

University of Pretoria Yearbook 2025

Statistics 220 (STK 220)

Qualification	Undergraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	20.00
NQF Level	06
Programmes	BCom 3-year programme
	BCom 4-year programme
	BCom specialising in Economics
	BCom specialising in Information Systems
	BCom specialising in Investment Management
	BCom specialising in Law
	BCom specialising in Statistics and Data Science
	Bachelor of Information Technology in Information Systems [BIT]
	BSc in Computer Science
	BSc in Information Technology in Information and Knowledge Systems
	BA specialising in Philosophy, Politics and Economics
	BSc in Meteorology
	BSc in Meteorology 4-year programme
Service modules	Faculty of Engineering, Built Environment and Information Technology
	Faculty of Humanities
	Faculty of Natural and Agricultural Sciences
Prerequisites	STK 210
Contact time	3 lectures per week, 1 practical per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	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.

General Academic Regulations and Student Rules

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. The G Regulations are updated annually and may be amended after the publication of this information.

Regulations, degree requirements and information

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

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 (HEQSF) 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.