



# University of Pretoria Yearbook 2016

## Statistics 143 (STK 143)

**Qualification** Undergraduate

**Faculty** [Faculty of Economic and Management Sciences](#)

**Module content** Optimisation 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, optimisation 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). Non Parametric tests. Report writing and presentation. Identification, use, evaluation and interpretation of statistical computer packages and statistical techniques.

**Module credits** 16.00

**Programmes** [BCom \(M\) Four-year programme](#)

**Prerequisites** STK 133 and WTW 133

**Contact time** 1 practical per week, 2 tutorials per week, 6 lectures per week

**Language of tuition** English

**Academic organisation** Statistics

**Period of presentation** Semester 2

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