

How technology is reshaping learning

MONDAY FEBRUARY 24 2020



Students need to be keen towards the emerging technology in their fields. file PHOTO

In Summary

The world is continuously evolving as is the job market. Technology presents a major interruption of how we lived our lives in the past. This is why learners must reinvent themselves by choosing to study what might be more relevant at the moment.

ADVERTISEMENT

By PAUL MURUNGI

Last month, President Yoweri Museveni while attending the 12th graduation ceremony

of Gulu University, he reiterated his call of prioritising sciences. According Museveni,

there was need to design and teach courses that solve key societal issues. Museveni went

on to identify agriculture, industry, services, and ICT as the key to solving societal issues.

The changing global technological landscape has led to radical shifts in the education sector. As such, students and parents must make right choices to remain relevant in the 21st Century world.

We cast a glance on some of the future courses in broad categories that have been reshaped by digital disruption and make analysis through industry experts and academicians.

Agriculture

It is the backbone of the country's economy with at least 70 per cent employed in the sector, this according to the sector minister, Vincent Bamulangaki Ssempijja. In various universities in the country, Agriculture is widely studied under different undergraduate courses such as: Agricultural engineering, Agricultural and rural innovation, Agricultural Land use and Management, Horticulture, Agribusiness management, Human nutrition, Environmental science and meteorology geographical sciences. This makes agriculture one of the courses to look out for at the turn of the decade. According to the Paul Mwambu, the commissioner in the department of crop inspection and certification, at the Ministry of Agriculture, Animal Industry and Fisheries. He says agriculture remains a top notch course especially in the 21st century where climate change is a threat to food production.

“Agriculture can't be ignored especially in the developing countries. We need closer interaction between academia, practitioners in the field and the farmers,” he says.

He adds: “We need an engagement to see the kind of agricultural extension officer we need in future; for example with the effects of climate change, it will create demand for

irrigation, so we are looking at how the next agricultural engineer will be like. With increased pests and diseases, how should agronomists, plant pathologists, position themselves? We shall need to position ourselves properly in the emerging challenges.”

Law

Legal services remain in high demand due to evolving needs. From being policy analysts, lobbyists, legal editors, clerks, management consultants, lecturers and legal secretaries. The list of opportunities is endless at the bottom for a career in law.

Brighton Barugahare, a professional lawyer and the assistant commissioner on policy analysis in the ministry of education says, the legal profession will remain more relevant in the 21st Century.

Barugahare says Law is a constant because it promotes rule of law and good governance. He tips law students to venture into new fields such as ICT where there's increase in cyber-crime. He also mentions oil and gas as an booming field.

He notes that the creation of the East African Community will require lawyers to adjust to regional needs because of the dynamism involved but also tap into the opportunities that come with regional integration.

Medicine

With emerging and complex diseases such as coronavirus in China or Ebola in DR Congo killing millions of people in days, as well the emergence of new lifestyle diseases such as diabetes and cancer, one may have to agree that there's more need for medical personnel in the world than ever.

As such pursuing a course in medicine is one sure to way to secure a good job in an increasingly unemployed world. Some of the courses a student can pursue in medicine

include: Pharmacy, dental surgery, nursing, medical radiography, biomedical sciences, biomedical engineering, optometry and dental laboratory technology. According to Dr Edward Ogwang, a dermatologist and medical lecturer, medicine as a course is still going to remain one of the most vital courses because of the need for medics.

He explains that for Uganda in particular, medical students need to work hard and specialise with a rise in need for specialised treatment. He mentions that doctors need to specialise especially in areas such as organ transplant since many Ugandans are travelling abroad for organ transplant.

He adds that oncology radiation (treating cancer through radiotherapy) remains unexploited field where there's need for more specialists.

ICT

We live in a digital world and therefore pursuing a course in ICT is worth an investment. The Uganda Investment Authority (UIA) mentions that ICT opportunities exist across various sectors such as agriculture, health, tourism, banking, insurance, oil and gas and public administration. Further, it mentions that the opportunities include; digitisation of services, productivity solutions, web applications, software development, warehousing and network integration.

According to Usama Kasagga, a lecturer of ICT and the head of faculty of sciences at Islamic University In Uganda (IUIU) Kampala campus, he explains that in the coming years, the trend of ICT will be changing.

“The industry is focusing on the Internet of Things and cloud computing depending on how technology is evolving. In the next five years, as a university, we shall focus on

cloud computing because that's where most technology companies are heading," he says.

Courses

Engineering

With the discovery and planned development of the oil and gas industry in the Albertine region, engineering remains a top notch course to look out for in the coming years. The industry will require a number of engineers with a focus on civil, electrical, mechanical engineering, land surveying and geometrics, architecture, quantity surveying, land economics, telecommunications, construction management.

According to Dr Nabeeta Karanzi, the executive director at Management Training and Advisory Centre (MTAC) in Nakawa, the traditional engineering may not stand the test of time because of the changing circumstances such as climate change.

He says: "The world is changing; we want engineers that are highly innovative and can understand the given challenges and design products that can solve the given challenges. That's what will define engineering in the next years in society."

According to Minister Ronald Atwine, a civil engineer, student engineers need to be keen towards the emerging technology in the engineering field.