

# University of Pretoria Yearbook 2017

## Spatial analysis 320 (GIS 320)

**Qualification** Undergraduate

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

**Module credits** 22.00

**Programmes** [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** 3 lectures per week

**Language of tuition** Module is presented in English

**Academic organisation** Geography, Geoinf + Meteor

**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. A project or assignments of at least 64 notional hours.

The information published here is subject to change and may be amended after the publication of this information. The [General Regulations \(G Regulations\)](#) apply to all faculties of the University of Pretoria. It is expected of students to familiarise themselves well with these regulations as well as with the information contained in the [General Rules](#) section. Ignorance concerning these regulations and rules will not be accepted as an excuse for any transgression.