Geomatics is primarily a technology for solving environmental issues and supporting the design, construction, and management of urban areas. Geomatics technologies also help eradicate poverty through establishment of land administration systems in developing countries and support good governance. Geomatics is exploited for finding solutions to many real-world problems.

Student profile
The use of technology is always underpinned by mathematics and statistics. You should have an engineering attitude and thorough knowledge of mathematics and statistics, or be willing to resolve deficiencies. Skills and interest in computer programming are advantageous. The background of our Geomatics students includes civil engineering, geodesy, physical geography, architecture, land surveying, urban and rural planning, mathematics, and computer science.

Programme
Core courses in the first year provide the...
fundamentals of geo-data acquisition, storing big data in database management systems, the concepts underpinning geographical information systems, 3D building modelling, and many more indispensable geomatics knowledge. In one of the core courses you will learn the programming language Python. In the fourth quarter, the first year culminates in a large group project in which you tackle a real-world problem defined in co-operation with a company or a governmental agency.

The second year focuses on conducting scientific research supervised by at least two experts. The second year also offers the possibility to deepen or broaden your knowledge and skills through electives. Electives may be chosen from MSc courses at TU Delft or from other national or international universities. Following electives can be done through exchange study abroad. The Geomatics in Practice elective enables you to get acquainted with projects in practice.

The teachers of the programme are experts in geo-data acquisition, GIS fundamentals, 3D geo-information, and creating 3D building models. Many of them are renown researchers and writers of geomatics text books used around the world.

Career prospects
Our graduates combine an in-depth knowledge on the fundamentals of Geomatics technologies with thorough software skills; a mix highly appreciated by the professional field. After graduation, students have unique knowledge and skills which make the difference in a competitive world. A master in Geomatics offers students good career perspectives and plenty of job opportunities. Geomatics firms, software companies, governmental agencies, and other employers are waiting for you. Embracing the scientific side of geomatics offers the chance to work at universities and research institutions all over the world.

Curio: George Washington, Thomas Jefferson and Abraham Lincoln, all former presidents of the USA, were geomatics engineers, at that time called land surveyors. Also, George Everest, name giver of Mount Everest, was a land surveyor. The famous Gauss had a background in geodesy, the forerunner of geomatics.