



UNIVERSITY OF CAPE TOWN

IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

Innovation

Manufacturing

Supply chain

Product

Cost

Delivery

Inventory

Management

Flight

Solution

Strategy

Management

BUILT ENVIRONMENT

GEOMATICS

(Geospatial Data Science and Surveying)



Powering the future with precision! From mapping cities to tracking climate change, geospatial science blends cutting-edge tech with geospatial data to shape a smarter, more sustainable world.

We are specialists in the measurement, mapping, modelling, monitoring and management of spatial features and phenomena of interest. We design solutions to help address current local, regional, and global societal and environmental challenges (focussing particularly on Africa) using geospatial data and land surveying.

We use cutting-edge technologies and develop innovative procedures for critical and creative spatial data analysis. Our professional skills are used to manage and communicate solutions to geospatial-related problems.

Our graduate attributes include ability to:

- 1) measure/record spatial and attribute data;
- 2) manage spatial data and projects;
- 3) produce and interpret spatial models (including maps, web GIS, 3D models and spatial development plans);
- 4) understand, analyse, and interrogate spatial data and legislation;
- 5) apply interdisciplinary skills and knowledge; and
- 6) identify with geospatial science profession and domain of work.

Degrees offered:

- **BSc (Geomatics)** Geospatial Surveying or Geospatial Data Science specialisation
- **Masters and Doctoral research degrees** specialising in land administration, cadastral systems and land tenure; geospatial data science, remote sensing and photogrammetry; geodesy and geodynamics.



FACT: The power of geospatial technology gives governmental bodies and private enterprises alike the opportunity to orchestrate comprehensive infrastructure planning for mass transit, public spaces and ecofriendly development initiatives. This makes it possible to foster the growth of intelligent, resilient communities, ultimately enhancing the overall quality of life while promoting economic prosperity.

The South African Geomatics Council registers graduates as:

- professional land surveyors
- professional geoinformatics practitioners

A GOOD PASS in Mathematics and Physical Science is a prerequisite for admission to the degree. Admission will be based on your school results. **Scan to see EBE NSC entry requirements.**



Career Opportunities

Geomatics graduates have a world of career options! From urban planning and environmental management to drone mapping, surveying, and even augmented reality—this field opens doors in industries ranging from tech and engineering to government and space exploration!

Our graduates are engaged in property surveying (land and buildings); geospatial information technology; computer software development for spatial analysis; financial services; remote sensing applications; spatial statistics; spatial modelling, spatial monitoring and analysis; development of spatial plans; construction surveying; geospatial research; mining surveying; aviation; media; and property services among others.

Choose geomatics if you love technology, maps, and solving real-world problems! This dynamic field lets you work with cutting-edge tools like drones, laser scanners, and AI to shape smarter cities, protect the environment, and even explore Antarctica, the oceans, and space!



www.geomatics.uct.ac.za



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