

## University of Pretoria Yearbook 2022

## Statistics 122 (STC 122)

Qualification	Undergraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	13.00
NQF Level	05
Programmes	BCom (Informatics) Information Systems
	BCom (Law)
	BCom (Statistics and Data Science)
	BCom (Accounting Sciences)
	BCom (Economics)
	BCom (Investment Management)
	BIT (Information Systems)
	BSc (Computer Science)
	BSc (Information and Knowledge Systems)
	BSocSci (Philosophy, Politics and Economics)
	BSc (Meteorology)
Prerequisites	At least a 60% in STK 110 or an average of 60% for either (1) WST 133, WST 143, WST 153; (2) STK 113, STK 123, STK 121; (3) STK 133, STK 134, STK 121; (4) WST 133, WST 143, STK 121 (An aegrotat exam is available to students who obtained 50%-59%)
Contact time	1 practical per week, 1 tutorial per week, 3 lectures per week
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 2

## **Module content**

Inferential concepts. Experimental and observational data. Measures of association, uncertainty and goodness of fit. Sampling error and accuracy of estimation. Introduction to linear regression, reduction of variation due to regression. Conditional distributions of residuals. Simulation based inference: conditional means and prediction intervals. Bivariate data visualisation. Supporting mathematical concepts. Statistical concepts are demonstrated and interpreted through practical coding and simulation within a data science framework.

This module is also presented as a summer school for students who initially elected and passed STK 120 with a final mark of at least 60% and then decides to further their studies in statistics as well as for students who achieved a final mark of between 40% - 49% in STC 122 during semester 2.



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.