

STATISTICIAN

S **STATISTICIANS** should have a mathematical aptitude and be able to reason logically and have a good sense for analyzing problems. They should be able to interact with, and present their findings in an understandable manner, to a variety of people who are not skilled in statistical matters. Statisticians should therefore be able to use computers competently.

Statistics gives meaning to numbers and includes all the ways in which information is collected, processed and interpreted.

The work of a statistician is about:

Planning and collection of data

Processing and analysis of data

Drawing conclusions from data

Making reasonable decisions based on the results of data analysis

ACADEMIC/RESEARCH STATISTICIANS

Academic and research statisticians are concerned with the training of students and statistical research in a chosen specialized field.

New theories are developed and existing theories are revised, providing the theoretical foundations upon which the applied statistician depends.

APPLIED STATISTICIANS

Applied statisticians are concerned with problems of data interpretation faced by the commercial, industrial and scientific sectors. They assist in planning procedures to collect and analysis information. Applied statisticians work in such diverse fields as finance, economics, engineering, medicine, psychology, astronomy, chemistry, life insurance and agriculture.

They are responsible for the design of the sampling procedures and experiments and are able to calculate the reliability of the conclusions.

Many other professionals such as actuaries, operations researchers and economists require a sound knowledge of statistics.

COMPULSORY SCHOOL SUBJECTS

Mathematics.

ADMISSION REQUIREMENTS

The minimum requirements is a Senior Certificate with matric exemption.

TRAINING

UNIVERSITY

Prospective statisticians can follow a BSc degree in Statistics or Mathematical Statistics. Normally this will be combined with Computer Science. Another option for aspiring statisticians is a degree course leading to a Bachelor of Commerce (BCom). Such a course will have a strong economics orientation.

UNIVERSITY OF TECHNOLOGY

MTech: Mathematical Technology is offered.

WORK OPPORTUNITIES

Statisticians are needed where data is collected, processed and analyzed for decision making. Employment exists in the Agricultural-, Science-, Industrial-, Medical- and Human Research Councils; Market research firms; educational and research institutions, e.g. universities; government; Eskom; banks; financial institutions and insurance and investment companies e.g. Old Mutual. Many statisticians act as consultants to the private and public sector.



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Central University of
Technology, Free State

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UNIVERSITY OF
KWAZULU-NATAL

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University of Fort Hare

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