

comprehensive educational programme. Manufacturing engineers are involved with the production process, from product design through post-sale service. If a new product or system is needed, it is the manufacturing engineer who will work on the team to design and produce it efficiently, economically, safely, and in an environmentally benign manner. Consequently, there is high demand for manufacturing engineers in the Malawi industries and throughout the world.

### (v) Bng (Hons) in Mechanical Engineering (Textile)

Importation of textile products such as clothing, carpets, bandages, and other fabrics or textile products used in different fields has a negative impact on the economy of our country. The production of textile products has declined in the past years. Besides textile engineers are few and most of them are trained abroad. As such there is a need to rejuvenate the textile industry in our country through training of experts who can spearhead production of textile products in our country. The need for textile products is always increasing since it is proportional to population growth. As such, MUST seeks to develop the textile engineering curriculum necessary to equip students with practical skills and theoretical knowledge in line with Malawi's policies.



### (vi) BSc in Computer Systems and Security

Computer systems and security play an important role in supporting commerce, banking, telecommunication, health care and other socio-economic agendas. However, system breaches and failures have the potential to undermine the safety and viability of industrial and commercial systems, fuel criminal activity and endanger human life. With the technological revolution brought about by the integration of computer technology in almost every aspect of life, security challenges inherent in computer hardware and software are on the increase. Worldwide, computer systems are falling victim to a unique variety of security breaches that usually have profound negative social, economic and legal implications. The programme develops experts to impart necessary knowledge and skills to safeguard computer systems from vulnerabilities and security breaches.

### (vii) BSc in Business Information Technology

Many organisations are in the process of introducing information and communication technologies (ICT) to enhance or improve their operations.

In terms of human capital, there is no reliable link between business and ICT professionals. In this "technological world" there is a need to have some individuals at all management levels who are conversant with both business and ICT. Through this programme, MUST intends to contribute to the solid training of professionals with knowledge and skills on the management of IT-supported business systems in any kind of organisation. Business Information Technology deals with all aspects of business, management and information technology (IT). It combines business science, management science and ICT.

### Admission Undergraduate Students

- (i) Candidates must have at least six credits at MSCE, IGSC or their equivalent which must include Physical Science or Physics and Chemistry, Biology and Mathematics with minimum grade of 4 points for MSCE or B for IGSC 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.
- (ii) 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 tuition of 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 semester and medical insurance whose amount will be advised.
- (iv) Postgraduate students pay US\$5,000 as tuition fees but there are also charges for accommodation, thesis binding, research etc, 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, MIT  
 Email: [dmweta@must.ac.mw](mailto:dmweta@must.ac.mw)/ [deanmit@must.ac.mw](mailto:deanmit@must.ac.mw)



# Malawi Institute of Technology

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 uses schools instead of faculties and currently has three functional schools, namely the Malawi Institute of Technology (MIT), Ndata School of Climate and Earth Sciences (NSCES) and the Bingu School of African Culture and Heritage (BISCH). The fourth school, the Academy of Medical Sciences (AMS), is yet to open although ground work has started to have it functional any time soon.

## Malawi Institute of Technology

It is headed by the Executive Dean, Dr Davies Mweta, who holds a PhD in Chemistry and Plant Sciences from University of the Free State, RSA, MSc in Applied Chemistry from University of Malawi and BEd from University

of Malawi, Chancellor College. After his PhD, he worked as postdoctoral research scientist in the biochemistry laboratory of the Plant Sciences department at the University of the Free State. He has previously worked as a secondary school teacher of science, Senior Lecturer, Principal Lecturer and Chief Lecturer in Chemistry at Domasi College of Education where he also held positions of Head of Department, Dean of Science and Deputy Principal. At MUST, Dr Mweta started as a Senior Lecturer in Chemistry where he was also Head of Basic Sciences department and Coordinator for Postgraduate Studies.

The MIT has three departments, namely Engineering Department; Applied Studies; and Department of Computer Science and Information Technology.

## Undergraduate Programmes under MIT

### (i) BEng (Hons) in Biomedical Engineering



This is the application of engineering principles and techniques to the medical field. It combines design and problem solving skills of engineering with medical and biological sciences to help improve patient health care and the quality of life of individuals. It is an exciting, comprehensive and developing field which combines knowledge of electronics, information technology, mechanical, chemical, and materials engineering with the life sciences including medicine, biology and molecular biology. Examples of applications of biomedical engineering are the development and manufacture of biocompatible prostheses, medical devices, diagnostic devices and imaging equipment and pharmaceutical drugs. The programme will address challenges in designing, manufacturing, adapting and maintaining sophisticated medical equipment, among others.

### (ii) BEng (Hons) in Chemical Engineering

This is a discipline influencing numerous areas of technology. Broadly, chemical engineers design, develop and operate processes for converting and refining raw materials into products. They may improve/develop new processes and materials; design/improve methods and equipment for extraction, filtration, distillation; design/operate plants and specify equipment/processes

and layout; test the quality of the process/product; find faults in plant equipment and take corrective action to ensure safe operation. The programme is designed to develop experts who will compliment Malawi's efforts of becoming a manufacturing and exporting country.

### (iii) BEng (Hons) in Metallurgy and Materials Engineering

It deals with all aspects of the operation, separation, extraction, and purification of ores, metals, and mineral products by both physical and chemical methods. Within the mineral industry, metallurgists use their knowledge of chemistry and physics, mineralogy, underlying process fundamentals and process engineering to control and improve the processes that separate, concentrate and recover minerals and their valuable metals from the natural ores. Mineral process engineers transform low value impure minerals found in nature, recycled materials and by-products of other processing operations into commercially valuable products.



### (iv) BEng (Hons) in Manufacturing Engineering

International economic competition is fierce today. Manufacturers rely on trained, dedicated professionals to develop and implement the equipment and production methods required to keep ahead of their competitors.

The course integrates highly diverse and exciting technologies and disciplines, such as design, robotics, micro-electrochemical systems (MEMS), manufacturing systems and control, and green manufacturing, into a