

## University of Pretoria Yearbook 2024

# Statistics 143 (STK 143)

| Qualification          | Undergraduate   |
|------------------------|---|
| Faculty                | Faculty of Economic and Management Sciences   |
| Module credits         | 16.00   |
| NQF Level              | 05  |
| Programmes             | BCom 4-year 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.

#### **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.