MASTER OF SCIENCE IN STATISTICAL SCIENCE

Strathmore University

Institute of Mathematical Sciences

PROGRAM DETAILS

Statistical skills are important in all applied sciences such life sciences, medicine and related fields, physical sciences, social and behavioural sciences and are becoming increasingly so in emerging fields that require analysis of complex data such as in marketing and finance. There is a constant demand for graduates with these skills in both industry and academia. The Masters of Science in Statistical Science offered at the Strathmore Institute of Mathematical Sciences, Strathmore University, provides an excellent balance between theory and application. The broad base of training in the important areas of statistical science will allow the student to successfully progress into professional employment or research.

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STUDENT TESTIMONIAL

" *Strathmore has trained and given me the confidence to share this knowledge, but it wasn't just about the new knowledge; the main benefits came from doing assignments, class presentation, receiving individual feedback from the professors and interacting with invited international faculty. We were also exposed to the use of scientific method of writing (Latex) and use of different statistical packages e.g. R, Stata, Winbugs and SPSS. The experience has been one of its kind. Strathmore helped build my interpersonal skills that are highly valuable in the job market. Through the Msc Statistics program the value of excellence, professionalism and integrity were instilled since day one which have proved to be invaluable in transforming the community at large. Indeed doing a Master of Science program at Strathmore has been transformative.*"

Mr. Kevin Otieno, Doctoral Fellow

CAREERS

We prepare our graduates for a diverse range of careers including: biostatistics, financial analysis, market research, econometrics, epidemiology, bioinformatics, demography, statistical programming, psychometrics, and any other career choices or fields which are of in-terest to the students.

In Kenya, a graduate with a Master of Science in Statistical Sciences can work with research firms like IPSOS/ Synovate, Kenya National Bureau of Statistics, Africa Population and Health Care Research Centre, UN-HABITAT, KEMRI, KEFRI, KARI, ILRI, CDC, Regional Centre for Mapping of Resources for Development and many other firms that require the expertise of a Statistician.

MODE OF STUDY

Evening Program: 5:30 pm - 8:30 pm on weekdays
Duration: 2 years
Intake: September
Course Fees: Approximately Kshs 610,380

PROGRAM STRUCTURE

The course covers 16 course units offered over 4 academic semesters and a subsequent dissertation project. The program relies on MATLAB, R, and C++ as the computing languages for modelling. Some of the core modules include:
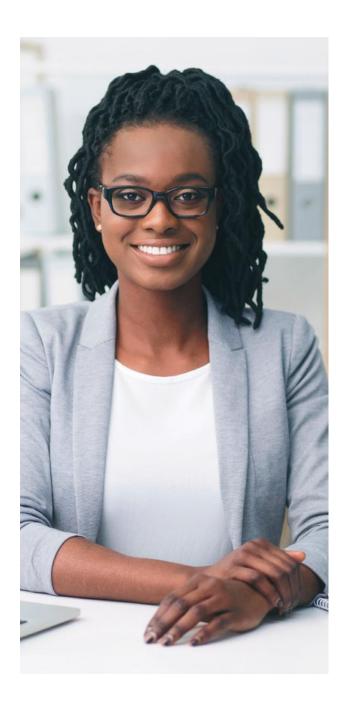
- Probability Theory
- Statistical Inference
- Linear Models
- Design and Analysis of Surveys
- Bayesian Modelling and Data Analysis
- Stochastic Processes
- Predictive Modelling and Statistical Learning
- Computational Statistics
- Multivariate Statistical Analysis
- Longitudinal Data Analysis
- Time Series Analysis and Forecasting
- Machine Learning and Pattern Recognition

PROGRAM BENEFITS AND OUTCOMES

i.   The students will be able to judge, discuss and communicate the principles of estimation and inference that underpin basic statistical theory and statistical analysis;

ii. The students will have deeper knowledge of the use of statistical methods in empirical applications, be able to analyse, interpret, and critically evaluate results on the basis of scientific and ethical considerations;

iii. This program will enable the students to critically, independently, and creatively identify and formulate problems of significance for statistical science;

iv. Provide the student with appropriate statistical and analytical training to carry out doctoral studies at any leading institution worldwide
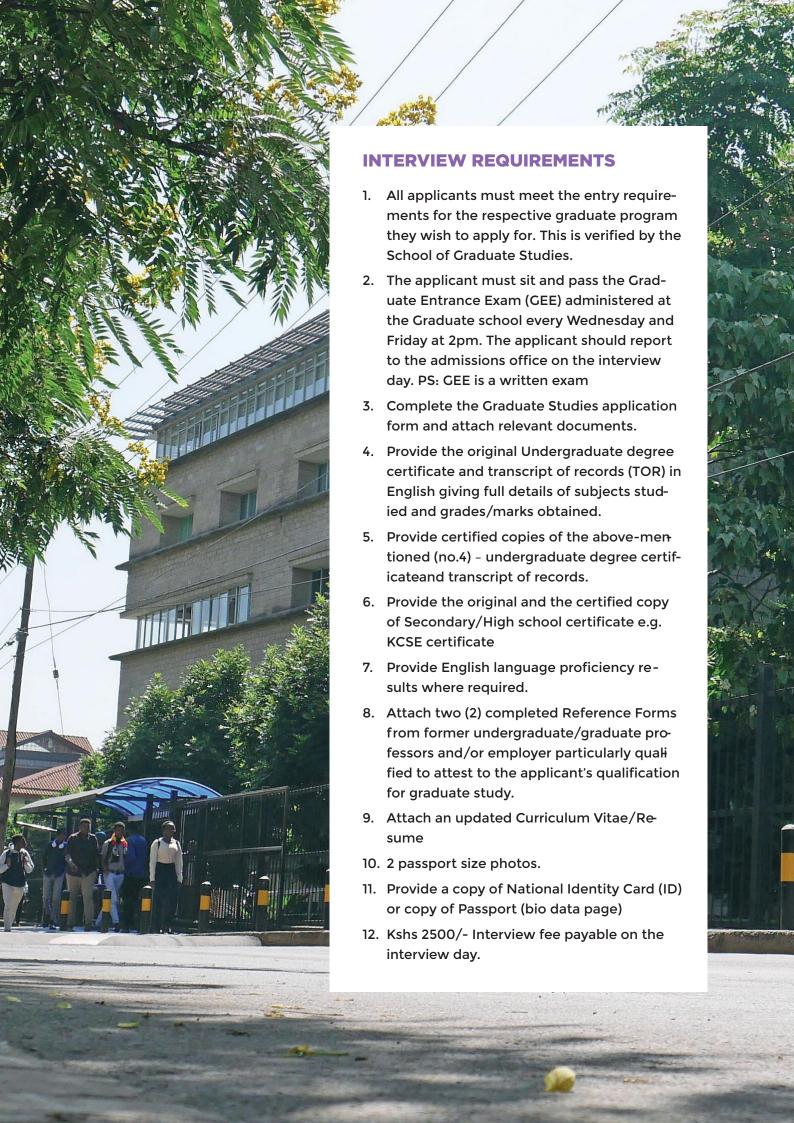
ENTRY REQUIREMENTS

a) The following are eligible for admission into the MSc. Statistical Science:

- Holders of First Class or Upper Second in Mathematics or a related discipline; OR

- Holders of Lower Second Class degrees in Mathematics or a related discipline plus Postgraduate Diplomas in relevant areas; OR

- Holders of Lower Second Class Degrees in Mathematics or related disciplines plus a minimum of two years of working experience OR

- b) In addition to meeting the above criteria, the applicants will be required to attend and pass an oral interview and a Graduate Entrance Examination (GEE).

- c) They will also be required to present two reference letters from academic referees.

HOW TO APPLY

In case you are interested kindly subscribe to the program by filling in your contact details and relevant information on our website at **http://sims.strathmore.edu/** or email us at **sims@strathmore.edu** and we will contact you with more information on how you can enrol for this course.

INTERVIEW REQUIREMENTS

1. All applicants must meet the entry requirements for the respective graduate program they wish to apply for. This is verified by the School of Graduate Studies.

2. The applicant must sit and pass the Graduate Entrance Exam (GEE) administered at the Graduate school every Wednesday and Friday at 2pm. The applicant should report to the admissions office on the interview day. PS: GEE is a written exam

3. Complete the Graduate Studies application form and attach relevant documents.

4. Provide the original Undergraduate degree certificate and transcript of records (TOR) in English giving full details of subjects studied and grades/marks obtained.

5. Provide certified copies of the above-mentioned (no.4) – undergraduate degree certificateand transcript of records.

6. Provide the original and the certified copy of Secondary/High school certificate e.g. KCSE certificate

7. Provide English language proficiency results where required.

8. Attach two (2) completed Reference Forms from former undergraduate/graduate professors and/or employer particularly qualified to attest to the applicant's qualification for graduate study.

9. Attach an updated Curriculum Vitae/Resume

10. 2 passport size photos.

11. Provide a copy of National Identity Card (ID) or copy of Passport (bio data page)

12. Kshs 2500/- Interview fee payable on the interview day.
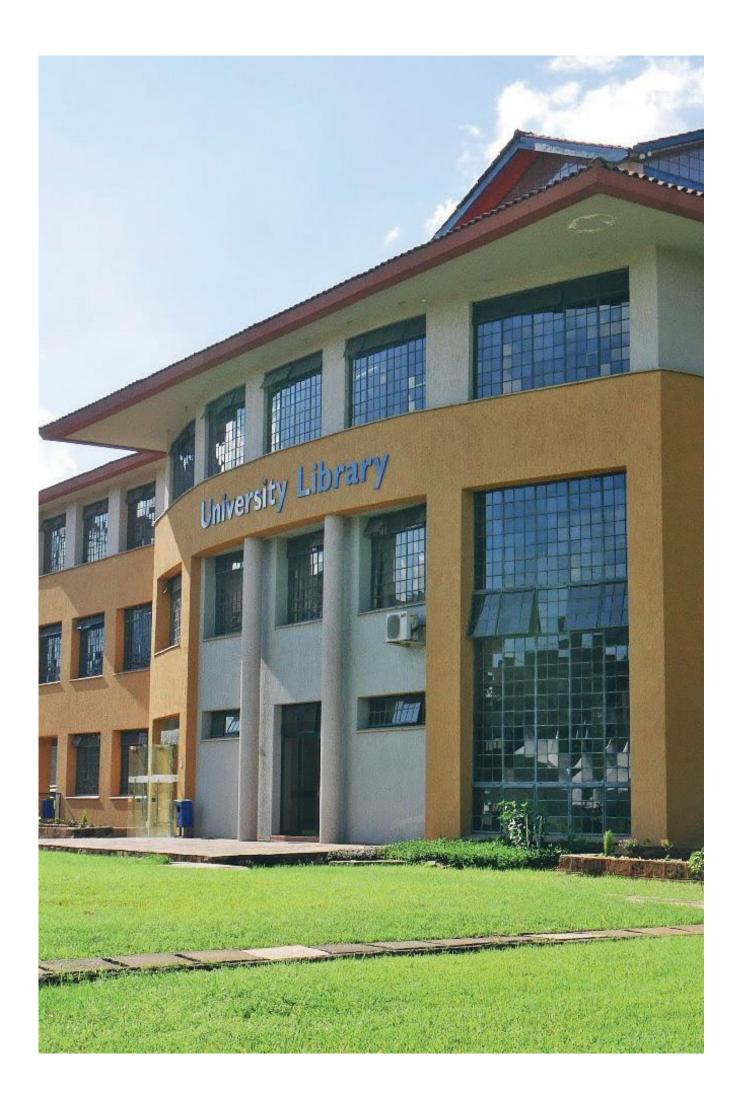
Why Strathmore University?

1. **Global exposure and international outlook:** Strathmore's international faculty and partners, global alumni network and diverse student body connect you with a world of opportunities.

2. **A Pioneer in Standards:** Strathmore University, its alumni and its partners have always been at the forefront of business education and standards. It is the first university in Kenya to become ISO 9001:2000 certified.

3. **World – class facilities:** Strathmore has avant-garde architecture that has been designed and built uniquely and in compliance with energy conservation requirements ensuring a holistic learning experience for students.

4. **People-oriented:** Strathmore believes that people matter. They are the heart of any organization and key to sustaining any organization. People are always our main focus in all we do. We give you personalized education, with special emphasis on human and ethical values.

5. **Teaching staff:** Our dedicated teaching staff are active professionals bring you up to speed with real - life situations through innovative teaching and individualised attention and guidance.

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