



**UNIVERSITY OF DAR ES SALAAM**  
**OFFICE OF THE DEPUTY VICE CHANCELLOR -**  
**ACADEMIC**



**UNDERGRADUATE PROGRAMMES**  
**CAREER GUIDE**

**UNIVERSITY OF DAR ES SALAAM**

**OFFICE OF THE DEPUTY VICE CHANCELLOR-  
ACADEMIC**



**UNDERGRADUATE PROGRAMMES CAREER GUIDE**

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University of Dar es Salaam  
Office of the Deputy Vice Chancellor - Academic  
P.O. Box 35091  
DAR ES SALAAM

Tel/Fax: +255-22-2410077

Email: [dvc-arc@udsm.ac.tz](mailto:dvc-arc@udsm.ac.tz)

Website: [www.udsm.ac.tz](http://www.udsm.ac.tz)

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## PREFACE

Welcome to the University of Dar es Salaam! We are excited that you have discovered the Undergraduate Programmes Career Guide. This guide is designed to be a resource for you during every step on your career journey at UDSM and beyond. Engaging with the university and our resources is one of the most important things you can do during your time at UDSM. One of our primary goals is to demystify the career exploration process in relation to the degree application process and, to support you as you plan your future career pathway. Career guidance plays an important role in helping our graduates and the job market meet their goals. A career should be chosen with utmost care, thought and planning. We believe that our prospective students have different innate capacities and abilities and hence, aptitudes for different kind of work. We want you to match your occupational aspirations with the degree programmes we offer for mutual benefits. We strongly believe that this guide shall promote equity for all our future graduates.

Recent evidence suggests that social mobility relies on wider acquisition not just of knowledge and skills, but also understanding how to use them (competence). In this context, the mission of career guidance is fast becoming part of lifelong learning. Not only does it help students reflect on their interests, ambitions, abilities, and future qualifications but it also helps students to understand the product market and education system. Overall, career guidance trying to teach us to plan and make decisions about work and learning.

This career guide will help familiarize you with various academic units and the programmes that they offer at our esteemed university. The guide shall also familiarize you with the processes involved in identifying careers and their linked degree programmes. If you choose to join the University of Dar es Salaam, you will want to keep this guide handy throughout your time at UDSM as it will help you at each stage of your journey. Use this guide to explore career pathways that match your skills and interests. Use it to learn how to expand your competencies and to present them to employers in a way that lets them see your talents and abilities. In the following pages, you will find relevant and valuable information pertaining to programme expected learning outcomes and career prospects for graduates of the degree programme. For the first time, we have aggregated the career prospects to include formal employment, entrepreneurial and community-based opportunities. These improvements are aligned with the prevailing technological, social and economic

advancements that our graduates face as they enter the job race. Additionally, if you are exploring degree programmes, you will find information on the programme description. At the end of the guide, you shall find the job industry and employment opportunities index. This index is an alphabetical list of job industries and employment opportunities with reference to the pages on which they are mentioned. The index shall maximise your use of the guide and provide an easy roadmap as well.

This career guide is for ALL UDSM undergraduate students no matter where you are in the career exploration or job search process. We hope that all your questions on what career shall you pursue by applying for which degree are answered in this guide.

Karibu UDSM!

Prof. Bonaventure S. Rutinwa

**Deputy Vice Chancellor - Academic**

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## ABBREVIATIONS AND ACRONYMS

B.A.	Bachelor of Arts
B.Com.	Bachelor of Commerce
B.Ed.	Bachelor of Education
B.Sc.	Bachelor of Science
CCTV	Closed Circuit Television
CoAF	College of Agriculture and Food Technology
CoET	College of Engineering and Technology
CoHU	College of Humanities
CoICT	College of Information and Communication Technologies
CoNAS	College of Natural and Applied Sciences
CoSS	College of Social Sciences
DUCE	Dar es Salaam University College of Education
EIA	Environmental Impact Assessment
GIS	Geographical Information System
ICT	Information and Communication Technologies
IDS	Institute of Development Studies
IFAMU	Idara ya Fasihi, Mawasiliano na Uchapishaji
IKS	Institute of Kiswahili Studies
ILUKII	Idara ya Lugha ya Kiswahili na Isimu
IMS	Institute of Marine Sciences
IoT	Internet of Things
IP PBX	Internet Protocol Private Branch Exchange
IT	Information Technology
MD	Medical Doctor
MUCE	Mkwawa University College of Education
NGO	Non-Governmental Organisation
SAS	Statistical Analysis System
SCADA	Supervisory Control and Data Acquisition

SJMC	School of Journalism and Mass Communication
SoED	School of Education
SoAF	School of Aquatic Sciences and Fisheries Technology
SoED	School of Education
SoMG	School of Mines and Geosciences
SPSS	Statistical Package for the Social Sciences
STATA	Statistical Software for Data Science
UDBS	University of Dar es Salaam Business School
UDSE	University of Dar es Salaam School of Economics
UDSM	University of Dar es Salaam
UDSM-MCHAS	University of Dar es Salaam Mbeya College of Health and Allied Sciences
UDSoL	University of Dar es Salaam School of Law

## **COLLEGE OF AGRICULTURE AND FOOD TECHNOLOGY**

The College of Agriculture and Food Technology (CoAF) comprises four teaching departments, namely Departments of Food Science and Technology, Crop Sciences and Beekeeping Technology, Agricultural Engineering and Agricultural Economics and Business. The college offers the following undergraduate programmes:

- a. Bachelor of Science in Food Sciences and Technology
- b. Bachelor of Science in Beekeeping Sciences and Technology
- c. Bachelor of Science in Agricultural Engineering and Mechanization
- d. Bachelor of Science in Agricultural and Natural Resources Economics and Business

### **Department of Food Science and Technology**

#### **Bachelor of Science in Food Science and Technology**

This is a four-year programme aimed at producing graduates who are trained in all aspects of food science and technology and who are capable of utilising agricultural resources efficiently and sustainably. The key objective of this programme is to help meet the manpower needs of the food industry and related sectors in Tanzania and in the region.

#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge on the principles and practical aspects of food science and technology.
- b. Apply problem-solving skills needed in food science and technology.
- c. Integrate theories and practical/field training skills in the area of food science and technology.
- d. Demonstrate competencies necessary for establishing and managing business firms in the area of food science and technology.

---

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including food and beverages production business.
- b. ***Employment opportunities:*** Graduates of the programme can be employed in different food processing and manufacturing industries, research institutions, universities and various government agencies responsible for food safety, quality and governance. They can also be employed by portable water industries, edible oil refining companies, beverages industries and related services.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based nutritional and food safety advocacy groups.

## Department of Crop Sciences and Beekeeping Technology

### Bachelor of Science in Beekeeping Science and Technology

This is a three-year programme aimed at train students in Beekeeping Science and Technology, and environmental conservation throughout the beekeeping value chain.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge on the principles and practical aspects of beekeeping science and technology.
- b. Equip with problem-solving skills needed in beekeeping science and technology.
- c. Apply entrepreneurship skills in the development of the beekeeping sector by converting knowledge and skills into services or products.
- d. Demonstrate competencies necessary for establishing and managing business firms in the area of beekeeping science and technology.

---

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including bee products value addition, apitherapy and commercial beekeeping.
- b. ***Employment opportunities: Graduates*** of the programme can be employed by the government as beekeeping extension agents, planning, monitoring and evaluation specialists, policy and legislation officers, conservationists, and in various research institutions as a researchers, bee breeders, and beekeeping science instructors. Graduates have potential in private sectors as product developers in cosmetic, pharmaceutical, foods and beverages products.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based beekeeping and associated products advocacy groups.

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## Bachelor of Science in Crop Science and Technology

This is a three-year profession-oriented programme aimed at building human capacity in crop sciences and related technologies.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Gain a wide range of knowledge on the principles and practical aspects of crop science and technology.
- b. Equip with problem-solving skills needed in crop science and technology including improving crop productivity in a sustainable manner in rural, peri-urban and urban settings.
- c. Demonstrate competencies necessary for establishing and managing business firms in the area of crop science and technology.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including production of crops, crop seeds and their products, and crop protection products (pesticides). Graduates are able to establish their own or lead agencies in crop science and technology. They can be involved in designing, implementing, managing and monitoring agricultural development programmes and projects. The graduates of this programme may engage in commercial agriculture or seed production.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as field officers, extension agents, agricultural education instructors, Plant Breeders, sustainable agriculture specialists, Precision Agriculture Specialists, agricultural biotechnologists, seed production specialists, agronomists, plant pathologists, agro-ecology specialists, and data mining and analysis specialists, in government, private and non-governmental institutions.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based crop production and associated products advisory groups. They may provide support to agricultural communities in matters of crop production value chain, mechanisation, preservation, processing and marketing skills.

## Department of Agricultural Engineering

### Bachelor of Science in Agricultural Engineering and Mechanisation

This is a four-year programme that provides training to students in various areas related to agricultural production. The programme includes courses from the College of Engineering and Technology.

## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge on the principles and practical aspects of agricultural engineering and mechanisation.

- b. Apply problem-solving skills needed in agricultural engineering and mechanisation.
- c. Demonstrate competencies necessary for establishing and managing business firms in the area of agricultural engineering and mechanisation.

---

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including setting up businesses dealing with automated hydroponics systems and automated spraying of pesticides. The graduates can also set up business ventures that involve designing, supplying and installing different kinds of irrigation systems, designing and fabricating different agricultural machines with which farmers can simplify activities such as farm preparation, planting, weeding, pruning, harvesting, storing and transporting agricultural produce for their own enterprises or any place of their formal employment. In addition, graduates of this programme are also equipped with skills that enable them to develop technologies which utilise sustainable sources of energy and process agricultural by-products into biofuels.
- b. ***Employment opportunities:*** Graduates of the programme can be employed in the agricultural sector in areas such as irrigation schemes, large- and medium-scale commercial agricultural enterprises, government agencies like research institutes, agriculture institutes, and irrigation commissions.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based agricultural engineering and mechanisation, and associated activities. In addition, graduates of this programme are also equipped with skills that enable them to develop technologies which utilise sustainable sources of energy and process agricultural by-products into biofuels.

## Department of Agricultural Economics and Business

### Bachelor of Science in Agricultural and Natural Resources Economics and Business

This is a three-year programme aimed to train students in applied economics and in the area of agricultural and natural resources. The programme offers a combination of skills relating to agriculture, natural resources, business and social sciences, which are necessary for managing agribusiness and related institutions.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge on the principles and theories in agricultural and natural resources economics and business.
- b. Apply problem-solving skills needed in agricultural and natural resources economics and business.
- c. Demonstrate competencies necessary for establishing and managing business firms in the area of agricultural and natural resources economics and business.

#### CAREER PROSPECTS

- a. **Entrepreneurial opportunities:** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties. They can start their own businesses, perform business and economic policy analyses, use tools for performing economic and business analysis to solve problems in various aspects of agriculture and natural resources.
- b. **Employment opportunities:** Graduates of the programme can be employed in agro-industries, natural resource-based institutions in areas of data analysis, business analysis, project appraisal and management, production and marketing.
- c. **Leadership/Community-based opportunities:** Graduates of the programme can offer leadership in NGOs and community-based agricultural and natural resources economics and business. They can provide support in value addition of community resources.

## **COLLEGE OF ENGINEERING AND TECHNOLOGY**

The College of Engineering and Technology (CoET) comprises five teaching departments, namely Departments of Chemical and Processing Engineering Transportation and Geotechnical Engineering, Structural and Construction Engineering, and Mechanical and Industrial Engineering. The college offers the following undergraduate programmes:

- a. Bachelor of Architecture
- b. Bachelor of Science in Chemical and Process Engineering
- c. Bachelor of Science in Civil Engineering
- d. Bachelor of Science in Electrical Engineering
- e. Bachelor of Science in Geomatics
- f. Bachelor of Science in Industrial Engineering
- g. Bachelor of Science in Mechanical Engineering
- h. Bachelor of Science in Quantity Surveying
- i. Bachelor of Science in Textile Engineering
- j. Bachelor of Science in Textile Design and Technology

### **Department of Chemical and Process Engineering**

#### **Bachelor of Science in Chemical and Process Engineering**

This is a four-year programme, aiming to impart knowledge and skills to students so that they can design, construct and operate relevant equipment. Students receive hands-on training in the workshops at the College of Engineering and Technology. At the end of each academic year, students are engaged in an 8-week practical training programme in industries.

#### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Apply chemical and processing engineering concepts to solve real life problems in the industry.
- b. Analyse and interpret the data generated in the laboratory or plant for improvement of services.

- c. Use modelling and simulation tools for the chemical engineering process.
- d. Make changes in the process in order to get the product of specific property demanded by the customer.

---

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme, can start his/her chemical production business e.g. refining food products, detergents: Also can work as a consultant in Chemical and process industries to design, operate and optimize processes for adding value to raw materials in chemical production and processing companies.
- b. ***Employment opportunities:*** graduates of the programme, can work in food processing industries, including flour-milling and juice-making industries: They work in industries that produce building materials such as cement and paints, roofing and plastering materials: the pharmaceutical and general chemical industries also need chemical engineers e.g. cosmetic and domestic hygiene industries: Also can be employed by chemical production and processing companies, water treatment industries, food manufacturers, oil refining/petrochemical companies and related service and contractor companies.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme, can also consider leadership roles or community-based roles where they can use their Engineering knowledge and skills to offer solutions that meets the needs of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

## Department of Transportation and Geotechnical Engineering

### Bachelor of Science in Geomatics

This is a four-year programme aiming to help meet the national demand for geomaticians/spatial data scientists with knowledge and skills in the geomatics.

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## LEARNING OUTCOMES

At the end of the program, graduates shall be able to:

- a. Collect, process and present data about the earth's surface using conventional, modern methods and techniques.
- b. Carry out cadastral surveys necessary for registering land, obtaining a title deed and secure land tenure.
- c. Use state-of-the-art techniques in doing mining surveys and route surveys, and in monitoring engineering structures.
- d. Use geodetic methodologies in predicting, monitoring and mitigating disasters arising from environmental changes, structural deformation and geophysical phenomena such as earthquakes, volcanoes and landslides.
- e. Provide geospatial services to various user groups or customers so that they make informed decisions.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can establish geomatics firms for consultation services to road and other construction projects, mining companies, industrial businesses and agencies within Tanzania and abroad.
- b. ***Employment opportunities: Graduates*** of the programme can be considered for employment in government agencies, municipal and town councils as spatial data scientists responsible for spatial data acquisition, store data, manipulate/analyse data, visualise data and assist in all stages of natural resource development and planning, and in national socio-economic infrastructure development and management.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme, can also consider leadership roles or community-based roles where they can use their knowledge and skills through advancing the community infrastructure development and land management.

### Bachelor of Science in Civil Engineering

This is a four-year programme designed to respond to the societal need for civil engineers and its emphasis is placed on the fundamentals of civil engineering principles and designing techniques. This programme provides students with a solid background on one of the following areas of concentration: water resources engineering, structural engineering, transportation engineering, geotechnical engineering and surveying/geomatics. The programme helps meet the national demand for engineers with knowledge of and skills in civil engineering.

#### LEARNING OUTCOMES

At the end of the program, graduates shall be able to:

- a. Use knowledge, good reasoning and quantitative skills to design and implement creative and sustainable solutions professionally and ethically.
- b. Plan, analyse, design, implement, operate and maintain civil engineering structures and infrastructure.
- c. Engage in life-long learning to overcome the challenges facing the profession and the nation at large.
- d. Exhibit good communication, and interpersonal and resource-management skills as leaders in the civil engineering profession.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can serve as technical consultants or technical writers through design, analyse, implement and manage the structure or infrastructure in government.
- b. ***Employment opportunities:*** Graduates of the programme can work as civil engineers for engineering firms and industrial businesses or agencies within Tanzania and abroad. They are equipped with skills to construct highways, roads, railroads, bridges, tunnels, airports, dams, harbours, channels, irrigation systems etc.

- c. **Leadership/Community-based opportunities:** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills by advising the community on management of the government public infrastructures.

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## **Bachelor of Architecture**

This is a five-year programme that aims to provide basic undergraduate education required in designing construction. The programme helps meet the national demand for architects with knowledge of and skills in building construction and engineering.

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### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Effectively plan, analyse, design, construct, operate and maintain buildings.
- b. Use knowledge, good reasoning and quantitative skills to design and implement creative and sustainable solutions.
- c. Engage in life-long learning to overcome the challenges facing the profession and the nation at large.
- d. Exhibit good communication, and interpersonal, and resource-management skills as leaders in the building construction profession.
- e. Identify and solve problems in the built environment professionally and ethically.

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### **CAREER PROSPECTS**

- a. **Entrepreneurial opportunities:** Graduates of the programme can serve as technical consultants to plan, analyse, design, construct, operate and maintain buildings for government agencies, building industries and in architectural and engineering firms.
- b. **Employment opportunities:** Graduates of the programme can work as architects for government agencies, building and construction industries and contractor agencies within Tanzania and abroad.

- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can advise the community or government on plan and design of houses and other infrastructures for specific community.

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### **Bachelor of Science in Quantity Surveying**

This is a four-year programme that aims to provide basic undergraduate education required in the construction industry. Emphasis in the programme is placed on the costs and economic aspects of building and civil works. The programme helps meet the national demand for quantity surveyors with knowledge of and skills in building construction and engineering.

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### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Use knowledge, good reasoning and quantitative skills to design and implement creative and sustainable solutions.
- b. Effectively plan, analyse costs and materials, construct, operate and maintain buildings professionally and ethically.
- c. Engage in life-long learning to overcome the challenges facing the profession and the nation at large.
- d. Exhibit good communication, and interpersonal and resource-management skills as leaders in the building construction profession.
- e. Identify and solve problems in the built environment.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can serve as consultants to estimate costs, quantities, and project timelines and provide this information to clients for building or construction industries and, architectural and engineering firms.
- b. ***Employment opportunities: Graduates*** of the programme can also be employed as quantity surveyors in government agencies, architectural and engineering firms, as well as building contractors within Tanzania and abroad.

- c. **Leadership/Community-based opportunities:** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to offer the advice on the budget for community construction projects.

## Department of Mechanical and Industrial Engineering

### Bachelor of Science in Industrial Engineering

This is a four-year programme that aims to provide basic engineering education needed in industries. The main objective of the programme is to produce graduates who possess the skills and knowledge to design, install and maintain efficient and effective operating systems and, who are capable of improving the productivity and effectiveness of the same systems.

#### LEARNING OUTCOMES

At the end of the program, graduates shall be able to:

- a. Use a knowledge application of manufacturing processes with an emphasis on the production of durable goods from engineering materials.
- b. Develop an understanding of concurrent engineering and the importance to manufacturing industries.
- c. Apply quantitative analysis techniques to the solution of manufacturing problems.

#### CAREER PROSPECTS

- a. **Entrepreneurial opportunities:** graduates of the programme, can serve as consultants in industries and engineering agencies to increase productivity through the management of workers, methods of business organisation and technology. This is achieved by determining the best ways to use basic factors of production such as machines, materials, information and energy to make a product or provide a service.
- b. **Employment opportunities:** graduates of the programme, have a wide range of employment opportunities in different industries,

government agencies, consulting engineering firms, hospitals and higher learning institutions as industrial engineers.

- c. **Leadership/Community-based opportunities:** *Graduates* of the programme, can also offer an advice to community on the durable material for different uses.

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## **Bachelor of Science in Mechanical Engineering**

This is a four-year degree programme that helps to meet the demand for broad-based professionals in mechanical and industrial engineering. The programme enables students to analyse mechanical engineering problems, perform operational planning and implementation, design and manufacture products, test mechanical systems and maintain various mechanical engineering systems.

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### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Identify, formulate, and solve complex engineering problems by applying principles of mechanical engineering.
- b. Pursue successful careers, in mechanical engineering or related fields that enhance personal fulfilment and contribute positively to society and their communities.
- c. Apply the principles of sustainable engineering in their professional careers.

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### **CAREER PROSPECTS**

- a. **Entrepreneurial opportunities:** *Graduates* of the programme can serve as consultants in industries and engineering agencies in the development of technologies for manufacturing and processing industries e.g., energy sources, including solar and wind energy. Also, they can design and manufacture engineering products, power plants, aeroplanes, automobiles, and heating and air-conditioning systems.
- b. **Employment opportunities:** *Graduates* of the programme are employed in all engineering-related industries and services. They can also work in manufacturing and processing industries,

construction industries, mining industries, transportation industries, consulting firms, government and other institutions as engineers, managers, designers or researchers.

- c. ***Leadership/Community-based opportunities: Graduates*** of the programme, can apply engineering design to produce solutions that meet specified needs to the community sectors e.g., public health, safety, environmental, and economic factors.

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## **Bachelor of Science in Textile Design and Technology**

This is a four-year degree programme that aims to account technological developments in science and engineering and how that can support the textile and allied industries in the country.

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### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Apply technological and creative skills in designing, use of patterns, construction and maintenance of textile artefacts.
- b. Provide managerial and entrepreneurial skills in textile industry.
- c. Transform the textile industry into a competitive and innovative industry.
- d. Takes into consideration community interests and the social benefit.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can serve as consultants Textile industries, self-employment through establishing firms or small-scale manufacturing industries e.g.,making fabrics, shoes and other related textile products.
- b. ***Employment opportunities: Graduates*** of the programme can be employed in the textile manufacturing sector, chemical and polymer industries, paper and pulp industries, leather and tannery industries, shoe and footwear industries, garment and fashion design industries, academic and research institutions industries, government and public institutions.

- c. ***Leadership/Community-based opportunities:*** *Graduates* of the programme, can also consider leadership roles or community-based roles where they can use their knowledge and skills to promote the use of materials, technologies and processes for small businesses within communities.

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## **Bachelor of Science in Textile Engineering**

This is a four-year degree programme that aims to design and integrate textile engineering systems and components that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

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### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Solve complex textile engineering problems properly by applying the principles, methods, techniques and tools of engineering.
- b. Operate and use equipment, instruments and software required for textile engineering practice.
- c. Takes in to account safety measures in the practice of textile engineering.
- d. Elaborate clear and precise technical documentation using norms, symbology and terminology proper of textile engineering.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** *Graduates* of the programme can serve as technical consultants in textile industries, self-employment through establishing firms or small-scale textile industries.
- b. ***Employment opportunities:*** *Graduates* of the programme can be employed in the textile manufacturing sector, academic and research institutions industries, government and public institutions. They are responsible for quality control, process engineering, production control, technical documentation, planning, research and development, marketing, and overseeing various types of equipment and processes used to produce fibres and fabrics.

- c. *Leadership/Community-based opportunities: Graduates* of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to promote the use of materials, technologies and processes for small businesses within communities.

## Department of Electrical Engineering

### Bachelor of Science in Electrical Engineering

This is a four-year degree programme that helps to meet the current and future challenges to meet the need for broad-based professionals in electrical engineering. This programme takes into account the emergence of a significant number of industrial, automated systems and advanced power industry controls as a result of advancements in microelectronics, power electronics and technology. The programme enables students to effectively plan, analyse, design, implement, operate, test, maintain and manage various electrical engineering systems.

#### LEARNING OUTCOMES

At the end of the program, graduates shall be able to:

- a. Have a strong foundation of knowledge in core electrical engineering and abilities necessary to specialise in all areas of electrical engineering such as power electronics, power utilisation, power generation, transmission and distribution.
- b. Have developed problem-solving and design skills for devising and evaluating solutions to electrical engineering problems, including designing components and systems, and doing experiments.
- c. Be well informed about the present and emerging technologies important to electrical engineering.
- d. Possess professional attributes, including communication skills, a teamwork spirit, ethics and appreciation for other disciplines, both technical and non-technical, in order to deal with the impact of technology in the global, societal and organisational contexts.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can serve as consultants for power and controls engineering of high voltage systems, also in plan, analyse, design, implement, operate, test, maintain and manage various electrical engineering systems for clients.
- b. ***Employment opportunities: Graduates*** of the programme can be employed in industries, consulting firms, government and other institutions as electrical engineers responsible to professionally plan, analyse, design, implement, operate, test, maintain and manage various electrical engineering systems.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to design, maintain and manage various electrical engineering systems for society.

## COLLEGE OF HUMANITIES

The College of Humanities (CoHU) comprises six teaching departments and one centre namely, Departments of Archaeology and Heritage Studies, Creative Arts, Foreign Languages and Linguistics, History, Literature, Philosophy and Religious Studies and the Centre for Communication Studies. These academic units offer 18 undergraduate degree programmes, as listed below:

- a. Bachelor of Arts in Archaeology
- b. Bachelor of Arts in Archaeology and Geography
- c. Bachelor of Arts in Archaeology and History
- d. Bachelor of Arts in Art and Design
- e. Bachelor of Arts in Communication Studies
- f. Bachelor of Arts in Diplomatic and Military History
- g. Bachelor of Arts in Film and Television Studies
- h. Bachelor of Arts in Heritage Management
- i. Bachelor of Arts in History
- j. Bachelor of Arts in History and Political Science
- k. Bachelor of Arts in History, Cultural Heritage Management and Tourism
- l. Bachelor of Arts in Language Studies
- m. Bachelor of Arts in Literature
- n. Bachelor of Arts in Music
- o. Bachelor of Arts in Philosophy and Ethics
- p. Bachelor of Arts in Theatre
- q. Bachelor of Arts with Education
- r. Bachelor of Arts with Education (Chinese and English)

### Bachelor of Arts in Communication Studies

The B. A. (Communication Studies) programme is a three-year programme that aims to produce competent graduates who are capable of applying the right scientific techniques, skills, and theories in the field of human communication.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Possess a broad understanding of communication theories and communicate competently in groups and organizations, and monitor and model interpersonal communication competence:
- b. Possess skills to effectively deliver formal and informal oral presentations to a variety of audiences in multiple contexts and construct effective written messages in various formats and styles, to a variety of audiences:
- c. Communicate ethically, responsibly, and effectively as local, national and global citizens and leaders and acquire knowledge and skills necessary to deal with diversities in various communication settings:
- d. Develop quality communication policies and strategies for organizations, institutions and demonstrate diagnostic and self-reflective skills in appropriate situations.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as advocacy, lobbying, content creation for social media and start-ups, scriptwriting for advertisements on media platforms, consultants for communications strategies for various institutions, and graphic and infographic designing.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in publicity, public relations, sales, marketing, communication research, writing and publishing. Other potential areas for employment are tourism, politics and

administration, media, social work, sports and entertainment, health and environmental sectors and in other areas where information processing and transfer is involved.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can consider leadership roles or community-based roles where they can use their knowledge and skills in advocacy, lobbying, development campaigns, political campaign experts and analysts, web-based communications for communities on issues of health, social work and environment, and conflict resolution within their local communities.

## Department of Literature

### Bachelor of Arts in Literature

The B. A. (Literature) programme is a three-year programme that aims at equipping students with literary and critical skills so as to strengthen their writing skills, stimulate their intellectual curiosity, enhance their memory and encourage them to be critical, all of which are important and can contribute immensely to solving these challenges.

### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate the highest-level proofreading and analysing literary works in various genres: prose, poetry and drama paying attention to the content of the respective works as well the conventions of the respective genres.
- b. Develop critical thinking skills as they engage in theoretically based interpretation and analysis of various literary works in classroom and seminar discussions as well as in their writings.
- c. Demonstrate communication and presentation skills acquired during their classroom discussions and seminar presentations, skills that will enable them to participate in local, regional, and international fora and discussions.
- d. Creatively develop literary works like prose, poetry or drama from skills acquired in creative writing courses: in addition, the vast amount of literary works that they would have encountered in the

program is a great exposure to our students which is significant in developing one's writing skills.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in script writing for drama performances, public speaking events, content creation for social media, oratory performances, consultants for literary works, novelist, creative writing etc.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in editorial work and speech writing for public institutions, publishing houses, news agencies, local and international organizations. They can be heritage experts, cultural experts, and publishing agents.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities for their communities.

## Department of Creative Arts

### Bachelor of Arts in Theatre Arts

The B. A. (Theatre Arts) programme is a three-year programme that aims at preparing students who will work skilfully and professionally in the area of theatre arts.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a broad and comparative knowledge of the general scope of theatre subject in all of its major categories including African theatre, World theatre, theory and criticism.
- b. Demonstrate a critical understanding of the essential and movements in in theatre and its role as an art form and develop an awareness of

the nature of theatre knowledge and challenges and opportunities of the theatre industry in Tanzania, Africa and the world at large

- c. Showcase knowledge and skills in acting, play writing, dancing, set designing, production designing, dance choreography and directing, the analysis of theatre production processes, producing original works for stage performances, adopting works and staging them.
- d. Demonstrate competence in understanding varieties of theatre forms and movements around the world.
- e. Demonstrate critical thinking in both identifying and analysing problems and issues in relation to the theatre arts and the society at large.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as theatre companies, organizing drama performances and events, oratory performances, and consultancy for literary, cultural and theatre works. Graduates from this programme can be self-employed as actors, actresses, dancers, comedians, choreographers, playwrights, stage managers, directors of the stage and screen.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in cultural event planning and organization, festival planning and organization, and publishing. They can also be employed as heritage experts, cultural experts, theatre critics, film critics, editors, ghost-writers and producers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities.

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### Bachelor of Arts in Film and Television Studies

The B. A. (Film and Television Studies) programme is a three-year programme that aims at preparing students who will work skilfully and professionally in the area of film and television studies.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a broad and comparative knowledge of the general scope of film studies in all of its major categories including film history, aesthetics, production, distribution, exhibition, theory and criticism.
- b. Demonstrate a critical understanding of the essential and movements in film history and its role as an art form and develop an awareness of the nature of film studies knowledge and challenges and opportunities of the film industry in Tanzania, Africa and the world at large
- c. Showcase knowledge and skills in acting, screenplay writing, production designing, producing, directing, editing, and cinematography, the analysis of film and the production processes, adopting stories from other literary forms such as short stories, novels, plays, etc. into films
- d. Demonstrate competence in understanding varieties of film forms and movements around the world.
- e. Demonstrate critical thinking in both identifying and analysing problems and issues in relation to the film industry and the society at large.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as film and photography companies, organizing events, consultancy for literary, cultural and film works. Graduates from this programme can be self-employed as filmmakers, film directors, scriptwriters, film editors and cinematographers.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in cultural event planning and organization, festival planning and organization, heritage experts, cultural experts, and publishing. They can be employed as film production managers, film artist managers, film marketing managers, film curators, film distributors, film and television programmes

reviewers, cultural officers and personnel, festival organizers and location managers.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities.

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## **Bachelor of Arts in Music**

The B. A. (Music) programme is a three-year programme that aims at preparing students who will work skilfully and professionally in the area of music.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate a broad and comparative knowledge of the general scope of music as a subject and its different areas such as music theory, composition, ethnomusicology, music research and documentation.
- b. Demonstrate a critical understanding of the essential music theories, music elements and concepts of music and an awareness of the nature of music knowledge
- c. Showcase knowledge and skills in creating music, performing music, analysing music works, gathering music works for research and documentation and preserving musical traditions of Tanzania and the globe at large.
- d. Demonstrate competence in describing elements of music and perform scholarly research in music cultures.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as music entertainment companies, organizing events, consultancy for cultural and musical works. Graduates from this programme can be self-employed as pianists, guitarists, disc jockeys, singers/musicians,

music composers, songwriters, music producers, music promoters and sound technicians.

- b. **Employment opportunities: Graduates** of the programme can consider employment opportunities in cultural event planning and organization, festival planning and organization, and publishing. They can be employed as music teachers, music managers, music consultant, researchers, educational entertainers, heritage experts, cultural experts and cultural officers.
- c. **Leadership/Community-based opportunities:** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities.

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### **Bachelor of Arts in Art and Design**

The B. A. (Art and Design) programme is a three-year programme that aims at preparing students who will work skilfully and professionally in the area of art and design.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate a broad and comparative knowledge of the general scope of art and design and its different areas such as fine art, graphic design, textile, fashion, jewellery design, drawing, painting, sculpture and printmaking.
- b. Demonstrate a critical understanding of the essential art and design theories, its elements and concepts.
- c. Showcase knowledge and skills in the development and creation of design solutions for both the industry and individual needs.
- d. Demonstrate competence in describing elements of art and design and perform scholarly research in artistic cultures.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as fashion and jewellery houses, organizing fashion events, organizing exhibitions, consultants for cultural and fashion works. Graduates from this programme can be self-employed as painters, draughtsmen, sculptors, fashion designers, curators, textile pattern designers, fashion show models, tailors, jewellery makers and designers, garment/costume designers, interior designers, fashion show events managers, animators and graphic designers.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in cultural event planning and organization, festival planning and organization, and publishing. They can be employed as fine art teachers, art gallery managers, art therapists, heritage experts, cultural experts, museum curators, art restorers and cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities.

## Department of Philosophy and Religious Studies

### Bachelor of Arts in Philosophy and Ethics

This is a three-year degree programme that exposes students to ethical principles and moral controversies by training professionals who can impartially analyse practical problems and everyday dilemmas, grounded in the literature of ethics applied to various services, such as public, health, business, environment and climate change, civics etc.

## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Perform the basic foundations for reflective thinking, insightful analysis, and balanced evaluation of the matters not only in science

and academics but also in various other fields of social and professional life.

- b. Gain specific skills with opportunities in conflict resolution, institutional ethics monitoring, civic education and mediation, public service institutions, political and social research institutes.
- c. Acquire the skills of analysing complex issues and suggest resolutions to them and apply philosophical methods to philosophical problems and problems of everyday life.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas as consultants for cultural and heritage preservation, systems analyst consultant and critic. Graduates from this programme are expected to be self-employed as consultants for issues related to conflict resolution, bioethics, animal ethics and monitoring.
- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities in the corporate management sector, international development agencies, high profile charities, heritage studies and tourism, travel and hospitality industries, diplomacy, banking and finance sectors, traditional and digital journalism, mass media, human rights and legal advocacy, policy making and analysis, local development sector, human resource and industrial psychology and the academia. They can be employed as organization ethics officers, disciplinary secretariat, investigation and inquiry officers, systems analysts, technical writers and cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities. Graduates have specific skills gained with opportunities in conflict resolution, civic education and mediation, public service institutions, political and social research institutes for the betterment of their communities.

### Bachelor of Arts in Language Studies

The B.A. (Language Studies) programme is a three-year programme aimed at creating professionals in the area of language use in editing and proofreading, language education, publishing, and in translation and interpretation.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire proficiency in language for general proficiency purposes at interpersonal level.
- b. Use English language to communicate knowledge receptively and productively in the formal and informal contexts.
- c. Edit and proofread various types of written texts.
- d. Work as professional interpreters and translators and work as sign language experts.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as consultancy for language, cultural and heritage preservation, language consultancy, bilingual consultancy and linguistic criticism.
- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities in mass media organisations and agencies, publishing houses, editorial and translation firms, language training centres and schools, and advertisement agencies. They can be employed as language editors, interpreters, translators, language laboratory experts, technical writers and cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities.

## Department of Archaeology and Heritage Studies

### Bachelor of Arts in Archaeology

The B.A. (Archaeology) programme is a three-year programme aims to produce competent graduates who are capable of conducting archaeological research, reconstructing environmental history, handling cultural heritage objects and interpreting cultural materials.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate knowledge of past human culture, its evolution and development to the present and its relevance in solving current social, economic and political concerns facing contemporary society.
- b. Show sound knowledge and understanding of the scope and issues within the discipline of archaeology including basic principles of archaeological reasoning (the ability to analyse ancient material culture and archaeological contexts).
- c. Demonstrate key transferable skills, for example archaeological field survey, excavation, recording, site sampling, etiquette and practice, data handling and analytical skills.
- d. Demonstrate proficiency in using appropriate methods and theoretical framework in recovering and documenting a variety of forms of material culture and archaeological contexts
- e. Demonstrate qualification and competence in archaeology for lifelong learning and career development, including independent research abilities, team work, written and oral expression.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas as consultants for cultural and heritage preservation, archaeological site consultant, tourism experts, establish travel companies, establish cultural and heritage companies, and tour guide service companies.

- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities in heritage institutions, museums, heritage management institutions and organizations, parks and conservation area, records and archives management institutions, and research institutions. They can be employed as forensic experts and curators, academic staff, research staff, cultural experts, cultural impact assessment consultants and cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities.

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### **Bachelor of Arts in Archaeology and Geography**

The B. A. (Archaeology and Geography) programme is a three-year programme aims to produce competent graduates who are capable of conducting geo-archaeological research, paleoenvironment, and interpreting archaeological materials, dispense rich history of human, plant and animal evolution, provide an account of the environmental and climatic history and contribute to better understanding of trends in cultural changes.

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#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate knowledge of the past humans and environments through archaeological objects and geographical landscapes and their relevance for understanding current social, economic, political and environment concerns.
- b. Demonstrate skills to use range of evidence from prehistoric remains and geographical information to explore the past and application of key intellectual issues within the disciplines of archaeology, and geography, and in-depth knowledge of selected specialist areas within the disciplines.
- c. Demonstrate key transferable skills, for example archaeological field survey and recording, site sampling, laboratory and critical and analytical skills on the application of more advanced research

methods such as geographical information systems (GIS) into the two disciplines of archaeology and geography.

- d. Show awareness of past environmental change, particularly with respect to understanding and contextualising past cultural change and the role of geography research for informing our understanding of current climate and environmental change issues.
- e. Demonstrate competence in archaeology and geographical skills and show key proficiencies for lifelong learning and career development, including independent research abilities, team work, written and oral expression.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas as consultants for cultural and heritage preservation, archaeological site consultant, tourism experts, establish travel companies, establish cultural and heritage companies, and tour guide service companies.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in heritage institutions, museums, heritage management institutions and organizations, parks and conservation area, records and archives management institutions, and research institutions. They can be employed as environmental-archaeologists, landscape archaeologists, geo-archaeologists, palaeontologists, and archaeological heritage conservation personnel, surveyors, GIS experts, and cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns or as social campaign experts and analysts for their communities.

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## Bachelor of Arts in Archaeology and History

The B.A. (Archaeology and History) programme is a three-year programme aims to produce competent graduates who are capable of conducting archaeological research, and interpreting historical and archaeological materials.

## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate knowledge on theoretical and practical experiences in archaeology as well as historical insights that concerns itself primarily with the study of human's past before and after the advent of written records.
- b. Show sound knowledge and understanding of the scope and issues within the discipline of archaeology and history including basic principles of archaeological and historical reasoning and in-depth knowledge of selected specialist areas within these disciplines.
- c. Demonstrate key transferable skills, for example archaeological field survey, excavation, recording, site sampling, etiquette and practice, data handling and analytical skills, as well as skills to evaluate the sources, methods, motivations, and interpretations behind historical narratives.
- d. Show ability to analyse change over time, the nature of causal relationships, and comparative, cross-cultural and abstract concepts and broad knowledge of the global scope of both disciplines and specialist knowledge of the archaeology and history of selected regions.
- e. Demonstrate qualification and competence in archaeology and history for lifelong learning and career development, including independent research abilities, team work, written and oral expression.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas as consultants for cultural and heritage preservation, archaeological site consultant, tourism experts, establish travel companies, establish cultural and heritage companies, and tour guide service companies.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in heritage institutions, museums, heritage management institutions and organizations, parks and conservation area, records and archives management

institutions, and research institutions. They can be employed as historical-archaeologists, historical landscape archaeologists, palaeontologists, and archaeological heritage conservation personnel, historians and cultural officers.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns, or as social campaign experts and analysts for their communities.

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### **Bachelor of Arts in Heritage Management**

The B.A. (Heritage Management) programme is a three-year programme aims to produce competent graduates who are capable of managing and conserving cultural materials.

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#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate wide knowledge on the basic concepts, principles, debates within cultural heritage studies, nature and presentation of cultural heritage in various contexts.
- b. Demonstrate knowledge on systematic understanding of the professional and research context of cultural heritage studies and knowledge of legislations and various international conventions such as UNESCO regarding cultural heritage and the politics behind cultural heritage protection, conservation and preservation in the world.
- c. Show skills of critically presenting evaluation of key issues relating to cultural heritage: evaluate and apply appropriate theoretical and practical approaches to relevant debates, and integrating the results from fieldwork to answer specific questions and develop new hypothesis.
- d. Show skills of planning, developing and implementing creative solutions to heritage issues thorough the application of appropriate skills and interpretive frameworks and assimilating and synthesising broad theories and models relating to the management and protection of terrestrial and underwater cultural heritage.

- e. Demonstrate competence to work independently or in team, exercising self-direction and problem-solving capabilities to a high level on matter related to cultural heritage and socio-economic development.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas as consultants for cultural and heritage preservation, archaeological site consultant, tourism experts, establish travel companies, establish cultural and heritage companies, and tour guide service companies.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in heritage institutions, museums, heritage management institutions and organizations, parks and conservation area, records and archives management institutions, and research institutions. They can be employed as historical-archaeologists, historical landscape archaeologists, palaeontologists, and archaeological heritage conservation personnel, historians and cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns, or as social campaign experts and analysts for their communities.

## Department of History

### Bachelor Arts in History

The B.A. (History) programme is a three-year programme aims to produce professional historians who are not only equipped with research, writing and debate skills but also relate historical thinking to topical issues of today such as politics, economics, gender, environment, health, conflicts, national archives, social attitudes, heritage and the broader meaning of national museums.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate knowledge and skills on the major trends of historical writing in relation to the social political context of a given country and continent.
- b. Perform comprehensive historical research by writing a history of any organisation/Institution by interpreting its records.
- c. Interpret and analyse archival files and library records by giving them its broader social-political meaning for a given community.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the B. A. (History) programme can establish entrepreneurial prospects in various areas as consultants for historical, cultural and heritage preservation, historical site consultant, tourism experts, establish travel companies, establish cultural and heritage companies, and tour guide service companies.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in heritage institutions, museums, heritage management institutions and organizations, archives and documentation centres, regional and district cultural offices, media houses (historical journalism), ministries and ministerial departments, public institutes, historical sites, and research institutions. They can be employed as historical researchers, historical heritage conservation personnel, historians, educators of history in educational institutions and cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns, preservation of community historical wealth and be social campaign experts.

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## Bachelor of Arts in History and Political Science

The B.A. (History and Political Science) programme is a three-year programme aims to produce competent graduates with knowledge and

skills on the interplay between history, politics and administration in Tanzanian society and beyond.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate knowledge and skills to articulate the existing political situations, public administrative challenges, international relations and diplomatic dynamics as historical processes
- b. Understand the essence of humanity and enhance their capacity to deal with current challenges facing humanity and human relations, nation building and nationalism, and changing global relations.
- c. Demonstrate knowledge, skills and competencies to interpret politics, public administration, and changing local/regional/global relations in their proper historical contexts and subsequently to produce correct knowledge/analyses/interpretations about those issues based on concrete historical precedence

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas as consultants for historical, cultural, political and heritage preservation, historical site consultant, establish cultural and heritage companies, and work as political history analysts and critics.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in heritage institutions, museums, heritage management institutions and organizations, archives and documentation centres, regional and district cultural offices, ministries and ministerial departments, public institutes, historical sites, and research institutions. They can be employed as professional historians, political scientists and public administrators, historians and political scientists in national and international institutions/organisations, and cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based

roles where they can use their knowledge and skills in cultural and heritage development campaigns, preservation of community historical wealth and be social campaign experts for their communities.

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### **Bachelor of Arts in Diplomatic and Military History**

The B.A. (Diplomatic and Military History) programme is a three-year programme aims to bring history at the centre of diplomatic and military thinking and practice in Tanzania and beyond and to prepare graduates who are historically informed when dealing with diplomatic and military issues.

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#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate a broad and comparative knowledge of the general scope of the subject of global history, diplomacy and military relations
- b. Demonstrate an ability to forge international diplomatic relations with other nations or global institutions requires a deeper understanding of the history and interests of those nations or institutions.
- c. Possess an ability to articulate procedures, processes, and techniques of diplomatic negotiations, conflict resolution and peace building and design war and military strategies based on historical precedence, contemporary realities, and global trends.
- d. Identify and analyse global history and changing diplomacy, problems and issues in relation to diplomatic and military histories, the interface between history, diplomacy and war, and history of war and appreciate the diverse strategies and practices that exist in the World.

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#### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects as consultants or critics for historical, political and military issues.

- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in public institutions, ministries and ministerial departments, diplomatic corps and Foreign Service. They can be employed as foreign service officers, diplomatic corps, international relations experts, defence/military attaches, strategists in government and military, historians for foreign service and military sectors, conflict mediators and peace building experts.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns, preservation of community historical and political wealth and be social campaign experts for their communities.

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### **Bachelor of Arts in History, Cultural Heritage Management and Tourism**

The Bachelor of Arts in History, Cultural Heritage Management and Tourism is a three-year programme that aims to bring historical consciousness to the centre of cultural heritage and tourism thinking and practice.

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#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Develop a broad and comparative knowledge of the general scope of the subject of history, cultural heritage and tour management.
- b. Understand how history can be applied in cultural heritage and tourism to produce national histories that foster pride, identity, and traumatic experiences.
- c. Produce historical narratives from cultural heritage and tourism that underscores national histories, identities, and trauma, and market cultural heritage and tourism for national foreign exchange.
- d. Promote national memories, culture, identity, pride and articulate ways of dealing with memory, remembrance and trauma.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas as consultants for historical, cultural and heritage preservation, historical site consultant, establish cultural and heritage companies, tourism experts, establish travel companies, and tour guide service companies.
- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities in heritage institutions, museums, heritage management institutions and organizations, archives and documentation centres, regional and district cultural offices, ministries and ministerial departments, public institutions, historical sites, and research institutions. They can be employed as professional historians, historians in national and international institutions/organisations, cultural officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in cultural and heritage development campaigns, preservation of community historical wealth and be social campaign experts for their communities.

## College-wide programmes

### Bachelor of Arts with Education

This is a three-year degree programme that aims at preparing graduate teachers. The degree programme equips the graduates with skills and knowledge on various disciplines including Kiswahili, Geography, Economics, French, English language, English literature, History, and Political Science.

## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.

- b. Demonstrates the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations
- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

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### **SPECIALISATIONS IN THE B.A. (EDUCATION) DEGREE PROGRAMME**

Students enrolled in the B.A. Education programme are required to take two teaching subjects (content courses) and Education courses. The following teaching subject combinations are offered:

- a. History and Geography
- b. History and English
- c. History and Kiswahili
- d. English and Kiswahili
- e. English and Geography
- f. English and French
- g. History and Political Science (Civic education)
- h. English and English Literature
- i. English and Creative Arts (Music/Fine Art/Drama)

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and

lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.

- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, teacher training colleges, secondary and primary schools. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational logistics officers, educational counsellors, and educational researchers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

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### **Bachelor of Arts with Education (Chinese and English Language)**

This is a three-year degree programme that aims at preparing graduate teachers in Chinese and English. The College of Humanities hosts the Bachelor of Arts with Education (Chinese and English Language) in collaboration with the Confucius Institute at the University of Dar es Salaam.

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#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.
- b. Demonstrate a comprehensive understanding of language teaching/learning theories and practices.
- c. Demonstrate a capacity and aptitude for teaching Chinese and English and develop listening, writing, reading and speaking skills among learners of both Chinese and English as foreign languages

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as the establishment of educational businesses i.e. translation and interpretation services, schools, educational support services and institutions, consultancy for educational services such as scholarships agencies and educational support services.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, teacher training colleges, secondary and primary schools. Graduates of the programme can also be employed as education officers, curriculum developers, educational analysts, education liaison officers, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational logistics officers, educational counsellors, educational researchers etc.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

## **COLLEGE OF INFORMATION AND COMMUNICATION TECHNOLOGIES**

The College of Information and Communication technology (CoICT) comprises of two teaching departments, namely Department of Computer Science and Engineering and Department of Electronics and Telecommunications Engineering. The college offers the following undergraduate programmes:

- a. Bachelor of Science in Business Information Technology
- b. Bachelor of Science in Computer Engineering and Information Technology
- c. Bachelor of Science in Computer Science
- d. Bachelor of Science in Electronic Science and Communication
- e. Bachelor of Science in Electronics Engineering
- f. Bachelor of Science in Telecommunications Engineering

### **Department of Computer Science and Engineering**

#### **Bachelor of Science in Business Information Technology**

This is a three-year programme, geared towards producing quality graduates of high intellectual standard and calibre who are capable of designing, developing and managing business IT systems to meet the current and future computing needs in the business world. It equips students with fundamental and advanced concepts of business and IT, with a particular emphasis on the application of these concepts to advance the field of information technology so that the needs of intricate business applications are met.

#### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Develop and use computer systems and quantitative modelling techniques for solving business problems and making managerial decisions.
- b. Design and implement IT systems in a business environment.
- c. Develop innovative software systems that address business needs.

- d. Integrate business issues, information challenges and technology through develop innovative software systems that address business needs.
- e. Show the qualities of a professional team member in the areas of interpersonal skills, scheduling, working within deadlines and budget restrictions.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish and manage their own businesses using information technology.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in public and private sectors as business analysts, information systems analysts, application systems designers, research assistants, ICT officers, webmasters, information systems auditor, systems administrators, business IT trainers, IT systems project managers and data analysts.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in web-based communications or specify software for communities on issues of health, social work and environment, and conflict resolution.

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## Bachelor of Science in Computer Engineering and Information Technology

This is a four-year programme trains students so that they become computer and IT engineers with the knowledge, skills and ability to design, implement and maintain computer software, computer networks, control systems, security systems, embedded systems, computer hardware as well as the information systems needed today. It is concerned with the design and construction of computers and IT-based systems. It is a broad discipline, which deals with the relationship and interaction between software and hardware in solving real engineering problems. It involves the study of hardware, software, controls, security systems, communications and their interactions.

## LEARNING OUTCOMES

At the end of the program, graduates shall be able to:

- a. Describe the theoretical background of computer engineering, including algorithm design and analysis, data structures, operating systems, computer networks, database systems, artificial intelligence, computer programming and software and hardware engineering.
- b. Design, develop, test, configure and maintain ICT based systems such as data centre systems, structured cabling, server systems, IP PBX, data networks and optical fibre networks.
- c. Design and implement the integrated security systems including CCTV, access control systems, intruder alarm systems, electric fence and fire alarms.
- d. Design and implement different control mechanisms using IoT based embedded systems including smart parking systems, traffic lights control systems, vehicle tracking systems, automatic gate pass systems, SCADA systems and all IT related control systems.
- e. Apply appropriate design, implementation and evaluation theories and fundamentals of computer engineering, and use modern engineering tools to design reliable systems, devices and processes that meet specified requirements.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish and manage businesses related to computer and IT systems engineering. They can serve as consultants in design companies, network equipment companies, mobile companies, software companies, network provider companies, data centres of finance companies, companies in need of skills to design and operate networks, software development companies, education and technology transfer institutions, research and development (R&D) departments, technology consulting firms and technology service companies.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in public and private sectors as computer systems engineers, software developers, network

engineers/administrators, information systems specialists, business process engineers, ICT department and project managers, IT systems security specialists, computer communication experts, systems analysts, computer systems and ICT trainers/tutors, multimedia experts and database managers.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in web-based communications or specify hardware/software for communities on issues of health, social work and environment, and conflict resolution.

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## **Bachelor of Science in Computer Science**

This is a three-year programme and is geared towards producing quality computer science graduates of high intellectual standard and calibre who are capable of designing and developing computer application systems that meet the current and future needs in the field of computing.

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### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Describe the theoretical background of computer science, including algorithm design and analysis, data structures, operating systems, computer networks, database systems, artificial intelligence, computer programming and software engineering.
- b. Demonstrate effective teamwork, communication and ethical skills in a variety of scientific contexts.
- c. Design, implement, and evaluate computer-based solutions to meet specified design and performance requirements.
- d. Apply appropriate design, implementation and evaluation theories and fundamentals of computer science to produce computer-based solutions.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in several areas of computer

science such as the development and implementation of software, and the design of new ways to use computers and effective ways to solve computing problems. Also, can specify computer hardware, software and interface requirements for business information systems.

- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities as system analysts, system administrators, network engineers/administrators/consultants, user interface designers, web developers and webmasters, information systems specialists, internet application programmers, information officers, software developers, business process engineers, ICT projects managers and ICT trainers, in the public and private sectors.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in web-based communications or specify software for communities on issues of health, social work and environment, and conflict resolution.

## Department of Electronics and Telecommunications Engineering

### Bachelor of Science in Electronic Science and Communication

This is a three-year programme that equips students with knowledge and skills in electronics science and communication. Graduates from this program receive fundamental scientific principles to design, implement, manage, and assess electronics and communication systems.

#### LEARNING OUTCOMES

At the end of the program, graduates shall be able to:

- a. Describe fundamental and advanced concepts of Electronics technologies and apply them to further advance the state of technology and meet the needs of the electronics industry.
- b. Develop appropriate electronics analytical models based on given specifications.
- c. Design, implement, test, and use measurement equipment for electronic systems based on given specifications.

- d. Make effective use of key electronics test and measurement equipment.
- e. Demonstrate effective verbal and written communication skills in making presentations to convey a body of technical information in a coordinated and comprehensive manner.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can create self-employment opportunities and generate income in works such as the development and installation of domestic and industrial electronics systems. In addition, these graduates can provide consultancy services in repair and maintenance of electronics and communication systems (e.g., mobile phones, medical instruments, and office equipment).
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in public and private sectors such as aviation, telecommunication, metrology, and television. They can also work in government, public and private sectors in all areas related electronics and communication products and/or services.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in web-based communications or specify electronic and communication system for communities on issues of health, social work and environment, and conflict resolution.

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## Bachelor of Science in Electronics Engineering

This is a four-year programme that provides a broad foundation in electronics engineering by combining classroom, laboratory and fieldwork training. The program prepares graduates for a professional career in electronics engineering.

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## LEARNING OUTCOMES

At the end of the program, graduates shall be able to:

- a. Describe fundamental and advanced concepts of Electronics engineering technologies and apply them to further advance the state of technology and meet the needs of the electronics industry.
- b. Develop appropriate electronics analytical models based on given specifications.
- c. Design, implement, test, and use measurement equipment for electronic systems based on given specifications.
- d. Make effective use of key electronics test and measurement equipment.
- e. Apply fundamental and advanced concepts of Electronics Engineering technologies to meet the needs of the electronics industry.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish their own companies in the fields of mobile telephony, aviation, military, metrology, and mining, among others. Electronics engineers can provide consultancy services their own firm to provide consultancy services in financial institutions, hospitals, government agencies and ministries, telecommunication companies, and transport industries.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in public and private sectors such as automotive industry, manufacturing industries, the world of computers, and more specific fields such as digital signal processing, optoelectronics, and mobile electronics.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to design and create the systems and devices that communities rely upon.

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## **Bachelor of Science in Telecommunications Engineering**

This is a four-year programme that trains students to become telecommunications engineers with knowledge, skills and ability to design, implement and maintain telecommunications systems.

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### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Design, develop, test, configure and maintain electronic communications systems by the application of both analogue and digital techniques and using a variety of electronic instruments, development systems and computer software as applied to the telecommunications engineering field.
- b. Interface analogue and digital systems to provide solutions to a variety of performance and operational problems of a typical telecommunications network.
- c. Interface computer hardware and software with telecommunications systems used in the transmission of both analogue and digital information.
- d. Evaluate, refine and solve engineering problems requiring the exercise of sound technical judgment and knowledge of engineering principles.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** *Graduates* of the programme can establish their own telecommunication companies. They can also provide consultancy services of telecommunication engineering to government agencies and ministries as well as to international organisations e.g., telephone network providers, mobile phone companies, cable and satellite companies, television stations, and Internet service providers.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in public and private sectors. They can be employed to work in the telecommunication industries to design, build, implement, manage, assess, and fix telecommunication systems and networks.

- c. *Leadership/Community-based opportunities: Graduates* of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in web-based communications or specify software for communities on issues of health, social work and environment, and conflict resolution.

## COLLEGE OF NATURAL AND APPLIED SCIENCES

The College of Natural and Applied Sciences (CoNAS) comprises six teaching departments, namely Departments of Botany, Chemistry, Mathematics, Physics, Zoology and Wildlife conservation, and Molecular Biology and Biotechnology. The college offers the following undergraduate programmes:

- a. Bachelor of Science in Actuarial Science
- b. Bachelor of Science in Applied Microbiology and Chemistry
- c. Bachelor of Science in Applied Zoology
- d. Bachelor of Science in Botanical Science
- e. Bachelor of Science in Chemistry
- f. Bachelor of Science in Chemistry and Physics
- g. Bachelor of Science in Mathematics and Statistics
- h. Bachelor of Science in Meteorology
- i. Bachelor of Science in Microbiology
- j. Bachelor of Science in Molecular Biology and Biotechnology
- k. Bachelor of Science in Petroleum Chemistry
- l. Bachelor of Science in Wildlife Science
- m. Bachelor of Science with Education

### Department of Botany

#### **Bachelor of Science in Botanical Sciences**

This is a three-year programme and covers a wide range of botanical sciences to produce graduates who have a good knowledge, skills and competency in botanical sciences, and the forces and factors behind environmental degradation, conservation and biodiversity at all levels (local, national, regional and global).

#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Acquired a wide range of knowledge on of botanical sciences.

- b. Apply problem-solving skills needed in botanical sciences including the mitigation of environmental degradation, biodiversity losses and conservation.
- c. Demonstrate competencies necessary for establishing and managing businesses in the field of botanical sciences.

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## CAREER PROSPECTS

- a. **Entrepreneurial opportunities: Graduates** of the programme can engage in professional consultancy services and opening private firms of the graduate's field of specialties such as mushroom and seaweed cultivation, horticulture, and botanical/flower farms.
- b. **Employment opportunities: Graduates** of the programme can be employed in a wide range of professions related to botanical sciences, including agriculture, natural resources, tourism and biomedical, conservation and environmental research institutions, government agencies, universities in the country, regionally and globally.
- c. **Leadership/Community-based opportunities:** Graduate of the programme can offer leadership in NGOs and other research and conservation groups.

## Department of Zoology and Wildlife Conservation

### Bachelor of Science in Applied Zoology

This is a three-year programme that trains zoologists suited to the current market needs and capable of undertaking research and doing related activities in biomedical sciences, agriculture, biodiversity and conservation, ecology, and Environmental Impact Assessment (EIA).

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge on the principles and practices in various aspects of basic and applied zoology
- b. Apply problem-solving skills needed in Applied Zoology and animal adaptation to environmental change.

- c. Demonstrate competencies necessary for establishing and managing businesses in the field of applied zoology.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including environmental impact assessment and animal husbandry.
- b. ***Employment opportunities: Graduates*** of the programme can be employed by ministries, government agencies and parastatals, and research and higher learning institutions.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can offer leadership in NGOs and other community-based animal welfare and other related groups.

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### Bachelor of Science in Wildlife Science and Conservation

This is a three years programme that produces graduates with basic scientific and conservation knowledge enabling them to comfortably fit into scientific, consultative and management activities in the natural environment. The programme trains professional wildlife scientists, research managers and managers of conservation areas and the wildlife industry.

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### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a detailed perspectives on the principles and practical aspects of conservation biology and wildlife management
- b. Apply problem-solving skills needed in wildlife science and conservation.
- c. Integrate theory and practical/field skills in the area of wildlife science and conservation to make it more relevant in contemporary wildlife and conservation research.
- d. Demonstrate competencies necessary for establishing and managing businesses in the wildlife science and conservation industries.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including environmental impact assessment and wildlife conservation advocacy.
- b. ***Employment opportunities:*** Graduates of the programme can be employed by government agencies, research institutions, district and regional natural resources offices in the local governments, universities and other higher learning institutions. In addition, national, regional and international NGOs which are involved in advocacy for the conservation of aquatic resources are also potential employers of the graduates of this programme.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based wildlife conservation groups.

## Department of Chemistry

### Bachelor of Science in Chemistry

This is a three-year programme aimed at producing graduates with a wide range of skills and knowledge of chemistry principles and its application in industrial processes and research. The key objective of the programme is to empower chemistry graduates with the necessary competence required for handling chemical-related industries with sound concepts of environmental protection and management in relation to chemicals.

## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive understanding of chemistry, together with their concepts needed for research and teaching
- b. Demonstrate knowledge and skills that applies in establishing links between academia, research output and industry, and transfer skills in advanced chemistry for application in real work environment.

- c. Conduct scientific research and the preparation of the report thereof and establish and manage chemical systems in teaching, research and industry.
- d. Apply new and acquired knowledge to undertake independent work/research, apply acquired knowledge to address societal problems related to chemistry aspect, and apply and keep pace with new and appropriate methods/techniques in chemistry for value addition.
- e. Establish and manage businesses in the chemical and allied industries.
- f. Demonstrate competencies necessary for establishing and managing businesses in the chemical and allied industries.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including environmental impact assessment, production of chemical materials such as natural pesticides, natural fertilizers, disinfectants, soaps and detergents.
- b. ***Employment opportunities:*** *Graduates* of the programme can be employed by pharmaceutical industries, research institutions, agricultural products processing and agricultural pest control agents, food processing industries, textile industries, plastics industries, mining industries, and government agencies, authorities and institutions. They can also be employed by construction industries, fertiliser manufacturing industries, brewing and bottling industries, pulp and paper industries, paint manufacturing industries, metal-works industries and environmental management and impact assessment agencies/companies.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based environmental conservation groups.

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## Bachelor of Science in Petroleum Chemistry

This is a three-year programme aimed at producing graduates with a wide range of skills and knowledge of petroleum chemistry principles and its

application in oil and gas industry. The key objective of the programme is to empower graduates with requisite skills for the sustainable development and management of oil and gas production and the petroleum allied industry.

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### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge of chemistry and in particular petroleum chemistry concepts, theories and principles.
- b. Apply problem-solving skills needed in petroleum chemistry and related fields industrial processes and research undertakings.
- c. Equip students with requisite skills for sustainable development and management of petroleum (oil and gas).
- d. Demonstrate competencies necessary for establishing and managing businesses in petroleum chemistry sciences and technology, and allied fields.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including environmental impact assessment, production of petrochemical products including plastics, rubbers, resins, synthetic fibres, adhesives, dyes, detergents, pesticides, and petroleum-derived paints and coatings.
- b. ***Employment opportunities:*** Graduates of the programme can be employed by oil-refining and formulation industries, oil exploration companies, petrochemicals and allied industries, government ministries dealing with energy, minerals, the environment and tax revenue, NGOs and consultancy companies dealing with environmental management and impact assessment and other environmental issues. They can also be employed by higher learning and research institutions.

- c. **Leadership/Community-based opportunities:** Graduates of the programme can offer leadership in NGOs and Community-based environmental conservation groups.

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## **Bachelor of Science in Chemistry and Physics**

This is a three-year programme aimed at producing graduates with a wide range of skills and knowledge of chemistry and physics and its application in chemical and energy related industry. The key objective of the programme is to empower graduates with all necessary aspects of chemistry and physics skills required to engage in issues of technology, environment, nanotechnology and nuclear energy.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge of chemistry and physics concepts, theories and principles.
- b. Apply problem-solving skills needed in industrial processes and research in the field of chemistry and physics.
- c. Demonstrate competencies necessary for establishing and managing chemistry and physics related businesses.

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### **CAREER PROSPECTS**

- a. **Entrepreneurial opportunities:** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including environmental impact assessment, production of chemical materials such as natural pesticides, natural fertilizers, disinfectants, soaps and detergents as well as physics related materials such solar cells and incubators.
- b. **Employment opportunities:** Graduates of the programme can be employed by universities and research institutions, food-processing industries, pharmaceutical industries, textile industries, plastics industries, nuclear energy industries, nanomaterials industries, mining industries, and government agencies, authorities and institutions. They can also be employed by construction industries, fertiliser manufacturing industries, pulp and paper industries, paint

manufacturing industries, metal-works industries, environmental management and impact assessment agencies/companies, and the aviation industry.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and Community-based environmental conservation groups.

## Department of Molecular Biology and Biotechnology

### Bachelor of Science in Microbiology

This is a three-year programme. The main objective of this programme is to produce graduates capable of meeting local and international market demands and undertaking microbiological, biotechnological and molecular biology research, both at national and international levels.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge of microbiology.
- b. Apply problem-solving skills needed in industrial processes and research related to microbiology.
- c. Demonstrate competencies necessary for establishing and managing microbiology related businesses including food, agricultural and biomedical industry.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties. They can set up microbiological laboratories of their own or be an entrepreneur for producing different types of products including fertilizers, food and beverages, biogas.
- b. ***Employment opportunities:*** Graduates of the programme can be employed in research and development laboratories, universities, health protection agency laboratories: pharmaceutical, food, fish, beverage and breweries industries and energy generation biogas.

They can find employment in regulatory authorities, food authorities, and water and wastewater authorities.

- c. **Leadership/Community-based opportunities:** Graduates of the programme can offer leadership in NGOs and Community-based environmental healthcare and conservation groups.

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## **Bachelor of Science in Molecular Biology and Biotechnology**

This is a three-year programme. The programme focuses on concepts and applications in microbiology, biotechnology and molecular biology.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge molecular Biology and biotechnology including genetics, cell biology and biochemistry, forensic DNA, bioinformatics, fermentation, biomedical sciences, applied mycology, biosafety and bioethics, environmental biotechnology, agricultural biotechnology.
- b. Apply problem-solving skills needed in industrial processes and research related to molecular biology and biotechnology.
- c. Demonstrate competencies necessary for establishing and managing molecular biology and biotechnology related business firms including food, agricultural, biomedical, biogas production.

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### **CAREER PROSPECTS**

- a. **Entrepreneurial opportunities:** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties. They can set up molecular laboratories of their own or be an entrepreneur for producing different biotechnological products.
- b. **Employment opportunities:** Graduates of the programme are employable at regulatory agencies/authorities such as bureaus of standards, drugs and food authorities, environmental management and waste water authorities, NGOs (waste management), medical research and medical institutions, agricultural research institutes,

proteomic and genomic research institutes, genomics companies, research and higher learning institutions, as well as regional and international organisations. Other career opportunities can be found in molecular genetics laboratories and biotechnology industries.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based environmental conservation and biotechnological groups.

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## **Bachelor of Science in Applied Microbiology and Chemistry**

This is a three-year programme, through which students acquire a combined knowledge, skills and competence in microbiology and chemistry.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge in applied microbiology and chemistry.
- b. Develop and apply an integrated problem-solving skill needed in industrial processes and research related to applied microbiology and chemistry.
- c. Demonstrate competencies necessary for establishing and managing applied microbiology and chemistry related business firms including food, agricultural, biomedical, biogas production.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of their specialties. They can set up microbiological laboratories of their own or be an entrepreneur for producing different types of products including fertilizers, food and beverages, biogas.
- b. ***Employment opportunities:*** Graduates of the programme can work in the areas of bio-chemical technology, environmental management, nanotechnology, beverage and food processing, agricultural,

chemical and other related industries. They can also work in research institutions, universities, government agencies, research and development laboratories, and pharmaceutical companies.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based environmental healthcare groups.

## Department of Mathematics

### Bachelor of Science in Actuarial Sciences

This is a three-year programme aimed to train students on using probability and statistical theories to solve problems in insurance, investment, pension and other financial companies. Actuarial science applies the mathematics of probability and statistics to define, analyse, and solve the financial implications of uncertain future events. The use of mathematics, statistics, and financial theory to help to assess the risk of potential events and enables businesses and other stakeholders develop policies that minimize the cost for a given risk.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge in actuarial sciences including mathematical probability, statistics and finance theories and principles.
- b. Equip with strong analytical and problem-solving skills needed in insurance, investment, pension and other financial industries.
- c. Demonstrate competencies necessary for establishing and managing actuarial science services and related industry businesses including microfinance firms and trading companies.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and setting up private firms of their specialties

- b. ***Employment opportunities:*** Graduates of the programme can work in the financial institutions including commercial banks, auditing firms, insurance industry, pension schemes, investment sectors, stock exchanges firms, chambers of commerce as well as universities and other higher learning institutions.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in community-based microfinance firms and NGOs.

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## **Bachelor of Science in Mathematics and Statistics**

This is a three-year programme aimed at enabling students to develop sufficient mastery of mathematics and statistics, and their applications in real life. Mathematical Statistics helps to analyse vast amounts of data for different systems and look for patterns and model building. In this venture, models can be used to understand and make predictions about such diverse things as glacial movement, seismic events, and tsunamis.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge in mathematics and statistics and their corresponding theories and principles.
- b. Apply analytical, mathematical, statistical problem-solving skills needed in in data analysis.
- c. Demonstrate competencies necessary for establishing and managing mathematical and statistical services and business firms.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and setting up private firms of their specialties.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as a statistician or data analysts in the financial institutions including commercial banks, auditing firms, insurance companies, pension schemes, investment sectors, stock exchanges firms,

chambers of commerce: as well as universities and other higher learning institutions, statistics support companies, other government and private sectors/agencies/authorities.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme offer leadership in community-based microfinance firms and NGOs.

## Department of Physics

### Bachelor of Science in Meteorology

This is a three-year programme aimed to produce knowledgeable, skilled and competent meteorological scientists. The programme equips students with competencies in Weather forecasting, Agricultural meteorology, Aeronautical meteorology and Marine meteorology. The programme also provides students with skills in applications and use of meteorological methods and equipment, as well as a foundation for further studies in meteorological sciences.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge in meteorological sciences and underlying theories and principles.
- b. Apply problem-solving skills needed in meteorological sciences.
- c. Demonstrate competencies in weather forecasting, agricultural meteorology, aeronautical meteorology and marine meteorology.
- d. Use meteorological equipment, establish and manage meteorological and environmental monitoring business firms.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates from the programme can engage in professional consultancy services and setting up private firms of their specialties.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as agricultural meteorologists in various areas, including

those dealing with the impact of weather and climatic factors relating to agriculture and crop modelling, as aeronautical meteorologists providing services to the aviation industry such as weather monitoring and forecasting, marine meteorologists providing services for navigation, for example marine climatology and forecasting, and as environmental meteorologists providing expertise on the effects and mitigation of climate change. Other specialized areas include air pollution scientist, broadcast meteorologist, hydrologist, operational meteorologist/laboratory scientist, risk assessment, synoptic meteorologist, data analyst and scientist. Meteorologists can also find work in meteorological agencies, military, aviation industry, marine industry, universities and other higher learning, research institutions, international organizations and the tourism sector.

- c. ***Leadership/Community-based opportunities: Graduates*** of the programme possess the potential to offer leadership in community-based NGOs related to environmental and climate changes.

## College-wide Programme

### **Bachelor of Science with Education**

This is a three-year degree programme that aims at preparing graduate teachers. The degree programme equips the graduates with skills and knowledge in various disciplines. It combines education with two teaching subjects chosen from the following fields: Physics, Chemistry, Mathematics, Geography, Economics, Biology (Botany and Zoology) and Information Science.

### **SPECIALISATIONS IN THE B.SC. (EDUCATION) DEGREE PROGRAMME**

Students enrolled in the B.Sc. Education programme are required to take two teaching subjects (content courses) and Education courses. The following teaching subject combinations are offered:

- a. Biology and Chemistry
- b. Biology and Geography
- c. Biology and Physics
- d. Chemistry and Geography

- e. Mathematics and Chemistry
- f. Mathematics and Economics
- g. Mathematics and Geography
- h. Mathematics and Information Science
- i. Physics and Chemistry
- j. Physics and Geography
- k. Physics and Mathematics

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### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrate the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations.
- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and

institutions, consultant for educational services such as scholarships agencies, educational support services.

- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, teacher training colleges, secondary and primary schools. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational logistics officers, educational counsellors, and educational researchers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

## COLLEGE OF SOCIAL SCIENCES

The College of Social Sciences (CoSS) consists of four departments and a unit that offer undergraduate programmes. The departments are Geography, Political Science and Public Administration, Sociology and Anthropology and Statistics. The Information Studies Unit is under the library, but its academic functions are supervised by the College of Social Sciences. CoSS offers the following undergraduate programmes:

- a. Bachelor of Arts in Anthropology
- b. Bachelor of Arts in Geography and Environmental Studies
- c. Bachelor of Arts in Library and Information Studies
- d. Bachelor of Arts in Political Science and Public Administration
- e. Bachelor of Arts in Psychology
- f. Bachelor of Arts in Sociology
- g. Bachelor of Arts in Statistics
- h. Bachelor of Arts with Education
- i. Bachelor of Social Work

### Department of Geography

#### **Bachelor of Arts in Geography and Environmental Studies**

This is a three-year programme. The programme focuses on the interaction between nature and society, the distribution and management of physical and human resources, and techniques for doing geographical analysis. It equips students with skills to identify, describe, explain, analyse and present problems and solutions related to the development process. Also, the programmes equip students with professional skills and abilities to manage environmental resources which are fragile and non-replaceable so as to use them sustainably.

#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Critically analyse and assess principal theories, concepts and terminologies in Geography and environmental management, human

landscape, spatial variations in economic development in light of geographical theories in understanding the real world.

- b. Demonstrate functions of biodiversity and ecosystems in the context of a changing climate, resources utilization and/or changing development plans.
- c. Use statistical and geospatial data and software to manage environmental resources and solve environmental problems.
- d. Collect, analyse, document, report and communicate Geographical research findings.
- e. Communicate geographical and/or environmental ideas, problems and solutions to specialist and non-specialist audiences.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can establish entrepreneurial prospects as professional environmental consultants, open environmental firms, and GIS and remote sensing data analysts.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as environmental officers, managers and planners in government institutions such as urban planning, rural development and settlement planning, agricultural development, land-use planning, water resources, forestry, tourism, NGOs, the private sector. They can also be employed as project and program officers in various development projects. They can also work as academicians in higher learning institutions.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles as environmental advocates, and volunteering and provision of environmental educational support services in the community.

## Department of Political Science and Public Administration

### Bachelor of Arts in Political Science and Public Administration

This is a three-year programme. The programme focuses on developing students' understanding of fundamental concepts, principles and theories of Political Science. It also develops students' critical mind so that they

can examine the nature and scope of Political Science and its relationship with other disciplines in the social sciences.

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### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Critically understand the decisions human beings make in political settings, including those regarding the forms of government available, the philosophical underpinnings of political systems, major ideologies and political parties.
- b. Communicate effectively and clearly systems and ideologies governing politics in written and oral form.
- c. Research, analyse and evaluate data and information that inform political and policy processes, and state and organisation behaviour.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in consultancy, open policy advocacy, policy design and analysis and political and social research firms, and political analysts.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as administrative officers in government institutions, foreign and international affairs. They also work as intelligence and security officers, academicians in higher learning institutions and work in media and civil society organisations.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles as political and public relations advisors.

## Department of Sociology and Anthropology

### Bachelor of Arts in Anthropology

This is a 3-year programme which is designed to produce graduates who can engage with the world, thoughtfully, critically and creatively using culture as the core analytical category. The programme will provide students not only with a solid base of anthropological knowledge and set

of skills but also foster a sense of engagement as citizens committed to making the world more human and liveable.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire an array of skills that can be applied to many forms of inquiry, analysis, scientific, moral reasoning and practice.
- b. Apply anthropological theories to challenge the understanding of the world in a nuanced way which entails expression of a broad and expansive view of social issues from the emic point of view.
- c. Understand and apply core anthropological methods in generating evidence to inform policy, programmes and development practices.
- d. Demonstrate critical and analytical thinking on the past, present and future global and local trends in various social, political, environmental and cultural issues.
- e. Understand the cultural and biological diversity of humanity and unity in diversity across the world.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in cultural impact assessments (Social research).
- b. ***Employment opportunities:*** Graduates of the programme can be employed as anthropologists in training, research and health institutions, cultural, archaeology and tourism/heritage sectors. They can also work as medical anthropologists, environmental anthropologists, and political anthropologists. Moreover, the programme sets the graduate up with a number of skills that takes one into a variety of careers including national, local government and international development structures, cultural resources and tourism/heritage management experts, home/internal affairs, socio-cultural-political-economic and market research, social policy analysts, public health and environmental experts.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based

roles in cultural and heritage development campaigns, and social development campaigns.

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### **Bachelor of Arts in Psychology**

This is a 3-year programme that provides students with knowledge based in the field of psychology, equips them with skills in scientific inquiry, critical thinking, research, and public services. The program also provides students with adequate professional development to apply the psychological knowledge and skills that meet current and future needs in a variety of settings such as community, education, family, workplaces, and health. It further prepares students to utilise ethical, social responsibility, and accountability in a diverse world and develop their intrapersonal and interpersonal skills.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate an understanding and familiarity with the major concepts, theoretical perspectives, empirical findings, historical and current trends in psychology.
- b. Apply psychological principles to interpret and solve real-world problems related to the psychosocial well-being of individuals, families, and communities.
- c. Demonstrate an understanding of the methods of research used in psychological research and critiquing the existing psychological research studies.
- d. Apply psychological knowledge, skills, and procedures in diverse settings needing psychosocial intervention, such as, disasters, child and adolescent development, education, work/organization, human resources, marketing, research, law and health etc.
- e. Demonstrate an understanding of and adherence to ethical, cultural, and historical aspects of psychology

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in sports and businesses to increase performance and productivity, and intermediaries for psycho-social support.
- b. ***Employment opportunities: Graduates*** of the programme can be employed as psychologists working in hospitals, schools and law enforcement (police, legal offices) to analyze criminal behavior and improve measures to prevent the recurrence of such behavior and empower law enforcers to maintain mental health as well as counsellors dealing with behaviour. Graduates can also work in the area of sports and business, government/private institutions to increase performance and productivity
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in areas that deal with psychological functioning and human behaviors, mental health and adjustment issues NGOs and community-based organizations and social groups. They can offer support to communities as clinical psychologists who deal with a range of mental and physical challenges such as anxiety, relationship challenges, depression, stress, addiction etc. or in disaster psycho-social intervention.

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## Bachelor of Social Work

This is a three-year programme. The programme is geared towards training students who are skilled in promoting and improving the quality of life for the various social groups related to their diverse needs and circumstances. To equip social work students with tools that can address personal vulnerability, social injustice and promote social and economic change.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
- b. Engage, assess, intervene, and evaluate the development of social issues with individuals, families, groups, organizations, and communities.

- c. Demonstrate the skills to identify, integrate, and application of social work knowledge in promoting human welfare, problem solving processes to facilitate change.
- d. Apply policy knowledge, evidence-based research skills and informed practice research skills to design, implement, and evaluate social policies and programs.
- e. Apply legal frameworks in addressing and solving social problems for specific social groups.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in socio-economic and social impact assessments (social researchers) and social policy analyst.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as social welfare workers in the public and private sector (dealing with issues such as individual, group or community welfare issues), clinical social workers, child, family and school social workers, medical and public health social workers, military social workers and counsellors in a range of settings such as training and medical health institutions. They can also be employed in higher learning institutions. In general, graduates can work in social work administration, researchers, planners and policy makers especially in government (both local and central), non-government organisations, civil society, community welfare organisations, schools, universities, churches, research centres, and hospitals.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can work as lead mediators of community conflicts and advocates of social change in the community. They can function as community social workers who work with communities to improve conditions and provide resources for communities.

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### Bachelor of Arts in Sociology

This is a 3-year programme which is designed to critically and analytically engage students in the study of society in all its facets and how it changes over time. The programme will impart students with the sociological tools

of analysis and skills as part of the effort to contribute to making society and human life both sustainable and more human.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate the application of sociological knowledge to understand human behaviour and social phenomena
- b. Apply sociological theories to evaluate and analyse the forces of social change
- c. Apply scientific approaches to explain and solve problems using well-established ideas and techniques from sociology.
- d. Critically examine, evaluate and analyse social scientific data
- e. Apply sociological knowledge and understanding to inform policy debates

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in socio-economic and social impact assessments (social researchers), open up firms specialized in knowledge production and dissemination (both formal and informal), and mass media.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as sociologists in public and private sector dealing with health, education, community development, social work, women and children affairs, gender and generational affairs, labour relations, economic planning, energy, agriculture, natural resources management and rural and urban development in public and private institutions/organizations and international platforms.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can consider leadership roles or community-based roles as community outreach officer. They can assist in social planning for the development of their communities.

## Department of Statistics

### Bachelor of Arts in Statistics

This is a three-year programme. The programme equips students with the knowledge and skills needed in the collection, management, analysis, presentation and interpretation of data. The knowledge and skills are used in analysing socio-economic, cultural, political, environmental, health and military planning for development.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Utilize acquired knowledge on basic statistics, statistical inference, probability, stochastic process, parametric and non-parametric statistics, statistical methods of econometrics and regression analysis.
- b. Design experiments, quality control, and develop price index skills.
- c. Practically use various statistical software such as SPSS, STATA, R and SAS for planning and development.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish own private research and data management firms which offer consultancy services locally and internationally.
- b. ***Employment opportunities:*** *Graduates* of the programme can be employed as statisticians in government departments, agencies and ministries, commercial banks, pension funds. They can also be employed in higher learning institutions, Non-Governmental Organisations (NGOs) and private enterprises.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can potentially offer leadership roles in community-based microfinance firms, NGOs, and village community banks.

## Information Studies Unit

### Bachelor of Arts in Library and Information Studies

This is a three-year programme. The programme equips students with advanced knowledge of information literacy, library operations, customer care, information and communication theories, collection development and management, records management and archives administration, marketing of library and information services, website designing for libraries and management of electronic resources. The programme will develop first class professional information workers with the knowledge and skills at this level who are critical, proactive and adaptive in meeting the information needs of the organizations and individuals.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Manage different kinds of libraries and information centre in the country and outside.
- b. Analyse various information systems and services in the libraries and information centres and apply different kind of ICTs to process, organize and manage library resources.
- c. Conduct training on information literacy skills to various groups of library and information centre users.
- d. Participate actively in professional activities such as organizing seminars and attending various events related to library and information.
- e. Provide leadership in local, national, regional and international development with a clear understanding of values and needs in the field of library and information science.

#### CAREER PROSPECTS

- a. **Entrepreneurial opportunities:** Graduates of the programme can establish entrepreneurial prospects starting their own data firms which offer consultancy services in database creation and website designing for local and international libraries. They can also work as information brokers, records dealers, and run their internet cafe.

- b. **Employment opportunities: Graduates** of the programme can be employed as record managers in institutional libraries, insurance companies, banks, in archiving, records and information centres, museums and ICT-related organisations and, information and documentation centres. They can also be employed in higher learning institutions.
- c. **Leadership/Community-based opportunities:** Graduates of the programme can also consider leadership roles or community-based roles in local, national, regional and international development in the field of library and information science.

## College-wide programme

### **Bachelor of Arts with Education**

This is a three-year programme. The programme equips students with skills and knowledge pertaining to various disciplines, including Geography, Economics, Political Science and Kiswahili. It also equips them with skills and knowledge of curriculum design and implementation, teaching methodologies, as well as skills in education management and administration. Education is combined with any of the following major subjects:

### **SPECIALISATIONS IN THE B.A. (EDUCATION) DEGREE PROGRAMME**

Students enrolled in the B. A. Education programme are required to take two teaching subjects (content courses) and Education courses. The following teaching subject combinations are offered:

- a. Geography and Kiswahili
- b. Geography and Economics
- c. Geography and Political Science
- d. Political Science and Kiswahili
- e. Economics and History

## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrates the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations
- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, teacher training colleges, secondary and primary schools. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government

educational officers, educational logistics officers, educational counsellors, and educational researchers.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

## **INSTITUTE OF DEVELOPMENT STUDIES**

The Institute of Development Studies (IDS) believe passionately that cutting-edge research, knowledge and mutual learning are crucial in shaping the transformations needed to reduce inequalities, accelerate sustainability and build more inclusive and secure societies. IDS has been working to tackle complex development challenges. The institute aim to strengthen skills and capabilities of those already working within the development sector, as well as nurture a new generation of development thought, policy and practice leaders. IDS offer one undergraduate programme which is Bachelor of Arts in Development Studies.

### **Bachelor of Arts in Development Studies**

This is a three-year programme. The programme provides students with holistic knowledge and skills to interpret development theory: and process, analyse, formulate and manage development plans and policies to achieve inclusive, equitable and sustainable development. It provides students with the knowledge and skills to effectively interrogate development challenges, processes and policies as well as conducting various development facilitation activities.

### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Critically review the concepts, theories and analytical tools of development.
- b. Explore the interaction of a wide range of political, economic, social and environmental factors in development.
- c. Examine both national and global drivers, challenges, opportunities and strategies to inclusive and sustainable development.
- d. Familiarize and practice various development facilitation skills.
- e. Apply action-oriented development research in order to build up evidence-based knowledge of development challenges and to make a case for change.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can be self-employment as socio-economic researchers, development consultants, humanitarian workers, development planners, activists, and development animators.
- b. ***Employment opportunities:*** Graduates of the programme can be employed across different sectors, including central and local governments, independent government agencies and departments, non-governmental organisations, faith based organizations, international development agencies and in the private sector as development planners, development policy analysts, managers of development projects and programmes, community development officers, gender issues experts, monitoring and evaluation specialists, policy managers, programme officers, researchers, social and economic impact analysts, social workers, and youth development officers. They can also serve as academician in various academic institutions.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership roles or community-based roles in NGOs and other community-based groups. They can be agents for community socio-economic development by providing expert advice on matters of planning development.

## **INSTITUTE OF GENDER STUDIES**

The Institute of Gender Studies (IGS) is mandated to develop undergraduate courses on gender and gender related programmes. IGS acts as a catalyst for change on matters related to gender equality and equity at national and global level. In addition, the IGS is also engaged in gender activities and gender networking with related institution. IGS offers one undergraduate programme which is Bachelor of Arts in Gender Studies and Community Development.

### **Bachelor of Arts in Gender Studies and Community Development**

This is a three-year programme. The programme is designed to develop competences in Gender analysis, basic and applied Gender research applicable in various aspects of society, develop gender experts equipped to address socio-economic, political and cultural challenges that exist in the communities, develop critical and analytical skills and capacity to assess situation and provide multiple suggestions and solutions. The programme also aims to inculcate accountability, respect, diversity, public engagement, learning and inquiring mind for research and scholarship.

### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Critical understanding of the theories, approaches, principles, models governing gender and community development practices.
- b. Apply knowledge on gender policy, gender budgeting and its processes, monitoring and evaluation of matters related to gender and gender mainstreaming across fields at national, regional and international level.
- c. Conduct gender related participatory research, write report, propose solutions and mobilize resources for enhancing community development.
- d. Develop business idea and apply entrepreneurship skills to support gender and community development at national, regional and international levels.
- e. Use of ICT facilities for writing, documenting and innovating ideas that facilitate community development.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can be self-employed as gender and socio-economic researchers, gender analysts, gender experts, community development consultants, humanitarian workers, gender activists, and development animators.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as development planners, gender policy analysts, managers of development projects and programmes, community development officers, gender experts, monitoring and evaluation specialists, and gender development officers across different sectors, including central and local governments and departments, non-governmental organisations, international development agencies and in the private sector. They can also serve as trainers and academic staff in various academic institutions.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership roles or community-based roles in NGOs and other community-based organisations. They can act as gender equality advocates within their communities and provide advice on gender responsiveness of community development projects.

## **INSTITUTE OF KISWAHILI STUDIES/TAASISI YA TAALUMA ZA KISWAHILI**

Taasisi ya Taaluma za Kiswahili ina idara mbili zinazofundisha: Idara ya Lugha ya Kiswahili na Isimu (ILUKII) na Idara ya Fasihi, Mawasiliano na Uchapishaji (IFAMU). ILUKII inafundisha masomo ya lugha ya Kiswahili na isimu. Kwa umahususi, masomo hayo huangazia taaluma za ukalimani, tafsiri, sera za lugha na masuala ya lugha na utamaduni. Kwa upande mwingine, IFAMU inafundisha masomo ya fasihi ya Kiswahili, mawasiliano na uchapishaji. Kwa umahususi, masomo hayo huangazia taaluma za uhakiki wa fasihi, uandishi wa kazi za kubuni, uhariri, fasihi linganishi, stadi za mawasiliano pamoja na uchapishaji. Taasisi ya Taaluma za Kiswahili ina programu moja ya shahada ya awali iitwayo Bachelor of Arts in Kiswahili/Shahada ya Awali katika Kiswahili.

### **Bachelor of Arts in Kiswahili/Shahada ya Awali katika Kiswahili**

Programu ya B.A. (Kiswahili) ni ya miaka mitatu. Inafundisha kozi mbalimbali zinazolenga kuwawezesha wahitimu kuwa weledi wa Taaluma mbalimbali za Kiswahili katika nyanja zake zote zinazojumuisha masuala ya isimu, fasihi, mawasiliano na uchapishaji. Kupitia nyanja hizi, programu inalenga kuwapa wanafunzi maarifa, misingi na uelewa wa kina kuhusu nadharia zinazoangazia taaluma ya isimu katika muktadha mpana wa lugha ya Kiswahili, lugha nyingine za Kiafrika na za Ulimwengu kwa ujumla. Pia, programu huwajuzua wanafunzi kuhusu nadharia za fasihi ikiwa ni pamoja na maana ya fasihi, historia na chimbuko la fasihi ya Kiswahili, misingi ya uhakiki wa kazi za fasihi, uchapishaji, mawasiliano na uhusiano kati ya fasihi ya Kiswahili na fasihi za mataifa mengine ulimwenguni.

### **MATARAJIO YA KOZI**

Mwishoni mwa programu hii mwanafunzi anatarajiwa kuweza:

- a. Kufundisha Kiswahili kwa wageni na wenyeji katika ngazi ya msingi, sekondari na vyuo.
- b. Kufanya aina mbalimbali za ukalimani na tafsiri.
- c. Kuandika kazi za kubuni, makala na vitabu vya fasihi na isimu.

- d. Kuchambua, kuhakiki na kuhariri matini za isimu na fasihi kuhusu masuala mbalimbali.
- e. Kufanya utafiti katika nyanja za fasihi, lugha na utamaduni na kusimamia shughuli za uchapishaji.

#### MATARAJIO YA AJIRA

- a. ***Fursa za ujasirimali:*** Wahitimu wa programu wanaweza kujiajiri katika nyanja anuwai zinazohitaji matumizi ya Kiswahili ikiwamo zifuatazo: utafiti wa lugha ya Kiswahili, ushauri elekezi wa lugha ya Kiswahili, kufungua biashara za huduma za lugha yaani ukalimani, ufundishaji wa lugha kwa wageni, tafsiri ya lugha, uandishi wa vitabu na utunzi wa filamu.
- b. ***Fursa za ajira rasmi:*** Wahitimu wa programu wanaweza kuajiriwa katika sekta binafsi na serikalini mf. Teknolojia ya Habari na Mawasiliano (TEHAMA), sanaa za maonesho, filamu, uhariri, uchapishaji, tafsiri, ukalimani, pamoja na upangaji, uratibu na ukuzaji mitaala ya lugha ya Kiswahili katika nyanja za isimu na fasihi. Kadhalika, wanaweza kuajiriwa kama wakalimani, walimu, watafiti, pamoja na watunzi wa vitabu vya kitaaluma na bunilizi katika taasisi mbalimbali ndani na nje ya nchi.
- c. ***Fursa za kijamii:*** Wahitimu wa programu wanaweza kushiriki katika shughuli za ushauri katika jamii na kuongoza jitihada za uenezi wa lugha ya Kiswahili pamoja na kuhamasisha jamii kuienzi lugha ya taifa na kutunza utamaduni na turathi wa Mtanzania.

## INSTITUTE OF MARINE SCIENCES

The Institute of Marine Sciences (IMS) offers only one undergraduate programme, namely Bachelor of Science in Marine Sciences.

### Bachelor of Science in Marine Sciences

This is a three-year programme aimed to train students in basic and applied marine sciences. The programme adopts a holistic approach to coastal and marine environmental issues.

### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Acquire a wide range of knowledge on the principles and practical aspects of marine sciences.
- b. Apply problem-solving skills needed in marine sciences and related fields.
- c. Integrate theories and practical/field skills in the area of marine natural resources management and aquaculture of different fishes, seaweed and marine plants.
- d. Demonstrate competencies necessary for establishing and managing business firms in the area of marine sciences, fisheries industries and technologies.

### CAREER PROSPECTS

- a. **Entrepreneurial opportunities:** *Graduates* of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including environmental impact assessment, marine resources conservation advocacy, and ecotourism and aquaculture business. They can also establish aquatic related business such as fish farms and fishing implements companies.
- b. **Employment opportunities:** *Graduates* of the programme can work in national, regional and international sectors of fisheries and aquaculture, energy, mining, environment, marine protected areas, natural resources, tourism, water and irrigation in the areas of marine environment, fish-processing industries and large aquaculture farms.

They can also be employed by ministries, agencies and departments responsible for natural resources, tourism, energy, mining, forestry, environment, marine protected areas, water and irrigation, universities, private organisations/companies, NGOs, research institutions and international organisations. Other potential employers in private sector include fish-processing industries and private aquaculture farms.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based marine resources conservation groups. They can provide advice on how to use marine resources for socio-economic development of the community.

## SCHOOL OF AQUATIC SCIENCES AND FISHERIES TECHNOLOGY

The School of Aquatic Sciences and Fisheries Technology (SoAF) offers only one undergraduate programme, namely Bachelor of Science in Aquatic Sciences and Fisheries.

### **Bachelor of Science in Aquatic Sciences and Fisheries**

This is a three-year programme aimed to train students in key aspects of aquatic systems, including its biodiversity, fisheries and aquaculture.

### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Understand the theories and science practices in fisheries, aquatic science and aquaculture and apply the comprehensive knowledge of aquatic biota and their environment in addressing the challenges faced by fisheries and aquaculture industries.
- b. Develop strategies for sustainable fisheries and aquaculture production, including management of fish populations, water quality, and disease control.
- c. Analyse and interpret data related to aquatic ecosystems, fisheries, aquatic resource management and aquaculture and apply knowledge in aquatic science, fisheries and aquaculture to work effectively.
- d. Pursue careers in various fields related to aquatic sciences and fisheries, such as fisheries management, aquaculture production, environmental consulting, and research.
- e. Evaluate the economic, social, and cultural aspects of fisheries and aquatic resource management, and the impact of management decisions on local communities and livelihoods.

### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including environmental

impact assessment, aquatic resources conservation advocacy, ecotourism and aquaculture business.

- b. ***Employment opportunities:*** Graduates of the programme can be employed in several government organisations and institutions, including ministries and research institutions, which need graduates with an in-depth knowledge of aquatic sciences, fisheries and aquaculture. Potential employers include regional, districts and municipalities, universities and other higher learning institutions, national, regional and international NGOs which are involved in advocacy for the conservation of aquatic resources. Other potential employers in private sector include fish-processing industries and large aquaculture farms.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based aquatic resources conservation groups. They can provide advice on how to use aquatic resources for socio-economic development of the community.

## **SCHOOL OF EDUCATION**

The School of Education (SoED) comprises three teaching departments namely, Departments of Educational Psychology and Curriculum Studies, Educational Foundations, Management and Lifelong Learning, and Physical Education and Sport Sciences. These academic units offer 5 undergraduate degree programmes, as listed below:

- a. Bachelor of Education in Adult and Community Education
- b. Bachelor of Education in Commerce
- c. Bachelor of Education in Early Childhood Education
- d. Bachelor of Education in Educational Psychology
- e. Bachelor of Education in Physical Education and Sport Sciences

### **Department of Educational Psychology and Curriculum Studies**

#### **Bachelor of Education in Early Childhood Education**

This is a three-year undergraduate degree programme. The programme trains experts and practitioners in the fields of early childhood development, care and education with a view to guiding the development and delivery of early childhood services and education in Tanzania and elsewhere in the world.

#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Train teachers and practitioners for early childhood educational institutions and produce experts for guiding and promoting the provision of early childhood services to meet the challenges of future development.
- b. Generate, promote and disseminate professional information, knowledge and skills in early childhood development and learning and offer parents/caregivers opportunities to support and monitor the development of their children systematically and plan interventions.
- c. Guide the preparation of early childhood intervention services and programmes, and offer children and opportunities to be screened for moderate learning difficulties and handicapping conditions.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in establishment of educational businesses such as pre-schools, day care centres, educational support services and institutions, consultant for early childhood educational services.
- b. ***Employment opportunities: Graduates*** of the programme can seek employment opportunities in ministries and ministerial departments, education institutions, kindergarten and nursery schools, and pre-schools. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, training officers, education programme officers, educational advisors, educational specialists, educational book authors, pre-school and kindergarten teachers, school managers, day care centre managers, government educational officers, educational counsellors and psychologists and educational researchers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

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## Bachelor of Education in Educational Psychology

This three-year undergraduate degree programme develops students' knowledge, understanding and application of empirical research in educational psychology.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in educational psychology.
- b. Apply psychological principles to personal, social, and organizational issues pertaining to educational matters and demonstrate an understanding of multiple perspectives on

psychology, including educational, biological, cognitive, developmental, social and cultural orientations.

- c. Demonstrate information competence and the ability to use computers and other technology for educational purposes.
- d. Use critical and creative thinking, sceptical inquiry, and, when possible, the scientific approach to solve problems related to behaviour and mental processes.
- e. Apply basic research methods in psychology, including research design, data analysis, and interpretation.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in establishment of educational businesses such as educational support services or become a consultant for psychological educational services.
- b. ***Employment opportunities:*** Graduates of the programme can seek employment opportunities in ministries and ministerial departments, education institutions, primary and secondary schools. Graduates of the programme can be employed as education officers, curriculum developers, specialists in career counselling, psychiatric technicians and behaviour counselling, educational analysts, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational counsellors and psychologists and educational researchers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

**Bachelor of Education in Commerce**

This is a three-year programme aims to prepares graduate teachers for commerce and business-related subjects for secondary schools, teacher training colleges and other higher learning institutions.

**LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Develop and demonstrate strong pedagogical knowledge and skills for teaching business education and business studies in secondary and business education institutions in Tanzania.
- b. Develop and demonstrate positive entrepreneurship attitude and behaviour for self-employment as means of reducing unemployment and related problems.
- c. Demonstrate strong mastery in using modern business communication technologies in teaching and training as well as in decision-making and problem-solving.
- d. Demonstrate a high understanding and internalization of professional ethics related to teaching, training and entrepreneurship.
- e. Develop strong managerial and leadership skills relevant to managing and leading educational institutions and programme in a competitive environment.

**CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in establishment of educational businesses such as educational support services or become a consultant for business-related educational services.
- b. ***Employment opportunities:*** *Graduates* of the programme can seek employment opportunities in financial institutions, ministries and ministerial departments, education institutions, primary and secondary schools. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts,

training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational researchers marketers, commercial and business advisors, financial and commercial analysts.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

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### **Bachelor of Education in Adult and Community Education**

This is a three-year programme. The programme trains specialists in the area of adult and community education and development.

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#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate knowledge of and skills in adult and community education methods, designing and developing education and community-based programmes for primary and secondary school dropouts and other categories of people who may not, for various reasons, have access to formal education and training.
- b. Use the knowledge and skills learnt to enhance adult and extension outreach education as a field of study and practice, designing, initiating and conducting research on community development needs, extending knowledge and other educational resources and rendering services to the society.

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#### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the B. Ed. (Adult and Community Education) can establish entrepreneurial prospects in various areas in establishment of educational businesses such as educational support services or become a consultant for community educational services.
- b. ***Employment opportunities:*** The programme graduates have employment opportunities in government institutions and private

sector. In public and private sectors, prospective graduates will be able to work in various areas, namely ministries and ministerial departments, community colleges, and education institutions. Graduates of the programme can be employed as education officers, curriculum developers, district and regional adult education officers, educational analysts, training officers, education programme officers, educational advisors, educational specialists, educational book authors, community development officers, educational managers, government educational officers, and educational researchers.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services, advisors for open and distance learning and counsellors in the community.

## **Department of Physical Education and Sport Sciences**

### **Bachelor of Education in Physical Education and Sport Sciences**

This is a three-year undergraduate programme geared towards producing graduates capable of spearheading the development and growth of Tanzania. It combines natural sciences such as Biology, Physics and Chemistry in order to understand the biomechanics of movement, and social sciences such as Sociology, Psychology and Philosophy to relate sport to society.

#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Understand a broad range of scientific theories and practices in physical education and sports.
- b. Capable in teaching physical education and sports from primary to secondary schools and teacher colleges.
- c. Manage sport organisations.
- d. Demonstrate skills and knowledge to work in the fitness, leisure and recreation industry as well as in the tourist industry;

- e. Design, prepare and evaluate programmes related to physical education and sports.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in establishment of educational businesses such as educational support services or become a consultant for physical educational services.
- b. ***Employment opportunities: Graduates*** of the programme can seek employment opportunities in sports organizations, recreational facilities, ministries and ministerial departments, community colleges, and education institutions. Graduates of the programme can be employed as sport managers and administrators, sports counsellors, sports officers, coaches, recreational managers education officers, curriculum developers, fitness instructors, district and regional sports education officers, educational analysts, training officers, education programme officers, educational advisors, educational specialists, educational book authors, games coach, educational managers, physical educational officers, and educational researchers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services, advisors for open and distance learning and counsellors in the community.

## SCHOOL OF JOURNALISM AND MASS COMMUNICATION

The School of Journalism and Mass Communication (SJMC) offers three undergraduate degree programmes, namely:

- a. Bachelor of Arts in Mass Communication
- b. Bachelor of Arts in Journalism
- c. Bachelor of Arts in Public Relations and Advertising

### Bachelor of Arts in Journalism

The Bachelor of Arts in Journalism programme is a three-year degree programme that prepares graduates for Tanzania's print and electronic as well as the now blossoming social media. Students learn everything about news, broadcast, production, and technological innovations.

### LEARNING OUTCOMES

By the end of the programme, graduates should be able to:

- a. Gather, process and disseminate news.
- b. Prepare programme contents for conventional media, web pages and social media.
- c. Identify and overcome mass media challenges.
- d. Handle ethical, legal and regulatory issues related to journalism practice locally and internationally.

### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as advocacy, lobbying, content creation for social media and start-ups, scriptwriting for advertisements on media platforms and consultancy for communications strategies for various institutions. They can also establish media companies, web-based media platforms, graphic and infographic designing companies.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in newspaper companies, local and international news agencies, television and film agencies, mobile

network companies, publicity organizations, web-based communication companies, public relations, sales, marketing, communication research, writing and publishing. Other potential areas for employment are tourism, politics and administration, media, social work, sports and entertainment, health and environmental sectors and in other areas where information processing and transfer is involved.

- c. **Leadership/Community-based opportunities:** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in advocacy, lobbying, development campaigns, political campaign experts and analysts, web-based communications for communities on issues of health, social work and environment, and conflict resolution.

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## **Bachelor of Arts in Mass Communication**

The Bachelor of Arts in Mass Communication programme is a three-year degree programme geared towards producing graduates who can work in the mass media industry.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Handle and manage media for professional information dissemination.
- b. Produce and manage mass media programme contents for conventional media, web pages and social media.
- c. Undertake programme management and overcome mass media and management challenges.
- d. Handle ethical, legal and regulatory issues in the media.

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### **CAREER PROSPECTS**

- a. **Entrepreneurial opportunities:** Graduates of the programme can establish entrepreneurial prospects in various areas such as advocacy, lobbying, content creation for social media and start-ups, scriptwriting for advertisements on media platforms and consultancy for communications strategies for various institutions. They can also

establish media companies, web-based media platforms, graphic and infographic designing companies.

- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in newspaper companies, local and international news agencies, television and film agencies, mobile network companies, publicity organizations, web-based communication companies, public relations, sales, marketing, communication research, writing and publishing. Other potential areas for employment are tourism, politics and administration, media, social work, sports and entertainment, health and environmental sectors and in other areas where information processing and transfer is involved.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in advocacy, lobbying, development campaigns, political campaign experts and analysts, web-based communications for communities on issues of health, social work and environment, and conflict resolution.

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### **Bachelor of Arts in Public Relations and Advertising**

This programme is geared towards producing graduates who can strategically and creatively create advertising and public relations messaging and content that connects with different audiences and stands out from the rest.

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#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Handle and manage corporate communication and public relations practice.
- b. Prepare programmes and public relations contents for different strategic communication purposes of organisations.
- c. Identify and select appropriate and strategic media for successful strategic communication.

- d. Handle ethical, legal and regulatory issues related to corporate communication, public relations and advertising locally and internationally.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas such as advocacy, lobbying, content creation for social media and start-ups, scriptwriting for advertisements on media platforms and consultancy for communications strategies for various institutions. They can also establish media companies, web-based media platforms, graphic and infographic designing companies.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in public relations firms, newspaper companies, local and international news agencies, television and film agencies, mobile network companies, publicity organizations, web-based communication companies, public relations, sales, marketing, communication research, writing and publishing. Other potential areas for employment are tourism, politics and administration, media, social work, sports and entertainment, health and environmental sectors and in other areas where information processing and transfer is involved.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in advocacy, lobbying, development campaigns, political campaign experts and analysts, web-based communications for communities on issues of health, social work and environment, and conflict resolution.

## SCHOOL OF MINES AND GEOSCIENCES

The School of Mines and Geosciences (SoMG) comprises three teaching departments, namely Departments of Geosciences, Mining and Mineral Processing Engineering, Petroleum Sciences and Engineering. The school offers the following undergraduate programmes:

- a. Bachelor of Science in Engineering Geology
- b. Bachelor of Science in Geology
- c. Bachelor of Science in Geology and Geothermal Resources
- d. Bachelor of Science in Geophysics
- e. Bachelor of Science in Metallurgy and Mineral Processing Engineering
- f. Bachelor of Science in Mining Engineering
- g. Bachelor of Science in Petroleum Engineering
- h. Bachelor of Science in Petroleum Geology
- i. Bachelor of Science with Geology

### Department of Geosciences

#### Bachelor of Science in Geology

This is a four-year degree programme aims to prepare geoscientists with relevant knowledge and skills in the exploration and exploitation of minerals and groundwater. It is a field-based programme, and students spend a substantial amount of time in the field where they learn and acquire skills in geological mapping. The programme enables them to understand the general principles and aspects of geology, but a special emphasis is placed on the geology of Tanzania.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Apply theoretical and practical knowledge of geology discipline in understanding of earth processes and their bearing on occurrence.
- b. Perform geology and mineral exploration activities under minimum supervision.

- c. Perform exploration and exploitation of earth resources by using different methods.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can be self-employed as small-scale miners, and serve as consultants in earth resources exploration and mining companies, environment agencies. They can establish geoparks for geotourism in Tanzania and abroad.
- b. ***Employment opportunities: Graduates*** of the programme can be employed as geologists by the government and its agencies, academic/research institutes, minerals/petroleum exploration and mining companies.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme, of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills for small scale miners, also environment awareness to government and communities during mining activities and mining closure.

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## Bachelor of Science in Geology and Geothermal Resources

This is a four-year degree programme aims at equipping candidates with geology and geothermal techniques relating to statistical data analysis, modelling, prospect assessment and evaluation and management, data presentation and public speaking.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Apply geophysics and hydrogeology knowledge, to analyse and model geothermal systems.
- b. Explain and use the various policies in energy development.
- c. Apply skills gained in geothermal and earth resources exploration and exploitation.

- d. Apply geological, geochemical, geophysical, and remote sensing techniques to delineate geothermal and other earth resources.
- e. Assess and develop geothermal resources using the available technology.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can serve as consultants in geothermal and other earth resources exploration and mining companies, as well as writing and edit scientific/geological reports for clients. They can establish geoparks for geotourism in Tanzania and abroad.
- b. ***Employment opportunities: Graduates*** of the programme, also can be as geologists employed by government and its agencies, academic/research institutes, and energy industries as experts in renewable sources of energy that include geothermal sources. They can also be employed as geologists in mineral and groundwater sectors/industries.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to emphasis the use of renewable energy to community to protect environment and non-renewable resources.

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## Bachelor of Science in Geophysics

This is a four-year degree programme, aims at producing well trained personnel in all aspects of geophysics and who can also do research in the relevant fields of geophysics and its relations to other geosciences field. The program equips students with adequate knowledge, skills and competence they need to do all tasks that require the application of geophysics, including exploration of hydrocarbons, mineral deposits, groundwater and geothermal energy resources, and monitoring of the environment.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Apply geophysical concepts, principles and methods with respect to seismology, gravity, geomagnetism, internal heat flow and geodynamics, and to the exploration of earth resources.
- b. Solve complex geophysical problems, develop software to process and interpret seismic, gravity, magnetic, electrical, radiometric data and other kinds of geophysical data.
- c. Use gravity, electrical and electromagnetic methods, seismology and nuclear geophysical methods to solve geological problems.
- d. Think critically and logically about geophysical concepts and problems.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can serve as consultants through application of geophysical methods in exploration of hydrocarbons, mineral deposits, groundwater and geothermal energy resources, monitoring of the environment and geotechnical investigations of building sites.
- b. ***Employment opportunities: Graduates*** of the programme can be employed as geophysicists in hydrocarbon, mineral and groundwater exploration, and monitoring of the environment (e.g. natural hazards, including earthquakes) in the government and its agencies, academic/research institutes, minerals/petroleum exploration and mining companies.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to monitor geological disaster or natural hazards e.g., earthquake and tsunamis.

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### Bachelor of Science with Geology

This is a four-year degree programme, offers all fundamental courses in Geology and one other science subject (e.g., Mathematics, Physics, Chemistry, Botany, Geography, Statistics or Computer Sciences) offered by CoNAS or CoSS. The create a national pool of candidates who are better prepared to embark on specialized training in the hybrid earth sciences disciplines like palaeontology, geochemistry, geostatistics, geophysics and environmental science.

## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Apply geology and other science subject theories, principles and approaches to improving geological investigations and mining.
- b. Work as experts in all undertakings that require the application of geology including exploration of hydrocarbons, mineral deposits, groundwater and geothermal energy resources, and monitoring of the environment.
- c. Conduct independent research, analyse and interpret findings.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can be self-employed as small scale miners, serve as consultants in earth resources exploration and mining companies, environment agencies, serve as consultants in a specific area of geology field, e.g. palaeontology, (biology and geology), geochemistry (geology and chemistry), geo-statistics (geology and mathematics/statistics), geophysics (geology and physics), and environmental science (geology and geography). They can establish geoparks for geotourism in Tanzania and abroad.
- b. ***Employment opportunities: Graduates*** of the programme can be employed by the government and its agencies, academic/research institutes, minerals/petroleum exploration and mining companies. They can be employed as mathematicians, geographers and chemists depending on their subject majors.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to educate small scale miners, train about environment awareness to communities during mining activities and mining closure.

### Bachelor of Science in Engineering Geology

This is a four-year degree programme, aiming to produce experts in all undertakings that require the application of engineering geology in exploration and exploitation of mineral deposits, groundwater and geothermal energy resources, and in civil engineering-related projects, for example road and dam construction, building foundations and other civil structures.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Apply theoretical knowledge of geology, rock fabrics and geological structures and their bearing on civil engineering or built structures.
- b. Use the skill of site investigations, and design and construction of built structures as well as to environmental and geotechnical studies.
- c. Work as experts in all undertakings that require the application of engineering geology including exploration of hydrocarbons, mineral deposits, groundwater and geothermal energy resources, and monitoring of the environment.
- d. Analyse earth materials through assessing their risk factors and advise on the best procedures for development and the suitability of construction materials.

#### CAREER PROSPECTS

- a. **Entrepreneurial opportunities:** *Graduates* of the programme can be self-employed small scale miners, serve as geotechnical consultants in earth resources exploration and mining companies: advise on the best procedures for development and the suitability of construction materials for building and construction companies, and monitoring of the environment (e.g. natural hazards, including earthquakes and mass movement). They can establish geoparks for geotourism in Tanzania and abroad.
- b. **Employment opportunities:** *Graduates* of the programme can seek employment in petroleum, mineral and groundwater exploration companies and also in geotechnical investigation of construction

sites. They can also be employed by the government and its agencies, academic/research institutes, minerals and petroleum exploration and mining companies, and some are employed by service providers.

- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills educate small scale miners, train about environment awareness to communities during mining activities and mining closure as well as monitoring geological disaster or natural hazards e.g., earthquake and mass movement.

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### **Bachelor of Science in Metallurgy and Mineral Processing Engineering**

This is a four-year degree programme aiming at train candidate to process raw minerals into valuable finished products needed by various industries and other consumers. They are, therefore, given the skills to design equipment and plants, design processes and extract minerals.

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#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Apply knowledge for extraction of valuable earth materials from their ores.
- b. Apply gained skills in processing various minerals such as crushing techniques, milling, and chemistry of metals, metal separation, and leaching techniques.
- c. Apply skills relating to minerals economics, environmental protection in mining areas, mining management and mining budgeting.
- d. work as a mineral processing engineer, extractive metallurgical engineer, physical metallurgical engineer, or material engineer.

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#### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can serve as consultants for mineral firms on processing various

minerals such as crushing techniques, milling, chemistry of metals, metal separation and leaching techniques. They can also give professional consultation on mineral economics, environmental protection in mining areas, mining management, and mining budgeting. They can establish and own small to medium scale mines as individuals or partners.

- b. ***Employment opportunities:*** Graduates of the programme can seek employment in the government, mineral agencies/firms and mineral related companies with the responsibility in extraction of valuable materials from their ores, the liberation of valuable minerals and the separation of value from gangue minerals.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to educate small scale miners on mineral economics, environmental protection in mining areas and mining management.

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### **Bachelor of Science in Mining Engineering**

This is a four-year degree programme aiming at equip candidate knowledge on extraction of earth resources containing valuable minerals from the earth's surface and from underground, ready for processing. This responsibility requires knowledge of the resources, their existence and methods of collecting them and transporting them to proper destinations, ready for further processing. The responsibility makes it necessary for one to have knowledge of the design of mines, safety procedures and environmental considerations. The programme, therefore, provides these skills to students so that they can undertake these and many other tasks related to the extraction of minerals.

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### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Apply knowledge of the resources, their existence and methods of collecting them and transporting them to proper destinations, ready for further processing.
- b. Use skills related with design of mines, safety procedures and environmental considerations.

- c. Undertake tasks related to the extraction of minerals and other earth resources.
- d. Be engaged in underground construction, shaft sinking, raise boring, mine contracting, raise mining and mines development.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** *Graduates* of the programme can serve as consultants for extraction of earth resources containing valuable minerals from the earth's surface and from underground. They can also offer professional consultation on environmental protection in mining areas, mining management, mining budgeting. They can establish and own small to medium scale mines as individuals or partners.
- b. ***Employment opportunities:*** *Graduates* of the programme can be employed by government, mining agencies/firms and mineral-related companies. Mining engineers are responsible for designing mines, operating small-scale mines, using computers in mining, undertaking mining management and performing mining evaluations and budgeting.
- c. ***Leadership/Community-based opportunities:*** *Graduates* of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to educate small scale miners on mineral economics, environmental protection in mining areas and mining management.

## Department of Petroleum Science and Engineering

### Bachelor of Science in Petroleum Engineering

This is a four-year degree programme. The objective of the programme is to produce graduates with the requisite engineering knowledge and skills needed for the development and management of oil and gas resources. This programme provides a reasonable and balanced dose in exploration, development, and conservation of oil and gas resources.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Use petroleum engineering, oil and gas reservoir knowledge for drilling, production plan, supervise drilling and well-completion programmes.
- b. Plan best methods to extract petroleum/ oil and gas products from the earth.
- c. Design and select drilling and production equipment, estimate and manage reserves, and manage oil and gas facilities.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** *Graduates* of the programme can establish consulting businesses and be independent oil and gas producers locally or internationally. They can also serve as service providers for oil and gas companies during exploration and mines development.
- b. ***Employment opportunities:*** *Graduates* of the programme seek employment within the oil and gas industry, government institutions and its agencies, academic/research institutes, which requires specialists in activities involving producing and injecting fluids using wellbores.
- c. ***Leadership/Community-based opportunities:*** *Graduates* of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to educate the community about environmental protection in petroleum mining areas and mining management.

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## Bachelor of Science in Petroleum Geology

This is a four-year degree programme, aim at prepare graduates with relevant skills in the exploration and development of oil and gas. The programme equips students with skills in all fields of Geology, with a particular emphasis on the areas of Stratigraphy and Palaeontology, Seismic Stratigraphy, Sedimentary basin analysis, Petroleum Geophysics and Geochemistry. Students are also exposed to various techniques used in the exploration of oil and gas, and in doing seismic data analysis.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Apply principles of geology and geophysical methods and techniques in the exploration of hydrocarbons, notably oil and gas.
- b. Provide geological expertise needed by the government in developing, reviewing and implementation of pertinent policies and regulations governing oil and gas sector development in the country.
- c. Improve methods effective for exploration and exploitation of the earth resources.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can be self-employed as small scale miners, serve as consultants in oil and gas exploration as well as other earth resources exploration industries, mining companies, environment agencies.
- b. ***Employment opportunities: Graduates*** of the programme can be employed as geologists or as petroleum geologists in the government and its agencies, universities, research institutes, oil companies, exploration and mining companies and some will be employed by service providers.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills to educate small scale miners about environment awareness in the communities during mining activities and mining closure.

## UNIVERSITY OF DAR ES SALAAM – MBEYA COLLEGE OF HEALTH AND ALLIED SCIENCES

The University of Dar es Salaam – Mbeya College of Health and Allied Sciences (UDSM-MCHAS) comprises seventeen teaching and clinical departments, namely Anatomy, Internal Medicine, Otorhinolaryngology, Physiology, Surgery, Anaesthesiology, Microbiology and Immunology, Paediatrics and Child Health, Psychiatry and Mental Health, Clinical Pharmacology, Obstetrics and Gynaecology, Parasitology and Entomology, Radiology, Emergency Medicine, Orthopaedics and Traumatology, Pathology, and Social Sciences. The college offers the following undergraduate programmes:

- a. Doctor of Medicine
- b. Doctor of Dental Surgery

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### **Doctor of Medicine**

This is a five-year programme. The programme is composed of basic medical science courses in the first two years and clinical subjects from the third year to the fifth year. The courses are delivered through seminars, lectures, practicals and laboratory classes. From the third to the fifth year, students spend most of their time in clinical rotations in hospital wards. They also undergo training in research in the second, third and fourth years of study.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the relationships between theory and practical aspects of basic biomedical sciences, clinical medicine, health system management, professional ethics and implications for the moral and professional conduct of a medical doctor in the society.
- b. Develop appropriate skills in selecting and using medical equipment, integrating ICT in medical care, designing and implementing laboratory and outdoor experimentation, analysis and interpreting measurement data for health.

- c. Demonstrate application of the basic medical sciences and the right communication skills to manage common medical conditions and counsel patients, their relatives and the society on preventive measures.
- d. Demonstrate and adhere to professional conduct that is expected of a medical professional and research ethics as applicable for health research.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties. They can establish health-related businesses such as clinics, health centres, hospitals, pharmacies, laboratories etc.
- b. ***Employment opportunities:*** *Graduates* of the programme have access to a variety of career opportunities in the private and public sectors, including being clinical physicians, advisers in public health programmes, dealing with preventive and curative services, health managers, medical teachers, clinical forensic medical examiners, crowd doctors, and medical/pharmaceutical researchers. MD degree is a requirement for most medical specialisations and many health-related specialties and subspecialties. Thus, MD graduates can be trained and involved in sport and exercise medicine, and be volunteers, medical sales representative, medical legal advisors, occupational physicians, transplant coordinators, radiology/diagnostic imaging directors, and investment bankers to help companies obtain funds and offer advice on mergers, acquisitions and healthcare equity research.
- c. ***Leadership/Community-based opportunities:*** *Graduates* of the programme can offer leadership in NGOs and community-based health related services and activities. They can engage in community-based clinics offering advice on disease prevention and care.

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## Doctor of Dental Surgery

This is a five-year programme. The programme is composed of basic medical science courses in the first two years and clinical subjects from the third year to the fifth year. The courses are delivered through seminars, lectures, practicals and laboratory practical classes. From the third to the fifth year, students spend most of their time in clinical rotations in hospital, oral and dental health clinics, wards, and laboratories. They also undergo training in research in the second, third and fourth years of study.

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### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the relationships between theory and practical aspects of basic biomedical sciences, clinical dentistry and oral health, health system management, professional ethics and implications for the moral and professional conduct of a dentist in the society.
- b. Develop appropriate skills in selecting and using dental equipment, integrating ICT in dental and oral health care, designing and implementing laboratory and outdoor experimentation, analysis and interpreting measurement data for health.
- c. Develop application of basic medical sciences and the right communication skills to manage common dental and oral conditions and counsel patients, their relatives and the society on preventive measures.
- d. Demonstrate and adhere to professional conduct that is expected of a dental and oral health professional and research ethics as applicable for health research.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** *Graduates* of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties. They can establish health-related businesses such as clinics, health centres, hospitals, pharmacies, laboratories etc.

- b. ***Employment opportunities: Graduates*** of the programme have access to a variety of career opportunities in the private and public sectors, including being dental and oral health physicians, advisers in public oral and dental health programmes, dealing with preventive and curative services, oral and dental health managers, oral and dental health teachers, medical researchers, pharmaceutical researchers. DDS degree is a requirement for oral and dental health specialisations and many oral and dental health related specialties and subspecialties. Thus, DDS graduates can be trained and involved in sport and exercise medicine, and be volunteers, medical sales representative, medical legal advisors, occupational physicians, transplant coordinators, radiology specialists, diagnostic imaging directors, and investment bankers to help companies obtain funds and offer advice on mergers, acquisitions and healthcare equity research.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can offer leadership in NGOs and community-based health related services and activities. They can engage in community-based clinics offering advice on disease prevention and care.

## UNIVERSITY OF DAR ES SALAAM BUSINESS SCHOOL

The University of Dar es Salaam Business School (UDBS) consists of four teaching and research departments that offer undergraduate programmes. The departments are accounting, finance, general management, and marketing. UDBS seeks to provide quality entrepreneurship, business management and governance training, research and advisory services for the development of Tanzania and the rest of the world. UDBS offer the following undergraduate programmes:

- a. Bachelor of Business Administration
- b. Bachelor of Commerce in Accounting
- c. Bachelor of Commerce in Banking and Financial Services
- d. Bachelor of Commerce in Finance
- e. Bachelor of Commerce in Human Resource Management
- f. Bachelor of Commerce in Marketing
- g. Bachelor of Commerce in Procurement and Supply Chain Management
- h. Bachelor of Commerce in Tourism Management

### Department of Accounting

#### **Bachelor of Commerce in Accounting**

This is a three-year programme. The programme covers a wide range of accounting issues. The programme provides students with a good understanding of Accounting, Finance, Management and other issues pertaining to accounting such as taxation, auditing, corporate governance, corporate social responsibility as well as forensic accounting. The programme exposes students to excellent education in all areas of teaching and learning, monitored academic progression and in a wide variety of educational resources. Accounting is a crucial function for any business or organization, making it an essential career path for many.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Understand and apply fundamental accounting concepts and principles to analyse financial information and prepare financial reports.
- b. Analyse financial accounting data to make informed business decisions and provide recommendations for improvement.
- c. Use technology and software to process financial transactions and manage accounting information systems.
- d. Demonstrate ethical and professional behaviour in accounting practice.
- e. Communicate effectively and work collaboratively with diverse stakeholders.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can start auditing and accounting firms and be public accountant consultants.
- b. ***Employment opportunities:*** Graduates of the programme can be employed across different sectors, including public accounting, corporate accounting, government accounting, and non-profit accounting as accountant, external auditor, internal auditor, tax accountant, cost and management accountant, forensic accountant, investment accountant, financial controller, finance manager, financial analyst, chief finance officer, information systems auditor, and risk and information security specialist.
- c. ***Leadership/Community-based opportunities:*** *Graduates* of the programme can also consider leadership or community-based roles in providing advice on accounting matters in community funds and volunteering to audit as well as manage community funds.

## Department of Finance

### Bachelor of Commerce in Banking and Financial Services

This is a three-year programme. The programme equips students with the necessary skills and knowledge related to the operations of banking and financial services institutions such as pension funds, financial market institutions, insurance, leasing companies, and microfinance institutions. The knowledge centres around economic aspects, legal and regulatory frameworks of the institutions, techniques, and tools for decision making, value chain of various services and products as well as linkages with other key organizational units such as marketing, human resources, and finance. The knowledge enables them to support decision-making in various areas of the operation of the institutions.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Use knowledge of key generic and specific areas of general business operations, fundamentals of banking services, systems, and business operations of the banking and financial services sector, banking and financial services products, services, operations, and risks.
- b. Use legal and regulatory frameworks in banking and financial services and the changing nature of the industry.
- c. Describe, design, price, and plan banking and financial services products.
- d. Analyse financial statements and articulate various risks in the banking and financial services industry. Further students will be able to gain research knowledge on the financial services provision.
- e. Apply various theoretical settings and thinking in the real-life decision-making processes affecting the banking and financial services industry.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can start personal corporate firms and financial consultancy.
- b. ***Employment opportunities:*** Graduates of the programme can be employed in private and public institutions as loan officers, financial products development officers and analysts, bank and investment

relationship officers in banking and financial services industry, financial executives and consulting officers and risk analysts.

- d. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership or community-based roles in providing advice to the community on village banking initiatives and how they can improve the socio-economic status of the community at large.

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## **Bachelor of Commerce in Finance**

This is a three-year programme. The programme focuses on corporate finance, financial markets, and leasing finance.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Use knowledge and concepts of corporate financing, by first understanding the micro and macro-economic structures and business undertakings. Issues related to fund management, and corporate financing, debt, equity or mezzanine financing. The legal and regulatory environment for financing as well as analysis of internal and external forces affecting corporate finance.
- b. Understand internal and external environmental aspects of finance, financial analysis, taxation issues as well as portfolio management of various financing and investment options available for corporate firms, describe, analyse, design policies and plans for corporate financing.
- c. Analyse various aspects when it comes to either debt or equity financing, scrutiny the financing documents, and arrange for a financial transaction.
- d. Perform analysis of corporate firms, deal with the ways to raise finance from various sources, and able to arrange financing deals of various companies.
- e. Solve problem related to assets management, treasury management and risks associated with such functionalities in adding decision making of corporate firms.

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## CAREER PROSPECTS

- a. **Entrepreneurial opportunities:** Graduates of the programme can start investment and financial market firms.
- b. **Employment opportunities:** Graduates of the programme can be employed in public and private sector as financial and investment analysts and officers, planning and finance officers, treasurer officers, banking officers, investment advisors, financial market advisors.
- c. **Leadership/Community-based opportunities:** Graduates of the programme can also consider leadership or community-based in providing financial advice to community leaders and also lead discussion on finance in community projects and programmes

## Department of General Management

### Bachelor of Business Administration

This is a three-year programme. The programme equips students with the principles of business administration, including accounting, risk management, finance, information technology, human resources, entrepreneurship, taxation and marketing. The overall objective of the programme is to develop their managerial skills. It prepares students for further education in business/management. It also provides them with a strong academic foundation in core business functions, including general business administration. It equips students with the knowledge and skills necessary to analyse complex business problems.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate foundational knowledge in accounting, economics, finance, management, and marketing and be able to apply theories in real-world situations.
- b. Understand global strategic issues facing corporations, and apply ethical reasoning in the business environment.

- c. Apply practical knowledge of the functional areas of business and use business policies for decision-making.
- d. Use current technology in support of business administration and deliver effective written and oral communications.
- e. Demonstrate critical thinking, research, and communication skills as applied to organizations and explain the cultural context of organizations operating in a global environment.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can start their own business consultancy firms, loan and insurance companies, be real estate agent, fundraisers, and insurance underwriter.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as business analysts, loan officers, business event planners, business information analysts, marketing manager, financial analyst, human resources manager, operations manager, sales manager, investment banker, project manager, supply chain manager, customer service manager, public relations specialist, retail manager, market research analyst, business development manager and risk manager.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership or community-based roles to lead community-based projects, business events and business-oriented NGOs.

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## Bachelor of Commerce in Human Resource Management

This is a three-year programme. The programme equips students with in-depth knowledge of human resource management practices, employment laws, ethics, and related policies enabling them to handle HR functions effectively. Also, it aims to equip students with the critical thinking, problem-solving, and leadership skills, the human resource functions, such as recruitment, payroll management, employee relations, and performance management.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Manage the recruitment process from sourcing potential candidates to orienting new employees, deal with staff complaints and disputes, handling payroll-related duties, and compliance.
- b. Critically understand human resource management concepts and theories, including recruitment, training, selection, and performance management, and apply them in real-world situations.
- c. Develop and implement effective human resource policies and practices that align with organizational goals and comply with legal and ethical standards.
- d. Analyse and interpret data related to human resource management, such as workforce demographics, employee engagement, and retention, and use this information to make fact-based decisions.
- e. Communicate effectively with stakeholders, including employees, managers, and external partners, on HR issues.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can start their own Human Resource firms, employee recruitment company, conduct human resource training, organizational development and labour relation consultants.
- b. ***Employment opportunities:*** Graduates of the programme can be employed as human resource specialist, human resource business partner, recruitment / talent acquisition manager, labour relations specialist / industrial relations experts, training and development specialist, compensation and benefits manager/ payroll manager, performance management specialist, human resource information systems analyst, diversity and inclusion specialist, human resource compliance manager.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills managing projects in the community.

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## **Bachelor of Commerce in Procurement and Supply Chain Management**

This is a three-year programme. The programme aims to train well-equipped, skilled, and knowledgeable professionals who can help organizations effectively manage their procurement and supply chain processes, reducing costs, and improving overall efficiency. The degree prepares students for the use of technology in procurement and supply chain management, including data analysis and process automation.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Critically understand procurement and supply chain management concepts and apply them in real-world situations.
- b. Assess and negotiate contracts, select suppliers, and manage supplier relationships.
- c. Develop effective supply chain strategies, optimize logistics, and evaluate risks in supply chains.
- d. Use technology to manage procurement and supply chain processes and communicate effectively with stakeholders.
- e. Understand and comply with relevant rules, regulations, laws, and ethical standards in procurement and supply chain management.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can start their own purchasing, procurement and supply chain consultancy firms, and clearing and forwarding companies.
- b. ***Employment opportunities:*** Graduates of the programme can be employed in manufacturing, retail, healthcare, technology industries, and government as procurement manager, supply chain manager, logistics manager/coordinator, supply chain analyst, sustainability manager, inventory control specialist, materials manager, contract manager, operations manager, vendor manager, and distribution manager.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based

roles where they can use their knowledge and skills in procurement and contracts for community projects and programmes.

## Department of Marketing

### Bachelor of Commerce in Marketing

This is a three-year programme. The programme provides basic marketing management knowledge and skills to students, professionally perform marketing and management functions in private and public institutions.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate an understanding of fundamental marketing concepts.
- b. Assess markets for their organisations and accordingly advise and implement strategies which enhance their organisations' competitiveness.
- c. Analyse key marketing opportunities and its implications on a firm's and evaluate new product or service ideas.
- d. Conduct marketing information systems, research and data analysis.
- e. Identify the key marketing challenges and propose various solutions.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can be self-employed by starting their own adverts, promotion, contents, and branding firms.
- b. ***Employment opportunities: Graduates*** of the programme can be employed as marketing managers, adverting and promotion managers, marketing production managers, media planners, marketing consultants, sales managers, strategic marketing managers, marketing information analysts, promotion managers, brand managers, digital marketers, and content developers.
- c. ***Leadership/ Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in promoting

and marketing of community products so as to generate wealth and sustainable development in the community.

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## **Bachelor of Commerce in Tourism Management**

This is a three-year programme. The programme imparts basic tourism knowledge and skills to students so that they can professionally carry out tourism and hospitality related duties in various public and private organisations within and outside the country. The programme train students in the tourism management areas for them to establish and run tourism enterprises. Students are trained to be catalyst for tourism development in both public and private sectors. Acquired skills make the to manage the tourism industry in Tanzania and elsewhere in the world.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate an understanding of fundamental tourism management concepts
- b. Plan, organize, implement, and control business related to tourism.
- c. Analyse, evaluate and synthesize tourism issues and apply theoretical ideas to practical settings.
- d. Create, apply, and evaluate marketing strategies for tourism destinations and organizations.
- e. Develop and evaluate tourism policy and planning initiatives.

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### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can start their own tour guide and operating companies, and consultancy role in all tourism functions.
- b. ***employment opportunities:*** Graduates of the programme can be employed as tourism managers, travel planners, tourism marketers, tourism agent, tourism entrepreneurs, tourism policy analysts, tourism information system analyst, tourism information managers, tourism destination managers, event managers, hotel managers.

c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in tourism development campaigns in the community and lead identification of tourism initiatives in communities that can bring wealth to the community and improve livelihoods.

## UNIVERSITY OF DAR ES SALAAM SCHOOL OF ECONOMICS

The University of Dar es Salaam School of Economics (UDSE) consists of two departments that offer undergraduate programmes. The departments are Economics and Applied Economics. The School of Economics offers the following undergraduate programmes:

- a. Bachelor of Arts in Economics
- b. Bachelor of Arts in Economics and Statistics

### Department of Economics

#### Bachelor of Arts in Economics

This is a three-year programme. The programme gives students a strong foundation in the major areas of Economics.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Use basic and intermediate micro- and macroeconomic theories, as well as trade and investment concepts, in analysing economic problems in a given socioeconomic environment.
- b. Understand how decisions are made, how markets work, how rules affect outcomes and how economic forces drive social systems to equip people to make better decisions and solve problems.
- c. Understand how scarce resources are allocated as well as being able to appraise the complex ways in which institutions, policies and practices relevant to economic development interact.
- d. Prepare, process, analyse, interpret and present data using appropriate qualitative and quantitative techniques.
- e. Make informed decisions on scarce resource allocation against unlimited needs/wants for individuals, households, firms and institutions (both public and private), government bodies, etc.

#### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can pursue careers as researchers, financial consultants, and investment

analysts. They can also establish their own firms as researchers, consultants and investment analysts.

- b. **Employment opportunities: Graduates** of the programme can be employed as economists, financial risk analysts, data analysts, accountants, economic researchers, financial consultants, and budget analysts in government ministries, departments, agencies, and parastatal institutions, commercial banks, pension funds, capital market, and stock exchange. They can also be employed as academic staff in higher learning institutions, the private sector and in international organisations.
- c. **Leadership/Community-based opportunities:** Graduates of the programme can also consider leadership or community-based roles in leading discussions and providing advice on development planning for the community.

## Department of Applied Economics

### Bachelor of Arts in Economics and Statistics

This is a three-year programme that gives students a strong foundation in the major areas of Economics and Statistics.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Understand the state of the economy and the challenges encountered in the production, distribution, and consumption processes through the use of descriptive statistical methods, as well as to recognise patterns in the economy through data visualisation
- b. Prepare, process, analyse, interpret and present data using appropriate qualitative and quantitative techniques.
- c. Use scientific methods in developing policies from the firm's level to the government level so as to attain efficiency and optimal allocation of resources.
- d. Apply methods of data collection, analysis, interpretation and representation to solve societal problems and understanding ways in which people from various income groups spend their incomes.

- e. Use trade and investment concepts in analysing economic problems in a given socioeconomic environment and collect, analyse, and interpret data using statistical and econometric techniques.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can be self-employed as researchers, financial consultants, and investment analysts.
- b. ***Employment opportunities: Graduates*** of the programme can be employed as statisticians, economists, financial risk analysts, data analysts, accountants, economic researchers, financial consultants, and budget analysts in government ministries, departments, agencies, and parastatal institutions, commercial banks, pension funds, capital markets, and the stock exchange. They can also be employed as academic staff in higher learning institutions, the private sector and in international organisations.
- c. ***Leadership/Community-based opportunities: Graduates*** of the programme can also consider leadership or community-based roles in leading discussions and providing advice on development planning for the community.

## UNIVERSITY OF DAR ES SALAAM SCHOOL OF LAW

The University of Dar es Salaam School of Law (UDSoL) comprises three teaching departments, namely Departments of Public Law, Private Law and Economic Law. The school offers the following undergraduate programmes:

- a. Bachelor of Law
- b. Bachelor of Arts in Law Enforcement

### **Bachelor of Laws**

This is a four-year degree programme that introduces students to principles of laws in Tanzania and international law. It equips them with skills necessary to master the legal profession. Upon successful completion of this programme, graduates are eligible to join the Law School of Tanzania for the practical legal training (Postgraduate Diploma in Legal Practice) as a prerequisite for admission as Advocate of the High Court.

### **LEARNING OUTCOMES**

At the end of the program, graduates shall be able to:

- a. Integrate and critically apply knowledge, understanding and the skills and techniques associated with the discipline of law to effectively engage with the evolving nature of the discipline, legal profession and legal practice. As such, they should be able to pursue clients' interests in accordance with relevant rules and codes of professional responsibility and identify strategies likely to increase access to the legal system and improve the quality of justice in society.
- b. Analyse legal concepts and problems in their historical and contemporary context, formulate potential solutions and defend conclusions by evaluating relevant legal sources, ideas and evidence.
- c. Integrate and synthesise legal and non-legal viewpoints and practices and work effectively across disciplinary and professional boundaries individually and with others to produce effective outcomes.
- d. Synthesize information about legal documents including statutes and case law, use primary and secondary sources of law in developing

arguments and detect ambiguity, consistency and inconsistency within and among different rules and sources of law

- e. Demonstrate skills in conducting legal research to solve legal problems in society in a manner that is practical and cost effective and be able to prepare legal documents such as pleadings, affidavits, memoranda, contracts, letters and emails, reflecting the effective legal writing skills and in a language that can be understood by ordinary clients. This includes the ability to cite appropriate legal authorities to support statements about law and follow standard citation and attribution styles and conventions.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can develop their career as excellent human resource officers/practitioners, administrative officers, company secretaries, tax consultants, mediators, arbitrators and legal consultants. Graduates can establish and run own law firms after admission as advocates of the High Court.
- b. ***Employment opportunities: Graduates*** of the programme can seek employment opportunities in the public and private sectors, NGOs both within and outside Tanzania as judges, magistrates, state attorneys, advocates, legal officers or administrators. They can also work with international organisations, courts and tribunals.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in human rights and legal advice to the community. As engaged and reflective professionals, they can initiate and lead constructive change, especially for disadvantaged groups and individuals in the community, through responsible modes of persuasion and active participation with others.

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## Bachelor of Arts in Law Enforcement

This is a three-year programme, specifically tailored to the needs of law enforcement bodies. However, admission is also granted to personnel from other stakeholder institutions. The overarching objective of the programme is to build the capacity of law enforcement agencies to deal with the

unique and ever-mutating challenges of the fast-globalising world. The programme is multi-disciplinary in content and exposes students to the essentials of law, political science, sociology, psychology, cyber and computer crime, international crime, transnational crime, fraud and forgery, and criminal investigation.

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### LEARNING OUTCOMES

At the end of the program, graduates shall be able to:

- a. Demonstrate an understanding of the fundamental skills of a law enforcement officer.
- b. Identify and demonstrate problem-solving skills that will correlate to the issues they will be challenged by as law enforcement officers upon employment.
- c. Demonstrate mastery and ability to sufficiently apply knowledge in relation to substantive and procedural laws applicable in various areas and levels of law enforcement.
- d. Communicate effectively using written and oral skills.

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### CAREER PROSPECTS

- a. ***Entrepreneurial opportunities: Graduates*** of the programme can establish companies that provide security services to the public and private sectors. They can also work as compliance officers or security and safety consultants.
- b. ***Employment opportunities: Graduates*** of the programme, can be employed by government sectors such as, prison, police, and immigration department, security services in other government agencies, judiciary, and in the private sector e.g., private security companies.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme, can also consider leadership roles or community-based roles where they can use their knowledge and skills in human security, human rights and legal advice to the community.

## **DAR ES SALAAM UNIVERSITY COLLEGE OF EDUCATION**

The Dar es Salaam University College of Education (DUCE) comprises three faculties namely, Faculties of Education, Humanities and Social Sciences, and Science. These academic units offer 5 undergraduate degree programmes, as listed below:

- a. Bachelor of Arts in Disaster Risk Management
- b. Bachelor of Arts with Education
- c. Bachelor of Education in Arts
- d. Bachelor of Education in Science
- e. Bachelor of Science with Education

### **Faculty of Education**

#### **Bachelor of Education in Arts**

This is a three-year programme. The programme covers a wide range of educational courses and minor subject-content components selected from among Arts subjects. It produces graduates with a good understanding of educational issues in the country, the region and the world in general.

#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

1. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
2. Demonstrate the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
3. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
4. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations.

5. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, and teacher training colleges. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational logistics officers, educational counsellors, educational researchers etc.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

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## Bachelor of Education in Science

This is a three-year degree programme. The programme covers a wide range of educational courses and minor subject-content components selected from among science subjects. It produces graduates with a good understanding of educational issues in the country, the region and the world at large.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrate the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations.
- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, and teacher training colleges. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational

logistics officers, educational counsellors, educational researchers etc.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

## Faculty of Science

### Bachelor of Science with Education

This programme offers courses leading to the award of a Bachelor of Science with Education degree. The overall objective of the programme is to enable students to develop sufficient mastery of the subject matter and competence in teaching sciences, as well as in pedagogy.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrates the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations.
- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

## SPECIALISATIONS IN THE B.Sc. (EDUCATION) DEGREE PROGRAMME

Students enrolled in the B.Sc. Education programme are required to take two teaching subjects (content courses) and Education courses. The following teaching subject combinations are offered:

- a. Biology and Chemistry
- b. Biology and Geography
- c. Biology and Physics
- d. Chemistry and Geography
- e. Mathematics and Chemistry
- f. Mathematics and Economics
- g. Mathematics and Geography
- h. Mathematics and Information Science
- i. Physics and Chemistry
- j. Physics and Geography
- k. Physics and Mathematics

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities:*** Graduates of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, teacher training colleges, secondary and primary schools. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational logistics officers, educational counsellors, educational researchers etc.

- c. *Leadership/Community-based opportunities:* Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

## Faculty of Humanities and Social Sciences

### Bachelor of Arts with Education

This is a three-year degree programme that aims at preparing graduate teachers. The degree programme equips the graduates with skills and knowledge on various disciplines including Kiswahili, Geography, Economics, French, English language, English literature, History, and Political Science.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrate the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations.
- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

## SPECIALISATIONS IN THE B. A. (EDUCATION) DEGREE PROGRAMME

Students enrolled in the B.A. Education programme are required to take two teaching subjects (content courses) and Education courses. The following teaching subject combinations are offered:

- a. Economics and History
- b. English and English Literature
- c. English and French
- d. English and Geography
- e. English and Kiswahili
- f. Geography and Economics
- g. Geography and Kiswahili
- h. Geography and Political Science (Civic education)
- i. History and English
- j. History and Geography
- k. History and Kiswahili
- l. History and Political Science (Civic education)
- m. Kiswahili and Political Science (Civic education)

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, teacher training colleges, secondary and primary schools. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government

educational officers, educational logistics officers, educational counsellors, educational researchers etc.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

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## **Bachelor of Arts in Disaster Risk Management**

This is a three-year programme. The overall objective of the programme is to provide students with practical skills, knowledge and values necessary for addressing risks related to hazards and disasters.

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### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate knowledge on causal phenomena, general characteristics, predictability, factors contributing to vulnerability, typical effects, possible risk reduction measures, specific preparedness measures, typical post-disaster needs, impact assessment tools for different types of disasters and societal response to disaster risks.
- b. Demonstrate knowledge and skills in insurance and risk management in identifying and analysing various types of risks.
- c. Engage in disaster preparedness and planning, design, develop and use a variety of tools for analysing risks and needs arising from disasters.
- d. Apply and observe ethical issues in discharging duties related to disaster managing, and prepare different types of reports on disaster for different stakeholders (e.g., disaster preparedness program reports, disaster needs assessment reports, emergency relief reports, and donor reports).
- e. Explain, describe and assess different types of disasters and provide practical solution with regard to disaster risk assessment, reduction, and preparedness planning.

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas as consultants for disasters preparedness and risks management, disaster site consultant, disaster experts, and establish disaster support services companies.
- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities in sustainable development organizations, disaster management institutions and organizations, non-governmental organizations, disaster response institutions, international organizations, government ministries, departments and agencies, hospitals, industries, transport and logistics companies, and research institutions. They can be employed as practitioners in national disaster management systems, civil societies and the private sectors, public safety experts, institutional emergency planners, public relief experts and disaster management logistics officers.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills as practitioners in community-based disaster management organizations, community emergency management, lead community sustainable efforts against environmental hazards and sustainable development efforts in communities

## **MKWAWA UNIVERSITY COLLEGE OF EDUCATION**

The Mkwawa University College of Education (MUCE) comprises three faculties namely, Faculties of Education, Humanities and Social Sciences, and Science. These academic units offer 5 undergraduate degree programmes, as listed below:

- a. Bachelor of Education in Arts
- b. Bachelor of Education in Science
- c. Bachelor of Arts with Education
- d. Bachelor of Science with Education
- e. Bachelor of Science in Chemistry

### **Faculty of Education**

#### **Bachelor of Education in Arts**

This is a three-year programme. The programme covers a wide range of educational courses and minor subject-content components selected from among arts subjects. It produces graduates with a good understanding of educational issues in the country, the region and the world in general.

#### **LEARNING OUTCOMES**

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrate the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations.

- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities: Graduates*** of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, and teacher training colleges. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational logistics officers, educational counsellors, educational researchers etc.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

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## Bachelor of Education in Science

This is a three-year degree programme. The programme covers a wide range of educational courses and minor subject-content components selected from among science subjects. It produces graduates with a good understanding of educational issues in the country, the region and the world at large.

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## LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrates the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and regulations
- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

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## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, and teacher training colleges. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational

logistics officers, educational counsellors, educational researchers etc.

- c. **Leadership/Community-based opportunities:** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

## Faculty of Science

### Bachelor of Science with Education

This programme offers courses leading to the award of a Bachelor of Science with Education degree. The overall objective of the programme is to enable students to develop sufficient mastery of the subject matter and competence in teaching sciences, as well as in pedagogy.

#### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrates the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counseling to students and staff where necessary and in line with national educational standards and regulations
- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

## SPECIALISATIONS IN THE B.SC. (EDUCATION) DEGREE PROGRAMME

Students enrolled in the B.Sc. Education programme are required to take two teaching subjects (content courses) and Education courses. The following teaching subject combinations are offered:

- a. Biology and Chemistry
- b. Biology and Geography
- c. Mathematics and Chemistry
- d. Mathematics and Economics
- e. Mathematics and Geography
- f. Mathematics and Information Science
- g. Physics and Chemistry
- h. Physics and Mathematics

## CAREER PROSPECTS

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, and teacher training colleges. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational logistics officers, educational counsellors, educational researchers etc.
- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

## Bachelor of Science in Chemistry

This is a three-year programme. The programme produces graduates with a wide range of skills and knowledge of chemical principles.

### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive understanding of chemistry, together with their concepts needed for research and teaching
- b. demonstrate knowledge and skills that applies in establishing links between academia, research output and industry, and transfer skills in advanced chemistry for application in real work environment.
- c. Conduct scientific research and the preparation of the report thereof and establish and manage chemical systems in teaching, research and industry.
- d. Apply new and acquired knowledge to undertake independent work/research, apply acquired knowledge to address societal problems related to chemistry aspect, and apply and keep pace with new and appropriate methods/techniques in chemistry for value addition.
- e. Establish and manage businesses in the chemical and allied industries.
- f. Demonstrate competencies necessary for establishing and managing businesses in the chemical and allied industries.

### CAREER PROSPECTS

- a. **Entrepreneurial opportunities:** *Graduates* of the programme can engage in professional consultancy services and venturing in private firms of the graduate's field of specialties including environmental impact assessment, production of chemical materials such as natural pesticides, natural fertilizers, disinfectants, soaps and detergents.
- b. **Employment opportunities:** *Graduates* of the programme can be employed by pharmaceutical industries, research institutions,

agricultural products processing and agricultural pest control agents, food processing industries, textile industries, plastics industries, mining industries, and government agencies, authorities and institutions. They can also be employed by construction industries, fertiliser manufacturing industries, brewing and bottling industries, pulp and paper industries, paint manufacturing industries, metal-works industries and environmental management and impact assessment agencies/companies.

- c. *Leadership/Community-based opportunities: Graduates* of the programme shall have a potential to offer leadership and advice to NGOs and community-based environmental conservation groups

## Faculty of Humanities and Social Sciences

### Bachelor of Arts with Education

This is a three-year degree programme that aims at preparing graduate teachers. The degree programme equips the graduates with skills and knowledge on various disciplines including Kiswahili, Geography, Economics, French, English language, English literature, History, and Political Science. Furthermore, graduates in the B.A. (Education) programme are equipped with

### LEARNING OUTCOMES

At the end of the programme, graduates shall be able to:

- a. Demonstrate a comprehensive knowledge of the general principles of education and its theoretical perspectives in teaching and learning, administration, management, and curriculum.
- b. Demonstrates the content knowledge of their chosen teaching subjects and the professional ethics for the moral and professional conduct of teachers and other personnel in the practice of education in society.
- c. Show mastery in the analysis of syllabuses and preparation of teaching plans, prepare teaching-learning aids/media and select and use appropriate teaching-learning methods and strategies.
- d. Provide guidance and counselling to students and staff where necessary and in line with national educational standards and

regulations.

- e. Demonstrate an ability to assume responsibilities and leadership roles in and outside the teaching profession within the community and wider society and demonstrate skills and knowledge on curriculum design and implementation, teaching methodologies, as well as skills in education management and administration.

### **SPECIALISATIONS IN THE B.A. (EDUCATION) DEGREE PROGRAMME**

Students enrolled in the B.A. Education programme are required to take two teaching subjects (content courses) and Education courses. Therefore, the degree programme produces teachers specialised in two of the following courses or subjects:

- a. History and Geography
- b. History and English
- c. History and Kiswahili
- d. English and Kiswahili
- e. English and Geography
- f. English and French
- g. History and Political Science (Civic education)
- h. English and English Literature

### **CAREER PROSPECTS**

- a. ***Entrepreneurial opportunities:*** Graduates of the programme can establish entrepreneurial prospects in various areas in advocacy and lobbying for educational matters, establishment of educational businesses such as schools, educational support services and institutions, consultant for educational services such as scholarships agencies, educational support services.
- b. ***Employment opportunities:*** *Graduates* of the programme can consider employment opportunities in ministries and ministerial departments, higher education institutions, teacher training colleges, secondary and primary schools. Graduates of the programme can be employed as education officers, curriculum developers, educational analysts, examination officers, training officers, education

programme officers, educational advisors, educational specialists, educational book authors, teachers, school managers, government educational officers, educational logistics officers, educational counsellors, educational researchers etc.

- c. ***Leadership/Community-based opportunities:*** Graduates of the programme can also consider leadership roles or community-based roles where they can use their knowledge and skills in volunteering and provision of educational support services in the community.

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University of Dar es Salaam  
Office of the Deputy Vice Chancellor - Academic  
P.O. Box 35091, DAR ES SALAAM  
Tel/Fax: +255-22-2410077  
Email: [dvc-arc@udsm.ac.tz](mailto:dvc-arc@udsm.ac.tz)  
Website: [www.udsm.ac.tz](http://www.udsm.ac.tz)