University of Pretoria Yearbook 2017

Geographic data analysis 220 (GIS 220)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	14.00
Programmes	BSc Information and Knowledge Systems
	BSc Chemistry
	BSc Engineering and Environmental Geology
	BSc Environmental Sciences
	BSc Geography
	BSc Geoinformatics
	BSc Geology
	BSc Meteorology
	BSc Physics
	BSc Plant Science
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	GMC 100 AND (STK 110 OR BME120)
Contact time	1 practical per week, 2 lectures per week
Language of tuition	Module is presented in English
Academic organisation	Geography, Geoinf + Meteor
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.