Hochschulrektorenkonferenz (HRK)* [German Rector's Conference]; Ahrstrasse 39, D-53175 Bonn; Fax: +49[0]228/887-110; Phone: +49[0]228/887-0; [www.HRK.de](http://www.HRK.de); E-Mail: post@hrk.de

- „Higher Education Compass“ of the German Rector's Conference features comprehensive information on institutions, programmes of study etc. ([www.higher-education-compass.de](http://www.higher-education-compass.de))

<sup>1</sup> The information covers only aspects directly relevant to purposes of the Diploma Supplement. All information as of 01.07.2010.

<sup>2</sup> *Berufsakademien* are not considered as Higher Education Institutions, they only exist in some of the *Länder*. They offer educational programmes in close cooperation with private companies. Students receive a formal degree and carry out an apprenticeship at the company. Some *Berufsakademien* offer Bachelor courses which are recognised as an academic degree if they are accredited by a German accreditation agency.

<sup>3</sup> German Qualification Framework for Higher Education Degrees (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 21.04.2005).

<sup>4</sup> Common structural guidelines of the *Länder* for the accreditation of Bachelor's and Master's study courses (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 10.10.2003, as amended on 04.02.2010).

<sup>5</sup> „Law establishing a Foundation „Foundation for the Accreditation of Study Programmes in Germany“, entered into force as from 26.02.2005, GV. NRW. 2005, nr. 5, p. 45 in connection with the Declaration of the *Länder* to the Foundation “Foundation for the Accreditation of Study Programmes in Germany“ (Resolution of the Standing Conference of the Ministers of Education and Cultural Affairs of the *Länder* in the Federal Republic of Germany of 16.12.2004).

<sup>6</sup> See note no. 5

<sup>7</sup> See note no. 5