

# University of Pretoria Yearbook 2023

## Statistics 220 (STK 220)

<b>Qualification</b>	Undergraduate
<b>Faculty</b>	Faculty of Economic and Management Sciences
<b>Module credits</b>	20.00
<b>NQF Level</b>	06
<b>Programmes</b>	BCom
	BCom (Economics)
	BCom (Informatics) Information Systems
	BCom (Investment Management)
	BCom (Law)
	BCom <i>Statistics</i>
	Bachelor of Information Technology (Information Systems) [BIT]
	BSc (Computer Science)
	BSc (Information and Knowledge Systems)
	BA <i>Philosophy, Politics and Economics</i>
	BSc (Meteorology)
<b>Service modules</b>	Faculty of Engineering, Built Environment and Information Technology
	Faculty of Humanities
	Faculty of Natural and Agricultural Sciences
<b>Prerequisites</b>	STK 210
<b>Contact time</b>	1 practical per week, 3 lectures per week
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Statistics
<b>Period of presentation</b>	Semester 2

### Module content

Multivariate probability distributions. Sampling distributions and the central limit theorem. Frequentist and Bayesian inference. Statistical learning and decision theory. Simulation techniques enhancing statistical thinking. Supervised learning: linear regression, estimation and inference. Non-parametric modelling. Supporting mathematical concepts. Statistical algorithms. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

### Regulations and rules

The regulations and rules for the degrees published here are subject to change and may be amended after the publication of this information.

The [General Academic Regulations \(G Regulations\)](#) and [General Student Rules](#) apply to all faculties and registered students of the University, as well as all prospective students who have accepted an offer of a place at the University of Pretoria. On registering for a programme, the student bears the responsibility of ensuring that they familiarise themselves with the General Academic Regulations applicable to their registration, as well as the relevant faculty-specific and programme-specific regulations and information as stipulated in the relevant yearbook. Ignorance concerning these regulations will not be accepted as an excuse for any transgression, or basis for an exception to any of the aforementioned regulations.

### University of Pretoria Programme Qualification Mix (PQM) verification project

The higher education sector has undergone an extensive alignment to the Higher Education Qualification Sub-Framework (HEQF) across all institutions in South Africa. In order to comply with the HEQSF, all institutions are legally required to participate in a national initiative led by regulatory bodies such as the Department of Higher Education and Training (DHET), the Council on Higher Education (CHE), and the South African Qualifications Authority (SAQA). The University of Pretoria is presently engaged in an ongoing effort to align its qualifications and programmes with the HEQSF criteria. Current and prospective students should take note that changes to UP qualification and programme names, may occur as a result of the HEQSF initiative. Students are advised to contact their faculties if they have any questions.