

# Hochschule für Technik Stuttgart

[www.hft-stuttgart.de/photogrammetry-geoinformatics](http://www.hft-stuttgart.de/photogrammetry-geoinformatics)

## MASTER PHOTOGRAMMETRY AND GEOINFORMATICS STUTTGART / GERMANY

### PROGRAMME FOCUS



Young experts will receive a scientific and practice-oriented education in the fields of photogrammetry, remote sensing and geoinformation science in addition to their professional background. An important objective is the transfer of up-to-date techniques into practice under different technological conditions. The course is designed in particular for future decision-makers and senior engineers of information and land management projects, national authorities for mapping, photogrammetry, land consolidation, forestry, agriculture, environment, rural or urban planning.

### CAREER PROSPECTS

Studying geoinformation science will place the graduates into a top position of the international job market: the field of geoinformation is considered worldwide as one of the key markets. There is a big demand of well trained personal in industrial countries as well as emerging markets.

After graduation, the new experts easily find a job in the private market or at consultancies. Here, in particular, the employers appreciate the international and intercultural experience of the students. Those who have been sent by an institution for further education, usually will be promoted to a higher position after return. A rather high percentage of the graduates continue their academic career with a doctoral study at German or international universities.



**MASTER PHOTOGRAMMETRY  
AND GEOINFORMATICS**  
HFT STUTT GART

**APPLICATION DEADLINES**  
April 15<sup>th</sup> for Non-EU-Citizens  
Juli 15<sup>th</sup> for EU-Citizens

**ADDRESS**  
Hochschule für Technik Stuttgart  
Photogrammetry and Geoinformatics  
Schellingstraße 24  
70174 Stuttgart  
Germany

**DEGREE**  
Master of Science (M.Sc.)

**PROGRAMME START**  
Yearly in October

**DURATION**  
3 Semesters  
Medium of instruction: English

**EMAIL/INTERNET**  
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F +49 (0)711 8926 2556

# PROFILE

The course is divided into a one-year study period with a mix of lectures and exercises and a six-month master's thesis project. On the basis of digital photogrammetry, the methods of aerial photography, automatic aerial triangulation, digital terrain model creation, true ortho-photo generation and data capture for building models are taught using high-end computer workstations. Mobile and airborne laser scanning and its applications right up to the creation of virtual city models represents the link between photogrammetry and remote sensing. The remote sensing lectures deal with geometric, spectral and temporal earth observation sensors and their characteristics. By theory as well as through practical student projects, you learn the classification methods of multi-image analysis, including the evaluation of radar data.

Beside the methods of photogrammetric data acquisition in Geoinformatics, further methods of terrestrial and satellite point detection (GNSS) for GIS are taught. Students acquire broad knowledge about different databases and Geographic Information Systems including Web-GIS, spatial analysis, and visualization based on different types and formats of 2D and 3D geo-data. A major focus of this master's programme is on the development of core skills and competencies. This enables students to cope with organisational tasks such as project management or prepares them for academic careers.

The final six-month project phase for the master's thesis is usually done either at the HFT Stuttgart, at a partner university abroad or in cooperation with companies in the field of photogrammetry, remote sensing, or geoinformatics. A small student to faculty staff ratio guarantees that professors, staff members, and tutors are easy to contact for providing support directly to students whenever needed.

# WORTH KNOWING

The programme is supported by the German Academic Exchange Service (DAAD) and has been evaluated as a premium study programme. It is accredited by ASIIN (Accreditation Agency for Study Programs in Engineering, Informatics, Natural Sciences and Mathematics) and holds the seal of European Accreditation of Engineering Programmes as a Second Cycle European Engineering Programme (EUR-ACE). As entry requirements, an above-average bachelor's degree in a profession related to geo-data and a proof of good English language skills are needed. Two years of relevant professional experience is recommended. For a possible exemption from the state-wide tuition fee for international students, please visit the homepage of the course programme.

# WELCOME



The Hochschule für Technik Stuttgart, founded in 1832, locates in the centre of Stuttgart, the state capital of Baden-Württemberg in the south-west of Germany. Education in Surveying has a long standing tradition at our university since its first offering in 1865; starting in 1979, international training courses in photogrammetry were offered which were converted to the international master's programme Photogrammetry and Geoinformatics in 1999.