



University of Pretoria Yearbook 2023

Statistics 143 (STK 143)

Qualification	Undergraduate
Faculty	Faculty of Economic and Management Sciences
Module credits	16.00
NQF Level	05
Programmes	BCom extended programme
Prerequisites	STK 133 and WTW 133 or STK 133 and WTW 135 GS or STK 133 and WTW 133 BAM 133 or WST 133 and WTW 135 GS.
Contact time	1 practical per week, 2 tutorials per week, 6 lectures per week, Foundation Course
Language of tuition	Module is presented in English
Department	Statistics
Period of presentation	Semester 2

Module content

Optimization techniques with economic applications: system of linear inequalities, solving of linear programming problems by means of the graphical and extreme point methods. Applications of differentiation and integration in statistic and economic related problems: the limit of a function, continuity, rate of change, the derivative of a function, differentiation rules, higher order derivatives, optimization techniques, the area under a curve and applications of definite and indefinite integrals in Economic and Probability applications. Introduction to probability theory. Probability and inference: Theoretical distributions. Sampling distributions. Estimation theory and hypothesis testing of sampling averages and proportions (one-sample and two-sample cases). Report writing and presentation. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques.

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