



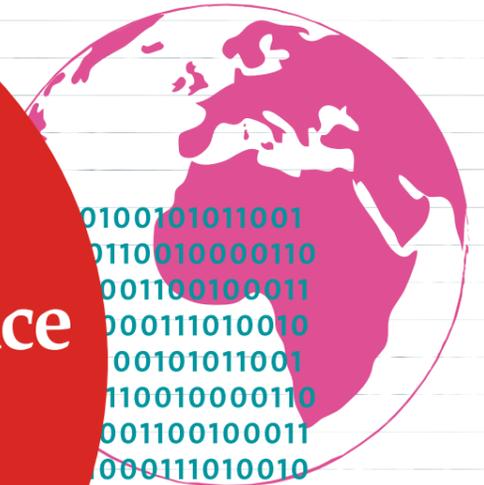
Contact

Prof. Dr. Robert Weibel
GIScience
Department of Geography
University of Zurich
Winterthurerstrasse 190
8057 Zürich
msc_giscience@geo.uzh.ch
www.geo.uzh.ch/en/studying/specialized-master/msc-in-giscience/

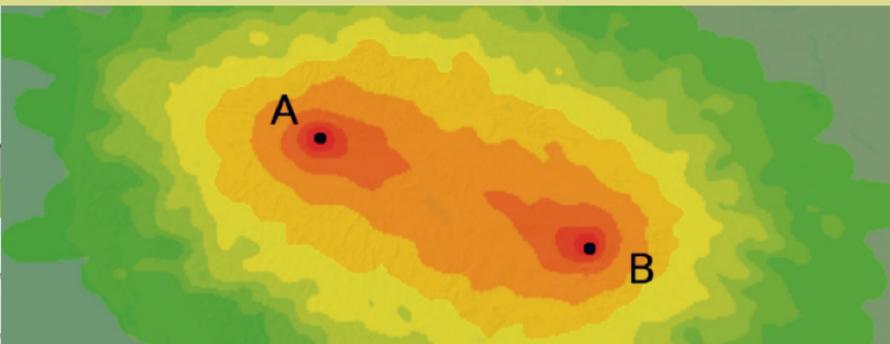
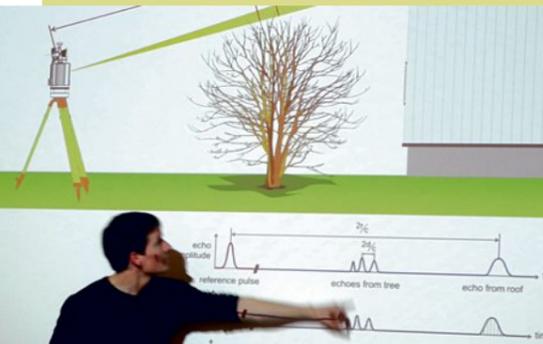
SPECIALIZED
MASTER

Geographic Information Science

Realizing the potential of
geographic data for science
and society



Increasing urbanization and mobility, multiple social networks and health data, accelerating climate change and natural disasters; all of these bring with them fundamental research challenges and ever increasing volumes of spatial data. By studying GIScience you learn the fundamental properties of space. You are educated on how to model space, how to analyze spatial and temporal relationships, and how to measure and interpret spatial behaviour.



SPECIALIZED MASTER'S IN GEOGRAPHIC INFORMATION SCIENCE (GISCIENCE)

Increasing urbanization and mobility, multiple social networks and health data, accelerating climate change and natural disasters; all bring with them fundamental research challenges and ever increasing volumes of spatial data.

Geographic Information Science is at the core of research on theories, methods, and tools to analyze and understand events, patterns, and processes occurring in space and time. By studying GIScience you will learn the fundamental properties of (geographic) space; how to model space; how to analyze spatial and temporal processes and relationships; how to deal with spatial data; and how to measure and interpret spatial behaviour.

The GIScience Center at the Department of Geography of the University of Zurich is formed by three units: Geographic Information Systems, Geographic Information Visualization and Analysis, Geocomputation.

ADMISSION CRITERIA

- Above-average performance and completion of a Bachelor's degree in Geography or in a relevant neighbouring discipline
- Prior knowledge in your field of interest
- High degree of motivation

PROGRAM STRUCTURE

An individual course program of 33 ECTS tailored to your interest and needs is combined with the exclusive courses for specialized Master's students "Fundamental Challenges in GIScience" (6 ECTS) and "Project Planning, Execution and Management" (6 ECTS). This set of courses prepares you for the extended master's thesis (45 ECTS).

OPTIONAL COURSE OFFERINGS:

- Spatial Algorithms
- Spatial Databases
- Retrieving Geographic Information
- Geovisualization
- 3D Modeling and Visualization
- Advanced Spatial Analysis I
- Advanced Spatial Analysis II
- Computational Movement Analysis
- Cognitive Issues in GIScience

In addition, a large variety of courses from the Master's offerings at the University of Zurich, ETH Zürich, or other universities can be chosen.

WHY ZURICH

The University of Zurich hosts one of the world's leading centers in GIScience at the Department of Geography, Switzerland's largest geography department. It is renowned for its research on a wide range of fields including digital cartography, mobile systems, environmental geoinformatics, geovisualization, spatial cognition, geographic information retrieval, movement and geosemantics.

CAREER OPPORTUNITIES

After finishing your degree you will be an expert in spatial data handling and analysis, data visualization, and geocomputation. You will be able to find exciting, challenging positions in academia, industry, and government.

**SPECIALIZED
MASTER**

