

University of Pretoria Yearbook 2022

Geographic data analysis 220 (GIS 220)

Qualification Undergraduate

Faculty [Faculty of Natural and Agricultural Sciences](#)

Module credits 14.00

NQF Level 06

Programmes [BIT \(Information Systems\)](#)

[BSc \(Information and Knowledge Systems\)](#)

[BSc \(Geoinformatics\)](#)

[BSc \(Meteorology\)](#)

[BSc \(Chemistry\)](#)

[BSc \(Engineering and Environmental Geology\)](#)

[BSc \(Geography and Environmental Science\)](#)

[BSc \(Physics\)](#)

Service modules Faculty of Engineering, Built Environment and Information Technology

Prerequisites GMC 110 and (STK 110 OR BME 120)

Contact time 1 practical per week, 2 lectures per week

Language of tuition Module is presented in English

Department Geography Geoinformatics and Meteorology

Period of presentation Semester 2

Module content

The nature of geographical data and measurement. Application of statistics in the geographical domain. Probability, probability distributions and densities, expected values and variances, Central Limit theorem. Sampling techniques. Exploratory data analysis, descriptive statistics, statistical estimation, hypothesis testing, correlation analysis and regression analysis. Examples used throughout the course are drawn from South African and African case studies and taught within the framework of the UN Sustainable Development Goals.

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