



**“Urban Systems”** – an innovative research and teaching platform at the University of Duisburg-Essen aims to find systematic and holistic solutions to the central challenges of global urbanization:

The new Masters program „Urban Systems“ and the PhD program „ARUS – Advanced Research in Urban Systems“

# Urban Systems

## The Focal Point of Research: The Main Research Area “Urban Systems”

The Main Research Area at the University of Duisburg-Essen has brought together more than 70 researchers from ten faculties and departments in six core competence fields: “Health”, “Environment”, “Infrastructure”, “Logistics”, “Culture”, and “Society, Education, and Social Policy”. Focusing on problem-oriented metropolis research, our researchers and scientists from diverse disciplines are working together in flexible interdisciplinary groups on a number of projects that address the central challenges urban agglomerations are facing today and developing agglomerations will face in the future. These include: CO<sub>2</sub> emissions as natural resources are dwindling and becoming more expensive; the potential of social conflict in multi-cultural, multi-ethnic communities; and the health burden of climate change and dangerous environmental conditions.

### Pivotal Questions:

- How can the challenges of urbanization be tackled?
- How can the potential advantages that large cities present be made tangible?
- How can the quality of life in metropolises be sustainably improved?
- What role does culture play in cities?

### Our Guiding Principle:

Innovative, sustainable and politically practicable solutions for urban agglomerations require integrated research.

### Our Objective:

A focus on developing holistic approaches to solutions to improve living conditions in both growing and shrinking metropolitan areas.

## The Focal Point of Teaching: The “Urban Systems” Masters Program

The new “Urban Systems” Masters program at the University of Duisburg-Essen will commence at the beginning of the winter term 2011/12. The international Masters program is part of a systematic and integrated program that also includes Bachelors and Doctoral programs and focuses on issues and problems central to urban systems worldwide. Our Masters program is decidedly different in its objectives and course offerings from programs at other universities. While most courses at other universities in urban studies tend to focus on discreet disciplines (whether technology and natural sciences, cultural studies and social sciences, or arts and design), the “Urban Systems” Masters program is the first to offer an integrated, interdisciplinary and praxis-oriented education to its students.

## The “Urban Systems” Masters Program in Brief

- Duration: four semesters
- Language of instruction: primarily English
- Two Focus Areas (see diagram):
  - Master of Science: Natural Sciences and Technology (Sustainable Urban Technologies)
  - Master of Arts: Cultural Studies, Education, and Social Sciences (Urban Culture, Society and Space)
- Praxis-oriented: four-month professional internship and more
- Close integration with the doctoral program “ARUS – Advanced Research in Urban Systems”
- On-Site local challenges: The Greater Rhine-Ruhr Metropolitan Region
- Prerequisites: A Bachelors degree in a subject related to the natural sciences, engineering, humanities, social sciences, education, or urban planning; the willingness and ability to do interdisciplinary work; a general interest in urban issues; very good English skills

