

laboratories and the pharmaceutical industry.

They can also help in coming up with new vaccines and effective treatment for diseases such as Tuberculosis (TB), HIV and AIDS, Cholera, Ebola and many more. Essentially, a career in this field is about saving lives. The degree programme will also provide an ideal preparation for future researchers in the fields of immunology.

### iii) Bachelor of Science in Medical Imaging

This programme also starts in the 2018/19 academic year and candidates to start in the first year have already been selected in readiness for opening in September. Graduates in Medical Imaging will be able to work either in public or private hospitals, provide medical imaging services, or work in medical laboratories, research laboratories and the pharmaceutical industry.



A CT Scanner that is used for body scanning

### Admission Eligibility

Candidates are eligible to pursue any of the three programmes currently being offered by the AMS if they have any of the following qualifications:

- a) **Entry in Year 1:** MSCE, "O" Level, IGCSE, GCE at least six credits including: Biology, Physics, Chemistry (or Physical Science), Mathematics and English with minimum grade of 3 points for MSCE or B for IGCSE in all the above subjects obtained. For purposes of selection, 'O' level grades shall be interpreted as follows: A\*=1, A=2, B=3, C=5, D=7, EFG=8.
- Entry in Year 2:** A-level with at least C grade in the

following subject Physics, Chemistry, and Mathematics, with Biology at 'O' level. But must take and pass Drawing 1 and Drawing 2.

**OR**

- Any other related qualification from a recognized institution of higher learning may be assessed by the Admissions Office.
- b) For Malawian students, selection to the University is coordinated by the National Council of Higher Education (NCHE). For foreign students, selection shall be based on merit and ability to pay all the required fees.

### Fees:

- (i) Malawian undergraduate students pay K450,000 per academic year.
- (ii) Foreign students from SADC countries pay US\$3,000 per academic year while those from other countries pay US\$3,500 per academic year.
- (iii) Other costs include K40,000 residence fee per semester; living expenses of approximately K500,000 per year and medical insurance whose amount will be advised.
- (iv) Postgraduate students pay US\$5,000 as tuition fees but there are also other charges for accommodation, thesis binding and research, all of which can be paid in Malawi Kwacha equivalents.

### MUST Facilities

The university comprises three functional areas. The teaching and learning area includes the teaching block comprising 60 lecture rooms with sitting capacity of 6000 students, the teaching hospital, the administration complex, the library and science and technology building and the auditorium. The sports area includes sports facilities such as an outdoor track field, basketball and volleyball courts and a football field. The living area includes student hostels and the service area.

### MUST Contacts:

The University Registrar  
Malawi University of Science and Technology (MUST)  
Bingu Highway, off Robert Mugabe Highway,  
Near Ndata Farm,  
P.O Box 5196  
Limbe  
Tel: 265 1 478 000  
Email: [registrar@must.ac.mw](mailto:registrar@must.ac.mw)  
Website: [www.must.ac.mw](http://www.must.ac.mw)

**OR**

The Executive Dean, AMS  
Email: [wmandala@must.ac.mw](mailto:wmandala@must.ac.mw)



# Academy of Medical Sciences

Where Excellence Reigns

## History

The Malawi University of Science and Technology (MUST) was established on December 17, 2012 by the Malawi University of Science and Technology Act No. 31 of 2012 as the fourth public university in Malawi. It opened its doors to pioneer students in April 2014 but was officially opened by His Excellency the President, Professor Arthur Peter Mutharika on October 24, 2014. It currently has around 1,400 students both at undergraduate and postgraduate levels comprising Malawians and foreign students.

Situated near Ndata Farm in the cool and tea growing district of Thyolo in southern Malawi, MUST is some 27km from Limbe, a town in the country's commercial city of Blantyre. The university comprises three functional areas: Teaching and learning, sports and living service.

The MUST campus occupies a total plot area of 215,000m<sup>2</sup> and has total building area of 46,000m<sup>2</sup>. The student seating capacity of this university is 6000. Evidently, MUST, which is still young, fresh and growing, will hugely contribute towards government of Malawi's efforts to increase access to higher education and create the much needed pool of skilled and knowledgeable professionals to spur production by adding value to natural resources and other raw materials with the aim of turning Malawi from the undesirable position of being a net consuming and importing nation towards the country's vision of being a net producer and exporter.

## University Vision

A world class centre of science and technology education, research and entrepreneurship.

## University Mission

To provide a conducive environment for quality education, training, research, entrepreneurship and outreach to facilitate economic growth in Malawi and beyond.

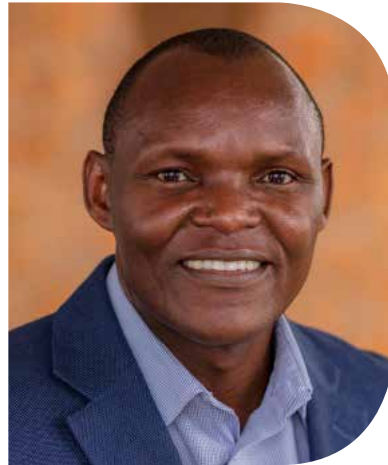
## University Core Values

Commitment, professionalism, integrity, competitiveness, openness to diversity, entrepreneurship and innovativeness

## Schools

The University has adopted the model of having schools instead of faculties and currently has four functional schools, namely the Malawi Institute of Technology (MIT), Ndata School of Climate and Earth Sciences (NSCES), Bingu School of African Culture and Heritage (BISCH) and the Academy of Medical Sciences (AMS).

## Academy of Medical Sciences (AMS)



The AMS is currently headed by Executive Dean, Professor Wilson Mandala who holds a PhD in Malaria Immunology from the Liverpool School of Tropical Medicine (LSTM), a Master's Degree in Molecular Biology and Biochemistry from Kings College, London and a Bachelor of Science degree in Chemistry from Chancellor College, University of Malawi.

The AMS is the last of the four schools to be opened at MUST in 2017 and it opened with one programme—a Bachelor

of Science degree in Medical Microbiology, which was initially under MIT. When fully operational, AMS plans to have four departments, two of which are already operational in some capacity. These departments are: Biological Sciences Department, Clinical Sciences Department, Medical Diagnostics Department and the International Centre for Quality Management Training and Research (ICQ). The AMS aims to provide training to undergraduate and postgraduate students in different degree programmes in different disciplines and conduct relevant and demand-driven research in areas of interest in Malawi in line with the Malawi National Health Research Agenda.

The Biological Sciences Department has been set up to accommodate undergraduate courses that have both medical as well as environmental implications. Currently it offers a Bachelor's degree in Medical Microbiology which was introduced in 2016 under MIT. But starting in the 2018/19 academic year, under the Medical Diagnostics Department, AMS will offer two more programmes; Bachelor of Science in Immunology and Bachelor of Science in Medical Imaging.

From the 2019/20 academic year, the AMS plans to introduce BSc degree in Medical Diagnostics and in Traditional and Herbal Medicine. The Clinical Sciences Department will host the MUST Teaching Hospital and will mainly focus on offering courses related to non-communicable diseases (NCDs) such as cancer with the first programme to be offered being an MSc in Oncology and Palliative Care. The ICQ intends to offer undergraduate and postgraduate courses in Quality Management.

## Academic Programmes under AMS

### Current Programmes and those starting September 2018:



Students busy in a microbiology laboratory

## i) Bachelor of Science in Medical Microbiology

Medical Microbiology is the study of organisms or microbes that cause infection in humans. The discipline seeks to determine what organisms cause infections? Why? When? Who is at risk? Is there treatment available? It, therefore, provides the tools to understand the epidemiology, diagnosis, treatment and prevention of most important infectious diseases. Some key applications of medical microbiology include clinical laboratory diagnosis, disease surveillance, development and testing of vaccines and therapeutics, quality assurance, food processing industries and waste management.

Malawi is faced with skills shortages in the areas of clinical laboratory support and quality assurance services. Malawi's National Health Research Agenda (NHRA) aims to build capacity that will support services and research which is responsive to the county's priority health needs.

Graduates of this degree programme will fit into various sectors of the healthcare system in Malawi, including medical research institutions, pharmaceutical industries, quality control, laboratories and training institutions such as universities, colleges and polytechnics.

## ii) Bachelor of Science in Immunology

The programme starts in the 2018/19 academic year and selection of pioneer students has already been done. Graduates in Immunology, based on their knowledge and expertise in immunology, can work in medical laboratories, research



Picture of a BD Flow Cytometer, one of the pieces of equipment extensively used in immunology