



UNIVERSITY OF NAIROBI
Institute of Tropical & Infectious
Diseases (UNITID)

Master of Science Course in
Medical Statistics (MSc. Medstat)

Introduction

Statistics can generally be defined as a branch of mathematics concerned with drawing inferences from numerical data based on probability theory. Medical Statistics deals with the application of statistical principles and methods required in the research and management of health related studies.

Currently there is demand for qualified professionals to serve in the fields of national health systems, the pharmaceutical industry, and in research which is important to the development of a country. Due to changing trends in the patterns of disease occurrence and resistance to the available means of management, there is need for trained health statisticians who are able to gather and utilize the available information to interpret and predict events for purposes of management and control of diseases.

The MSc. in Medical Statistics course aims at training such personnel by equipping them with the relevant knowledge of theoretical and practical aspects of statistics and their applications in health research.

Objectives

1. Equip students with theoretical and practical knowledge;
2. Develop and apply techniques of mathematics, statistics and computing to health research and health care delivery;

3. Provide statistical expertise on public health issues;
4. Analyse and interpret medical data;
5. Develop research designs and engage in health research.

Who is eligible?

Candidates eligible for admission into the MSc. degree in Medical Statistics shall have the following qualifications:

1. Holders of Bachelors degrees in Medicine & Surgery, Dental Sciences, Pharmacy, Veterinary Medicine and Nursing Sciences from the University of Nairobi.
2. Holders of at least an upper second class Bachelors degree in Science, Engineering, Agriculture and Arts based subjects with strong mathematical background from the University of Nairobi.
3. Holders of a lower second class degree in the disciplines specified in (2) above plus postgraduate diploma or at least two years of relevant research/work experience in their respective fields.
4. Holders of a pass degree in the disciplines specified in (2) plus a post-graduate diploma in the relevant disciplines with at least two years of research/work experience.
5. Holders of a pass degree in the areas specified in (2) plus at least five years of research/work experience.
6. Any other qualifications equivalent to the above from institutions recognized by the Senate of the University of Nairobi.

Course contents

The course consists of fifteen (15) core units, one (1) elective unit and a project. A course unit is made up of 45 contact hours, comprising of lectures, tutorials and practical.

A candidate is required to take a minimum of three (3) course units and a maximum of five (5) course units in a semester.

The following course units are offered in the 1st year: Statistical Methods I & II, Epidemiological Methods I & II, Data Management and Statistical Computing, Multivariate Statistical Methods, Sample Survey Methods, Health Services Survey and Statistics, Design of Clinical Trials and Statistical Genetics I.

In the second year the course units are divided into core and elective units.

The Core Units include: Advanced Statistical Models, Statistical Demography, Statistical Methods for Survival Data, Professional Issues in Medical Statistics and Modelling Dynamics of Infectious and Communicable Diseases, while **Elective Units** are: Biological Assays, Statistical Genetics II, Environmental Statistics and Occupational Health, and Spatial Statistical Methods in Health Sciences.

The students will also be required to carry out a research project.

Mode of delivery

Through lectures, tutorials, seminars/journal clubs, practicals and a research project

Course Duration

The MSc. degree course in Medical Statistics covers a minimum duration of four (4) semesters and maximum duration of ten (10) semesters of fifteen (15) weeks each.

Fee Structure

1st year:

Kenyans (inclusive of tuition, all other university expenses)	Ksh. 284,700
Non Kenyans	US\$ 4,645

2nd year

Kenyans	Ksh. 299,500
Non Kenyans	US\$ 4,860

Additional Information

- Allow an additional Ksh. 100,000 (US\$ 1370) for project expenses.
- Accommodation and living expenses, at least Ksh. 30,000 (US\$ 420) per month.
- Book allowance Ksh. 70,000 (US\$ 960).

Enquiries

For more information concerning fee details and other issues, please contact:

The Course Coordinator (MSc. Medstat)
c/o Institute of Tropical and Infectious Disease (UNITID) at the address below.

How to apply

Application forms are available at the following addresses:

Director,
University of Nairobi
Institute of Tropical and Infectious Diseases (UNITID)
College of Health Sciences
P.O. Box 19676 – 00202
Nairobi.
Tel + 254 20 2726765
Fax + 254 20 2726626
Email: unitid@mail.uonbi.ac.ke
Website: www.uonbi.ac.ke/UNITID