



# Master of Science in Biomathematics



**Strathmore University**  
Institute of Mathematical  
Sciences

## PROGRAMME OVERVIEW

The Master of Science in Biomathematics focuses on methods of applied mathematics and mathematical modelling needed to provide quantitative answers to practical questions in biomedical research. A key characteristic of this program is the careful integration of mathematical methods with the theory and practice of modern computational biology. The objective of the program is to produce graduates with a rigorous foundation in the mathematical modelling of biological systems, and with practical ability in biomedical modelling.

## CAREERS

MSc Biomathematics opens up a wide range of careers such as: Agricultural and Food Scientist, Biochemists and Biophysicist, Biomedical Engineer, Geoscientist, Hydrologist, Marine Biologist, Natural Sciences Manager, Molecular Biologist among many others.

In Kenya, a graduate of MSc. Biomathematics has opportunities for a placement with institutions such as:

- KEMRI-Wellcome group (Kenya Medical Research Institute)
- KEFRI (Kenya Forestry Research Institute)
- KALRO (Kenya Agricultural & Livestock Research Organisation)
- ILRI (International Livestock Research Institute)
- Pharmaceutical companies
- Military organisations such as the Kenya Navy
- Other research institutions

## Student Testimonial

“A whole new world with exciting possibilities of finally making headway in, previously, unsolved medical problems has emerged for me by taking Masters of Science in Biomathematics! The ability to model disease dynamics on infectious and non-communicable disease using already available (public) genetic data is ushering in new insights. New combination of medicine, mathematics and computational prowess could not come at a more opportune time. I am thankful to Strathmore’s Institute of Mathematical Sciences for availing this program here in Kenya.”

Dr Andrew Cole (Medical Doctor)

## MODE OF STUDY

Part-time classes from **5:30 pm to 8:30 pm**

**Intake:** January

**Duration:** 2years

## HOW TO APPLY?

Applications can be done through **admissions@strathmore.edu** or **+254 703 034 032**

## WHY STUDY IN STRATHMORE UNIVERSITY?

- 1. Global exposure/ international outlook:** Strathmore's international faculty and partners, global alumni network and diverse student body connect you with a world of opportunities.
- 2. Academic rigour:** Through our innovative research and learning approach, you will enhance your capacity to manage and solve business challenges.
- 3. People-focused:** We believe that putting people at the center of decisions is essential to sustainable business growth and outstanding business education.
- 4. Teaching staff:** Our dedicated teaching staff are active professionals who will bring you face-to-face with real situations. You will learn through:
  - hands on disease modelling facilitated by senior researchers in the field
  - Individualized attention and guidance, and
  - Small class groups.
- 5. Timely completion of studies:** Students are assured of completion of an uninterrupted learning period of 2 years.
- 6. World-class facilities:** Strathmore has avant-garde architecture that has been designed and built uniquely and in compliance with energy conservation requirements. This ensures delivery of a rich and holistic learning experience for its students.

## EXPECTED OUTCOMES

- 1. Competitive skills:** Strathmore aims to help you develop leadership skills, which will be useful in the world of work. Your investment will have a high return in terms of your competitive advantage.
- 2. Realistic approach:** You will adopt a reflective, analytical, participative approach to education and consequently to your career.
- 3. Great counsel:** Our lecturers and coaches are experts in their respective fields and they will be a resource to help you develop a new perspective and see new opportunities.
- 4. Powerful networks:** You will learn from and alongside diverse, talented classmates as you share a transformative journey together. As such, you will develop a network of friends and contacts that will last a lifetime.
- 5. Exceptional learning experience:** You will acquire skills to take on any challenge and think critically backed by solid fundamental knowledge. As a result, you will gain hands-on-experience to tackle real life

## ENTRY REQUIREMENTS

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

- 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
- Holders of other related qualifications from recognized universities

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

Admission Office, Strathmore University  
Ole Sangale Road, Madaraka Estate,  
P.O.Box 59857-00200 City Square, Nairobi, Kenya.

+254 (0) 703 034000/203/232/297  
admissions@strathmore.edu  
www.strathmore.edu