MINOR GEOGRAPHIC INFORMATION SYSTEMS (GIS)

The world is facing environmental and social challenges on a global, national, local and individual level, while also moving further into the information age. Availability of reliable and up to date information has become more and more important to make informed decisions to address global challenges. In many cases, data required to generate the information needed to tackle these grand challenges are geographical.

WHAT IS A HTHT MINOR?
An HTHT-minor fits within the UT profile: High Tech, Human Touch. The minors are offered in English and accessible for both national and international students. The goal of the HTHT-minor is to illuminate specific societal themes for which the UT develops High Tech Human Touch solutions. These solutions are created by conducting high-quality research. Both the form and the content of the minors are High Tech Human Touch (multidisciplinary) and are profiling for the student.

The UT offers most HTHT-minors in a coherent package of 2 (30 EC). There are also HTHT minors of 15 EC that do not belong to a package. You can choose one of these minors and combine this with one minor of a package. If possible, you can even choose two minors from different packages.

MINOR INFORMATION
This module introduces students to Geographic Information Systems (GIS). The leading theme of this module is: how can GIS be used efficiently for global and actual problems. It consists of three stages: the first efficiently supplies basic knowledge to the corresponding theme of GIS, the second applies the knowledge in relevant domains, and the third integrates the acquired knowledge in a project framework.

Students will get lectures in combination with (un) supervised exercises. Lectures and exercises are designed such that the basics of storing, accessing and analyzing geo information are covered. Students are encouraged to find creative solutions in the use, design, and analysis of GIS functionalities. Treated are the concepts of multi-scale and geometric aspects of mapping in a GIS context, dissemination methods, and environments, with emphasis on online and interactive methods.
The final part of this module consists of an inter- or multi-disciplinary project. Projects with an international flavor related to the various societal benefit areas (SBA's) are proposed from which the students can choose. The focus is on how GIS can be used effectively by combining geo-information to provide possible solutions/plans and to allow efficient communication with stakeholders.

**Part of an HTHT package**

GIS is the first part of the HTHT package GIS & Earth Observation, although it can be taken independently.

**Target group**

The package is designed to meet the needs of students from both the technical (addressing technical aspects of spatial information) and the social sciences (addressing impacts and decision making).

Specifically links to gamma students, and therefore of high interest for both beta and gamma students:
- What are the transport policies, how they are produced and executed;
- How is voluntary participation organized, how to use geo-information in the communication with stakeholders?
- About “Ethics of (cartographic) visualization: How to lie with maps?”.

**About ITC**

The Faculty of Geo-Information Science and Earth Observation (ITC) of the University of Twente provides international postgraduate education, research, and project services in the field of geo-information science and earth observation using remote sensing and GIS. The aim of ITC's activities is the international exchange of knowledge, focusing on capacity building and institutional development in developing countries and emerging economies.

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**MORE INFORMATION**

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