University of Pretoria Yearbook 2020

Spatial analysis 320 (GIS 320)

Qualification	Undergraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	22.00
Programmes	BIT Information Systems
	BSc Information and Knowledge Systems
	BSc Chemistry
	BSc Environmental Sciences
	BSc Geography
	BSc Geoinformatics
	BSc Geology
	BSc Meteorology
Service modules	Faculty of Engineering, Built Environment and Information Technology
Prerequisites	GIS 220 and GGY 283
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

Construction of Raster Geovisualisations, spatial model construction and use, multi-criteria decision analysis. Factor analysis: Principle component analysis. Geostatistics: Spatial dependence modelling, ordinary kriging. Markov chains and cellular Automata, combined models. Examples using data from South Africa are implemented. A project or assignment of at least 64 notional hours.