

MBEYA UNIVERSITY OF SCIENCE AND TECHNOLOGY



UNDERGRADUATE PROSPECTUS

2025/2026

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1.0 INTRODUCTION

1.1 VICE CHANCELLOR’S MESSAGE

Mbeya University of Science and Technology (MUST) provides Technical Education, Research and Consultancy services. Due to rapid technological changes in the world today in many fields, there are ever widening technical skill gaps in the labour market for scientists, technicians and engineers. MUST has set for itself the task of responding to these changes at the same pace as that at which the technology is changing by making frequent reviews of its curricula and developing new curricula and Programmes to fit and fill the skill gaps that new technologies pose. MUST, therefore, play its role of training scientists, engineers and technologists in numbers and quality so as to spearhead development in the public and private sector.

1.2 HISTORICAL BACKGROUND

Mbeya University of Science and Technology (MUST) is a result of the transformation of Mbeya Institute of Science and Technology (MIST) through the University Act No. 7 of 2005 and the Charter of Mbeya University of Science and Technology, 2013. The Institute was a result of the transformation of the former Mbeya Technical College (MTC) through the National Council for Technical Education (NACTE) Establishment Order No. 9 of 2004 and Section 9 of the NACTE Act of 1997. MTC was officially launched on 1st September 1986.

The transformation from MTC to MIST and then MUST was done to fulfil a long-term plan, made during the first phase Government, under the then President of the United Republic of Tanzania, the late Mwalimu Julius Kambarage Nyerere.

In a bid to expand and offer services to a wider client base, in 2015, Mbeya University of Science and Technology (MUST) acquired a new Campus (MUST Rukwa Campus College) which is in the Rukwa Region.

MUST Mtwara Campus College of Technical Education admitted its first cohort of students in the 2025/2026 academic year. The campus is an upgrade of the former Mtwara Technical Teacher Training College and Mtwara Teachers College.

LOCATION

Mbeya University of Science and Technology has two campuses. The Main Campus is located in Mbeya City in the Southern Highlands of Tanzania 10 km outside the city center and about 3 Km from the Mbeya -Tunduma Highway. The road to MUST branches from the highway at the Iyunga/Ituta -TAZARA area. MUST Rukwa Campus College is located at Kianda along the Tunduma- Sumbawanga road, about 50 km from Sumbawanga. MUST Mtwara Campus of Technical Education is located 3 km from Mtwara Port in Shangani Street.

1.4 VISION, MISSION AND OBJECTIVES OF THE UNIVERSITY

1.4.1 VISION

The vision of Mbeya University of Science and Technology is to become the leading centre of excellence for knowledge, skills and applied education in Science and Technology.

1.4.2 MISSION

The mission of Mbeya University of Science and Technology is to develop academically, technologically and socially competent students, staff and other stakeholders who will be responsive to the broader needs and challenges of the society specifically by:

- i. Facilitating appropriate tuition, practical training and support according to the needs of students and other customers.
- ii. Encouraging staff commitment to quality education and services including research, consultancy and innovation.
- iii. Fostering lifelong learning, honesty and responsibility.
- iv. Promoting an environment conducive to human development.
- v. Promoting effective entrepreneurship and usage of appropriate technology that meet national and international needs and standards through skills and practical oriented training, research and consultancy.

1.4.3 UNIVERSITY OBJECTIVES

- i. To offer training in science and technology, technical education and other training, thus developing a critical mass of highly trained manpower.
- ii. To formulate plans for the promotion, technological development and improvement of the quality of education and training being offered to students and other stakeholders.
- iii. To promote and encourage innovation, initiative and readiness amongst staff and students in their fields of specialization and study.
- iv. To collaborate with other institutions nationally and internationally in the initiation, promotion and conduct of technical education, science and technology Programmes.
- v. To carry out any other assignments given by the government through its various organs.

1.5 ACCREDITATION

Mbeya University of Science and Technology is fully registered and accredited by the Tanzania Commission for Universities (TCU) to conduct higher education programmes.

1.6 MEMBERSHIP

Mbeya University of Science and Technology is a member of the following Institutions;

- i. The Association of Technical Universities and Polytechnics in Africa (ATUPA),
- ii. Commonwealth of Learning (CoL),
- iii. Inter University Council for East Africa (IUCEA),
- iv. African Network of Scientific and Technical Institutions (ANSTI) and
- v. Southern African Regional Universities Association (SARUA).

1.7 SENIOR OFFICERS OF THE UNIVERSITY**Chancellor**

Hon. Amani Abeid Karume

Chairperson of the University Council

Hon. Zakia Hamdani Meghji

1.8 MEMBERS OF THE COUNCIL**Hon. Zakia Hamdani Meghji**

Chairperson of the University Council

Prof. Aloys N. Mvuma

Vice Chancellor (ex-officio)

Prof. Said HA. Vuai

Deputy Vice Chancellor Academic, Research and Consultancy (ex-officio)

Prof. Zacharia S. Katambara

Deputy Vice Chancellor Planning, Finance and Administration (ex-officio)

Prof. Ladislaus Laurent Mnyone

Director of Technology and Innovation - Ministry of Education, Science and Technology

Prof. Bakari M. Mwinyiwiwa

Principal of the College of Engineering and Technology- University of Dar es Salaam

Ms. Lilian Marwa

Principal Finance Management Officer

Ms. Jenifer Tondi

Southern Highland Zonal Manager- CRDB

Ms. Leticia Paschal Lutambi

Women Committee Coordinator- Tanzania Higher Learning Institutions Trade Union (THTU) –MUST

Dr. Hezron Mwakabona

Chairman of MUST Academic Staff Association (MUSTASA)

Mr. Yohana Mpuya Lucas

President of MUST Students' Organization (MUSTSO)

Adv. Lugano Mwakilasa

Corporate Counsel/Secretary to the Council

1.9 EXECUTIVE OFFICERS OF THE UNIVERSITY

Vice-Chancellor

Prof. Aloys N. Mvuma – PhD (Hiroshima, Japan), MSc. CIS (Shimane, Japan), BSc. Eng (UDSM).

Deputy Vice Chancellor Academic, Research and Consultancy (ex-officio)

Prof. Said HA. Vuai - PhD MES (Okinawa, Japan), MSc CBMS, (Okinawa, Japan), BSc Chemical and Process Engineering (UDSM)

Deputy Vice Chancellor Planning, Finance and Administration (ex-officio)

Prof. Zacharia S. Katambara – PhD WRE (Witwatersrand-South Africa), MSc. WRE Engineering (UDSM), BSc Civil Engineering (UDSM).

Principal of MUST Rukwa Campus College

Prof. Asheri Mwidege – PhD (SUA); MA Econ. BSc. Ed. (UDSM), Dip. In Ed. (Mkwawa).

Principal of Mtwara Campus College of Technical Education

Prof. Duwa H. Chengula - Ph.D. Materials Science (Kassel University – Germany), MSc. Highway Eng. (UDSM), BSc. Civil Eng. (UDSM), FTC Civil Eng. (MTC)

Principal of the College of Engineering and Technology

Dr. Yazid Mwishwa - PhD (UDSM), MEM (UDSM), PGD (UDSM), ADE Civil Eng. (DIT), FTC Civil Eng. (TCA)

Ag. Principal of the College of Science and Technical Education

Dr. Bernadether Rugumisa - PhD Molecular Sciences (UDSM), MSc. Life Sci (Health & Biomedical Sciences (NM-AIST), BSc. Biotech & Lab Sci. (SUA).

Ag. Principal of the College of Architecture and Construction Technology

Dr. Emmanuel J. Liombo - PhD in Architecture (Ardhi University), M.Arch. (Univ. of Nairobi, Kenya), B.Arch. (University of Dar es Salaam).

Ag. Principal of College of Humanities and Business Studies

Dr. Yohana J. Sesabo - PhD in Innovation Management (Mzumbe), MBA (Mzumbe), BBA-Marketing (Mzumbe).

Principal of the College of Information & Communication Technology

Dr. Juma S. Ally – PhD in ICE (USTC, China), MSc. in CIS (HUST, China), BEng. in TE (HUST, China).

Principal of the College of Agricultural Sciences and Technology

Dr. Eliezer Brown Mwakalapa- PhD. Veterinary Sciences (Norwegian University of Life Sciences, Norway); MSc. Marine Sciences (UDSM); BSc. Aquaculture (SUA).

Director of the Internationalization and Convocation Unit

Dr. Buberwa M. Tibesigwa - PhD Eng. In Architecture (Chongqing University, China), M.Arch. (HIT China) B.Arch. (University of Dar es Salaam).

Director of Quality Assurance

Dr. Hadija Mohamed Matimbwa - PhD in Human Resources Management (Mzumbe University), MBA in Human Resources Management (Ruaha Catholic University) and Bachelor of Home Economics and Human Nutrition (SUA)

Director of the Center for Innovation and Technology Transfer

Dr. Ramadhani S. Tekka - PhD in Management Science and Engineering (CQU, China), Masters of Engineering Management (University of Dar es Salaam), Bsc. in Geomatics (University of Dar es Salaam).

Director of the Centre for Gender Studies

Dr. Emmanuel Tonya - PhD (OUT), B. Com-Marketing, MBA - Marketing (OUT).

Director of Postgraduate Studies, Research and Publication

Dr. Fredrick Ojija - PhD. Life Science & Bioengineering (Biodiversity & Ecosystems Management) (NM-AIST), MSc. (Vrije University of Brussels), BSc Wildlife (UDSM)

Director of Undergraduate Studies

Dr. Arthur Mngoma Omari - PhD Sustainable Energy Science and Engineering (NM-AIST), MSc. Elec. Eng. (Kharkov State Technical University of Agriculture- Ukraine), Tech. Ed. (Morogoro).

Director of Administration and Human Resource Management

Mr. Michael Gwisu Masanja - Master of Business Administration (University of Dar es Salaam), Bachelor of Arts (University of Dar es Salaam).

Director of Finance

Ms. Willieth Tilwetwa – MBA Finance (OUT), CPA (NBAA) & Adv. Dipl. Acc. (IAA).

Director of Planning and Development

Mr. Cornel Msemwa - MBA (SUA), BSc. FST (SUA).

Director of Library Services

Mr. Novatus Luanda – MA. (UDSM), BA. (UDSM), DIP (Nyegezi).

Director of Information and Communication Technology Services

Mr. Imani Mwalumbwe - MSc (UDSM), MBA (Coventry Univ), PGD (UDSM), Adv.Diploma (IFM).

Director of MUST Consultancy Bureau

Mr. Ivor J. Ndimbo - Master of Technology in Water Resources Development. (IIT-Roorkee INDIA), BSc. Civil Engineering (UDSM).

Chief Internal Auditor

Mr. Frank Kindimba - MBA Finance (ASSAM, India), CPA (NBAA) & BAF (MU).

Director of Estates Management

Dr. Hieronimi Mboya- PhD in Material Science and Engineering Structural Materials, (NM-AIST), Msc. Structural Engineering (UDSM), Postgraduate Diploma- Structural Engineering (UDSM), Advanced Diploma-Civil Engineering (DIT).

Director of Students Services

Mr. Augustine Matemu - MA in Ed. (UDOM) BSc. Ed. (UDSM), Dip.Ed. (MKWAWA).

Corporate Counsel

Adv. Lugano Mwakilasa - LL.M. (UDSM) LL.B. (Tumaini University - Iringa).

1.10 ACADEMIC ORGANS

Mbeya University of Science and Technology consists of six (6) Colleges and two (2) Campus Colleges.

1.10.1 DEPARTMENTS UNDER THE COLLEGE OF ENGINEERING AND TECHNOLOGY (CET)

- i. Department of Civil Engineering;
- ii. Department of Electrical and Power Engineering;
- iii. Department of Geosciences and Mining Technology;
- iv. Department of Mechanical and Industrial Engineering; and
- v. Department of Chemical and Environmental Engineering.

1.10.2 DEPARTMENT UNDER THE COLLEGE OF ARCHITECTURE AND CONSTRUCTION TECHNOLOGY (CoACT)

- i. Department of Architecture and Art Design;
- ii. Department of Construction Management and Technology; and
- iii. Department of Urban Planning and Real Estate Studies.

1.10.3 DEPARTMENT UNDER THE COLLEGE OF INFORMATION AND COMMUNICATION TECHNOLOGY (CoICT)

- i. Department of Computer Science and Engineering;
- ii. Department of Electronics and Telecommunications Engineering;
- iii. Department of Informatics; and
- iv. Department of Information Systems and Technology.

1.10.4 DEPARTMENTS UNDER THE COLLEGE OF SCIENCE AND TECHNICAL EDUCATION (CoSTE)

- i. Department of Applied Sciences;
- ii. Department of Medical Sciences and Technology;
- iii. Department of Natural Sciences;
- iv. Department of Technical Education;
- v. Department of Earth Sciences; and
- vi. Department of Mathematics and Statistics.

1.10.5 DEPARTMENTS UNDER THE COLLEGE OF HUMANITIES AND BUSINESS STUDIES (CoHBS)

- i. Department of Business Management; and
- ii. Department of Humanities.

1.10.6 DEPARTMENTS UNDER THE COLLEGE OF AGRICULTURAL SCIENCE AND TECHNOLOGY (CoAST)

- i. Department of Food Sciences and Technology; and
- ii. Department of Crop Science and Horticulture.

1.10.7 DEPARTMENTS UNDER MUST RUKWA CAMPUS COLLEGE (MRCC)

- i. Department of Business Management; and
- ii. Department of Mechanical and Industrial Engineering.

1.10.8 DEPARTMENTS UNDER MTWARA CAMPUS COLLEGE OF TECHNICAL EDUCATION

- i. Department of Engineering
- ii. Department of Technical Education

1.11 CONTACT ADDRESSES AND TELEPHONE NUMBERS

General Administration Mbeya University of Science and Technology

P.O. Box 131

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General line: 255 (0)25 2957544 or 255 (0)25 2957542

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E-mail: must@must.ac.tz

Website: www.must.ac.tz

Vice Chancellor

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Deputy Vice Chancellor (Academic, Research and Consultancy)

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Deputy Vice Chancellor (Planning, Finance and Administration)

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College of Science and Technical Education

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College of Architecture and Construction Technology

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College of Agricultural Science and Technology

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College of Humanities and Business Studies

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College of Information and Communication Technology

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MUST Rukwa Campus College

P.O. Box 624, Sumbawanga
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E-mail: mrcc@must.ac.tz

MUST Mtwara Campus College of Technical Education

P.O. Box 506, Mtwara
TEL: 255 23 233371
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Industrial Linkage and Labour

P.O. Box 131, Mbeya
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Fax: 255 (0) 25 2957552
E-mail: dillm@must.ac.tz

MUST Health Centre

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E-mail: hc@must.ac.tz

Students' Organization (MUSTSO)

P.O. Box 131, Mbeya
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Directorate of Postgraduate Studies, Research and Publications

P.O. Box 131, Mbeya
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Centre for Virtual Learning and Continuing Education

P.O. Box 131, Mbeya
Tel: 255 (0) 25 2957544
Fax: 255 (0) 25 2957552
E-mail: cvce@must.ac.tz

MCB

P.O. Box 131, Mbeya

Tel: 255 (0) 25 2957544

E-mail: mcb@must.ac.tz

Directorate of Students Services

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E-mail: dss@must.ac.tz

Department of Examinations

P.O. Box 131, Mbeya

Tel: 255 (0) 25 2957549

E-mail: de@must.ac.tz

Department of Admissions

P.O. Box 131, Mbeya

Tel: 255 (0) 25 2957550

E-mail: admission@must.ac.tz

Communication and Marketing Unit

P.O. Box 131, Mbeya

Tel: 255 (0) 25 2957544

E-mail: cmu@must.ac.tz

1.12 STUDENTS SERVICES**1.12.1 MEDICAL AND HEALTH SERVICES**

The University has a Dispensary, which provides clinical and health services. The Dispensary has full-time Medical Staff who attend students and University staff as well as the neighbouring community.

All students are required to join the National Health Insurance Fund (NHIF), which guarantees medical treatment at the University Dispensary and elsewhere.

All first-year undergraduate students are required to undergo a medical examination at the University Dispensary and submit a medical report, including a chest X-ray, as part of the registration process. A fee of TZS 5,000 is applicable for this service.

1.12.2 STUDENTS WELFARE

The Directorate of Students Services (DSS) is responsible to provide administrative support for students, general information for both current and past students, personal and social at the University. The Director of Students Services is assisted by two Heads of Departments: Students Welfare Services and Students Governance. The head of Students welfare is assisted by Wardens, Janitors and Spots/Games Tutors.

The directorate also provides the following facilities: residence, catering, games and sports. The Director of Students Services oversees the activities of students' organizations and provides general guidance and counselling in social, financial, academic and worship issues.

1.12.3 RESIDENCE

The University has limited on-campus accommodation spaces and therefore only few students accommodated in University hostels. The majority of students should find their own accommodation outside the campus. Students who secure on-campus accommodation are obliged to pay accommodation fees at an authorized rate. All payments for on-campus accommodation shall be made in advance, and no student shall be accommodated without payment of accommodation fee.

Currently, the University has five (5) hostel blocks with a capacity to accommodate 2900 students at a time. Priority for on-campus accommodation is given to certificate students, government sponsored Diploma students, female students, foreign students and those with disabilities. Regardless of the Programme one is undertaking, the University will not offer accommodation for students with children; such students will be required to look for their own accommodation off campus. All students will be required to observe the student by-laws and Students Accommodation guidelines 2022.

1.12.4 MBEYA UNIVERSITY OF SCIENCE AND TECHNOLOGY STUDENTS' ORGANIZATION (MUSTSO)

Formal student activities are administered by the Mbeya University of Science and Technology Students Organization (MUSTSO). The organization deals with students' academic, social and recreational activities. Every MUST full time registered student is automatically a member of MUSTSO. The students' organization shall address itself to aspects of representing students' interest in various decision-making bodies such as College boards, Senate, Council Committees and University Council. MUSTSO under leadership of its president is a formal active voice of students, within and outside the University.

Under MUSTSO, there are other affiliated organizations such as religious and foreign students' organizations.

1.12.5 GAMES AND SPORTS

The University has sports facilities that include football grounds, volleyball, tennis, netball, and basketball courts. Students are therefore, encouraged to participate in athletics, jogging, table tennis, football, basketball, and netball. Mbeya University of Science and Technology takes part in sports and games competitions organized by various sports bodies, such as the East African University Sports Federation (S), East, Central and Southern African Universities Sports Association (ECSAUSA), the Federation of African University Sports (FASU) and Federation of International University Sports (FISU), Tanzania Universities Sports Association (TUSA).

1.12.6 CATERING SERVICES

Catering services at the University are free for Diploma Government sponsored students. The services are commercialized for all other students. Under commercialization, students are required to pay for their meals. The cafeteria services are outsourced to private catering service providers approved by the University to give the meal service to students. Students are not allowed to cook in the halls of residence and therefore are required to use the catering services approved by the University.

1.12.7 RELIGIOUS ACTIVITIES

MUST is a non-religious institution but it provides opportunities to students to participate in various faiths. Religious facilities and services are available on campus and students are free to join in any one of the religious groups existing in the University.

1.12.8 BANKING SERVICES

Financial facilities include (CRDB and NMB) Automatic Teller Machines (ATMs) which are installed within the campus. Other services include money transfer facilities are provided by major mobile phone companies. Bank services are provided by Bank Agents within the campus and in the city centre.

1.13 UNIVERSITY LIBRARY

The Dr. Magufuli Library offers information services to support roles of the University in teaching, learning and research activities. It has well trained staff members who can assist in meeting user needs and, it provides huge and conducive reading space for users. Also, it provides information resources in both print and electronic formats in which the available print resources contain text and reference books for all courses offered at MUST including those in Engineering, Science and Technology, Technical Education as well as Business Administration. In addition, it has computer rooms to facilitate training and access to electronic resources in CD ROMS as well as online resources. Furthermore, the Dr. Magufuli Library provides access to various international journal databases through annual subscription to those databases. Other services available in the library are wireless internet, printing, photocopying, cloak room service where users can keep their bags while studying in the library.

Working Hours***During Semester***

08:30 am – 09:00 pm EAT (Monday – Friday)

08:30 am – 12:30 pm EAT (Saturday)

02:00 pm – 06:00 pm EAT (Sunday)

During Vacation

8:00 am – 03:30 pm EAT (Monday – Friday)

Public Holidays: *Closed*

1.14 VIRTUAL AND CONTINUING EDUCATION SERVICES

The services on virtual and continuing education are offered by the Centre for Virtual and Continuing Education (CVCE). The CVCE has two departments: Virtual Education Department and Continuing Education Department. The Virtual Education Department is responsible for coordinating online non-degree and degree programmes while the Continuing Education Department is responsible for coordinating face to face short courses at Campus. The CVCE is the best place for educational development. Currently, the CVCE is developing curricula which will be offered through face-to-face sessions and distance education mode for non-degree educational certificate, virtual education degree and non-degree programmes. With this directorate, a learner will learn a specific topic of education and be competent in that area of a discipline. Also, the CVCE offers short courses including Chinese language. Furthermore, it conducts sensitization campaign annually by visiting various secondary schools in Tanzania to encourage female students as well as male students to opt for science subjects at secondary school level.

1.15 INNOVATION AND TECHNOLOGY TRANSFER SERVICES

The innovation and technology transfer services are offered by the Centre for Innovation and Technology Transfer (CITT). The University established CITT to promote the generation of ideas, the creation of new knowledge, technology licensing, intellectual property securing, venture capital and funding, and the development of business plans and business growth. CITT is geared towards co-operation with science and business; it offers various types of support for students and staff, start-ups and scale-ups. CITT also aims to contribute to Tanzania's social and economic development by providing quality supervision and coordination of all inventions, innovation and entrepreneurship activities and initiatives that result in the creation of spin-offs and start-ups, thereby contributing to Tanzania's diversification and economic self-reliance of current and future generations. In this view, the role of CITT is to foster creativity by bringing and managing innovative, technological, and entrepreneurship development. Overall, CITT's mission is to provide objectives, guidelines, procedures, and standards for managing inventions, innovations, entrepreneurship, and technology transfer activities through;

- i. Developing, reviewing and implementing programmes, policies and guidelines in the field of innovation and technology transfer;
- ii. Monitoring and evaluating performance of innovation and technology transfer programmes;
- iii. Facilitating training and mentoring of inventors and innovators through incubation, seminars, workshops and boot camps;
- iv. Managing research activities in liaison with the Directorate of Postgraduate Studies, Research and Publications; and
- v. Providing consultancy services in Liaison with the Directorate of Internationalization and Convocation Unit.

1.16 UNIVERSITY QUALITY ASSURANCE

The University's Quality Assurance mission is to create consciousness of quality standards and best practices, facilitate and enhance quality by Compliance to the efficient and effective delivery of teaching, learning and research, services and overall governance through cooperation and interaction among staff members, students as well as the external stakeholders of Mbeya University of Science and Technology.

The objectives of the QA are to:

- i. Safeguard and ensure the integrity of academic awards of the University;
- ii. Provide guidance in development and implementation of quality assurance and enhancement procedures and practices;
- iii. Outline the internal and external quality assurance procedures and practices necessary to realize the vision and mission as well as uphold the core functions of the University;
- iv. Lay out the structure to ensure that quality assurance systems are coordinated and managed with maximum effectiveness; and
- v. Facilitate development of a culture of self-evaluation and continuous quality improvement in the University.

1.17 UNIVERSITY COLLABORATION

The University collaborates with peer universities and other higher learning institutions. Currently, the University is collaborating with various international higher learning institutions including; The University of Texas Rio Grande Valley (UTRGV), the University of Applied Sciences Burgenland in Austria, Southern Methodist University (SMU), Malawi University of Science and Technology, Kassel Through East Africa Network of Learning Administrators (EANLA), Hanze University of Applied Sciences in the Netherlands, Meru University of Science and Technology (MUST-Kenya), Chuka University in Kenya, Acharya Institutes (ACHARYA) in India. National wise, the University has Memoranda of Understanding in academic activities with the University of Dar es Salaam, Ardhi University (ARU), University of Dodoma (UoD), Confucius Institute at the University of Dar es Salaam, Sokoine University of Agriculture (SUA), Muhimbili University of Health and Allied Sciences (MUHAS), The Open University of Tanzania (OUT), Dar es Salaam Institute of Technology (DIT), Arusha Technical College (ATC), Ardhi Institute -Morogoro (ARIMO), Teofilo Kisanji University (TEKU) and The Technical and Vocational Education and Training (TVET). University of Maryland – USA, Novosibirsk State Agrarian University - Russia

Furthermore, the University is collaborating with other non-academic institutions and companies including;

- i. United Nations Development Program (UNDP),
- ii. Tanzania Industrial Research and Development Organization (TIRDO),
- iii. Small Industries Development Organization (SIDO),
- iv. Tanzania Communications Regulatory Authority (TCRA),
- v. e-Government,
- vi. Mbeya Cement,
- vii. MIC Tanzania Limited (TIGO),
- viii. HELP TO HELP,
- ix. All Green Energy,
- x. Rujewa Integrated Efforts to Fight Poverty (RIEFP),
- xi. HUAWEI,
- xii. Mwanza Polytechnic Institute (MWAPOI),
- xiii. K'S Hospital,
- xiv. Youth For Africa (YOA),
- xv. YARA Tanzania Ltd,
- xvi. Tanzania Geothermal Development Company (TGDC),
- xvii. Tanzania Agricultural Research Institute (TARI),
- xviii. Nature Tanzania,
- xix. Ifakara Health Institute,
- xx. Mbeya Zonal Referral Hospital,
- xxi. Universal Communications Service Access Fund (UCSAF) – Tanzania, and
- xxii. Tanzania Engineering and Manufacturing Design Organization (TEMDO).
- xxiii. CultivAid Organization
- xxiv. Amsha Amsha Organization
- xxv. Livy Africa Organization

2.0 UNIVERSITY CERTIFICATE, DIPLOMA AND BACHELOR DEGREE AWARDS**2.1 DIPLOMA AND BACHELOR DEGREES OFFERED BY THE COLLEGE OF ENGINEERING AND TECHNOLOGY (CET)**

- a) Diploma in Civil Engineering;
- b) Diploma in Highway Engineering;
- c) Diploma in Electrical and Electronics Engineering;
- d) Diploma in Mechanical Engineering;
- e) Diploma in Mechatronics Engineering;
- f) Diploma in Mining Engineering;
- g) Diploma in Mechanical Engineering with Industrial Safety and Occupational Health;
- h) Diploma in Automotive and Auto-Electrical Engineering;
- i) Bachelor of Civil Engineering;
- j) Bachelor of Electrical and Electronic Engineering;
- k) Bachelor of Mechanical Engineering;
- l) Bachelor in Instrumentation and Control Engineering;
- m) Bachelor of Science in Electrical and Renewable Energy Technology;
- n) Bachelor of Science in Mechatronics Engineering; and
- o) Bachelor of Science in Petroleum Storage and Transportation Engineering.

2.2 DIPLOMA AND BACHELOR DEGREE PROGRAMMES OFFERED BY THE COLLEGE OF ARCHITECTURE AND CONSTRUCTION TECHNOLOGY (CoACT)

- a) Diploma in Architecture;
- b) Bachelor of Technology in Architecture; and
- c) Bachelor of Technology in Landscape Architecture.

2.3 DIPLOMA AND BACHELOR DEGREE PROGRAMMES OFFERED BY THE COLLEGE OF INFORMATION AND COMMUNICATION TECHNOLOGY (CoICT)

- a) Diploma in Computer Engineering;
- b) Diploma in Computer Science;
- c) Diploma in Information and Communication Technology;
- d) Diploma in Electronic and Telecommunication Engineering;
- e) Diploma in Business Information Systems and Technology;
- f) Bachelor of Computer Engineering and Technology;

- g) Bachelor of Computer Science;
- h) Bachelor of Science in Information and Communication Technology;
- i) Bachelor of Science in Telecommunication Engineering;
- j) Bachelor of Engineering in Data Science;
- k) Bachelor of Science in Electronics and Automation Engineering;
- l) Bachelor of Applied Informatics in Industrial Automation;
- m) Bachelor of Applied Informatics in Marketing; and
- n) Bachelor of Science in Information and Computer Networking.

2.4 DIPLOMA AND BACHELOR DEGREE PROGRAMMES OFFERED BY THE COLLEGE OF SCIENCE AND TECHNICAL EDUCATION (CoSTE)

- a) Diploma in Biomedical Equipment Engineering;
- b) Diploma in Laboratory Science and Technology;
- c) Diploma of Technical Education in Architectural Technology;
- d) Diploma of Technical Education in Civil Engineering;
- e) Diploma of Technical Education in Electrical and Electronic Engineering;
- f) Diploma of Technical Education in Mechanical Engineering;
- g) Diploma in Biotechnology;
- h) Diploma in Applied Statistics;
- i) Bachelor of Technical Education in Architectural Technology;
- j) Bachelor of Technical Education in Civil Engineering;
- k) Bachelor of Technical Education in Electrical and Electronics Engineering;
- l) Bachelor of Technical Education in Mechanical Engineering;
- m) Bachelor of Science with Education in the following specializations;
 - Chemistry and Biology;
 - Chemistry and Mathematics;
 - Chemistry and Physics;
 - Physics and Mathematics;
 - Physics and Computer;
 - Chemistry and Computer;
 - Biology and Computer; and

- Mathematics and Computer.
- n) Bachelor of Science in Laboratory Science and Technology;
- o) Bachelor of Natural Resources Conservation;
- p) Bachelor of Science in Chemistry;
- q) Bachelor of Science in Biotechnology;
- r) Bachelor of Science in Environmental Science and Technology;
- s) Bachelor of Technical Education in Computer Science;
- t) Bachelor of Technical Education in Telecommunication Engineering;
- u) Bachelor of Science in Health Information science;
- v) Bachelor of Applied Nuclear Science; and
- w) Bachelor of Science in Aquatic Sciences and Aquaculture Technologies.

2.5 CERTIFICATE, DIPLOMA AND BACHELOR DEGREE PROGRAMMES OFFERED BY THE COLLEGE OF HUMANITIES AND BUSINESS STUDIES (CoHBS)

- a) Certificate in Business Administration;
- b) Certificate in Agribusiness with Technology;
- c) Diploma in Business Administration;
- d) Diploma in Agribusiness;
- e) Diploma of Business Administration in Accounting and Finance;
- f) Diploma of Business Administration in Marketing and Entrepreneurship;
- g) Bachelor of Business Administration with the following specialization:
 - Accounting and Finance;
 - Human Resources Management;
 - Marketing and Entrepreneurship and
 - Procurement and Supply Chain Management.
- h) Bachelor of Agribusiness Management.

2.6 DIPLOMA AND BACHELOR DEGREE PROGRAMMES OFFERED BY THE COLLEGE OF AGRICULTURAL SCIENCES AND TECHNOLOGY (CoAST)

- a) Diploma in Food Science and Technology and
- b) Bachelor of Science in Food Science and Technology.

2.7 CERTIFICATES, DIPLOMA AND BACHELOR DEGREE PROGRAMMES OFFERED BY MUST RUKWA CAMPUS COLLEGE (MRCC)

- a) Certificate in Business Administration;
- b) Diploma in Business Administration;
- c) Diploma in Mechanical Engineering;
- d) Diploma in Computer Science;
- e) Diploma in Electrical and Electronics Engineering;
- f) Diploma in Marketing Technology;
- g) Diploma in Health Systems Administration and Management;
- h) Bachelor of Mechanical Engineering and
- i) Bachelor of Business Administration with the following specialization: -
 - Accounting and Finance,
 - Human Resources Management,
 - Marketing and Entrepreneurship and
 - Procurement and Supply Chain Management.

2.8 BACHELOR DEGREE PROGRAMME OFFERED BY MTWARA CAMPUS COLLEGE OF TECHNICAL EDUCATION (MCCTE)

- a) Bachelor of Technical Education in Civil Engineering.

3.0 ACTIVITIES UNDER THE CENTRE FOR VIRTUAL LEARNING AND CONTINUING EDUCATION

- i. Managing and Administering Short courses Programmes.
- ii. Managing and Administering Distance Learning Programmes.
- iii. Managing and administering courses through Flexible Skills Development.

4.0 GRADUATION AWARDS FOR STUDENTS

The following list indicates the types of academic awards/prizes offered by the University:

- i. Chancellor's Prize
- ii. University Best Female Student Award

- iii. Undergraduate Programme Award
- iv. Best Student's Final Project Award
- v. Best Research Award
- vi. Innovation Award
- vii. Individual/Organisation/Company Prizes

5.0 FEES AND BURSARIES

Students pursuing Diploma Programmes may join the University under either Government sponsorship, private sponsorship or may apply for scholarships or loans from the Higher Education Students Loan Board (HESLB) and Students pursuing Bachelor Programmes may apply for scholarships or loans from the Higher Education Students Loan Board (HESLB) also may join the University under private sponsorship.

Note: Fees may change due to prevailing circumstances. The fee structure for Government and privately sponsored students are as shown in the following tables:

5.1 FEE STRUCTURE FOR DIPLOMA STUDENTS (UQF 6)

5.1.1 GOVERNMENT SPONSORED STUDENTS

Table 1: Fee structure for Diploma government sponsored students in (TZS)

S/N	Item	1 st Year	2 nd Year	3 rd Year
1.	Tuition fee (cost sharing fee)	-	-	130,000
2.	<i>Other Expenses</i>			
i.	Caution Money (Non-refundable)	20,000	-	-
ii.	Hiring University mattress	10,000	10,000	10,000
iii.	Hiring University bed	10,000	10,000	10,000
iv.	Library membership fees	30,000	30,000	30,000
v.	Examination fee	50,000	50,000	50,000
vi.	Certification	40,000	-	-
vii.	Students' Organization fee	10,000	10,000	10,000
viii.	Registration fee	10,000	10,000	10,000
ix.	Student's Identity Card	10,000	10,000	10,000
x.	Medical Contribution (NHIF)	50,400	50,400	50,400
xi.	Capitation fee	10,000	10,000	10,000
xii.	Prospectus	-	-	-
xiii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
xiv.	Graduation gowns	40,000	-	-
xv.	Transcript fee	10,000	-	-
	Sub-total; Other Expenses	320,400	210,400	210,400
	Total fees	320,400	210,400	340,400

Table 2: Payment Options (TZS)

Tuition fee	-	-	130,000
Other Expenses	320,400	210,400	210,400
Semester I	320,400	210,400	275,400
Semester II		-	65,000

5.1.2 PRIVATE SPONSORED STUDENTS (UQF 6)

Table 3: Fee structure for Diploma in Engineering, Architecture, Science Courses and Diploma in Business Information Systems and Technology (1st Year) private sponsored students in (TZS)

S/N	Item	In campus		Off campus
		<i>Meals and accommodation</i>	<i>Accommodation Only</i>	
1	Tuition fee	900,000	900,000	900,000
2	<i>Other Expenses</i>			
i.	Meal Costs	1,176,000		
ii.	Accommodation Fee	107,100	107,100	
iii.	Caution money	20,000	20,000	20,000
iv.	Library membership fees	30,000	30,000	30,000
v.	Examinations fee	50,000	50,000	50,000
vi.	Certification	40,000	40,000	40,000
vii.	Students' Organization fee	10,000	10,000	10,000
viii.	Registration fee	10,000	10,000	10,000
ix.	Student's Identity Card	10,000	10,000	10,000
x.	Medical Contribution (NHIF)	50,400	50,400	50,400
xi.	Capitation fee	10,000	10,000	10,000
xii.	Prospectus	-	-	-
xiii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
xiv.	Graduation gown	40,000	40,000	40,000
xv.	Transcript fee	10,000	10,000	10,000
xvi.	Sub-total; Other Expenses	1,583,500	407,500	300,400
xvii.	Total fees	2,483,500	1,307,500	1,200,400

Table 4: Payment Options (TZS)

	In campus		Off campus
	<i>Meals and accommodation</i>	<i>Accommodation only</i>	
Tuition fee	900,000	900,000	900,000
Other Expenses	1,583,500	407,500	300,400

Semester I	1,445,500	857,500	750,400
Semester II	1,038,000	450,000	450,000

Table 5: Fee Structure for Certificate and Diploma in Business Administration and Agri business Course (1st Year) Private sponsored students in (TZS)

S/N	Item	In campus		Off campus
		<i>Meals and accommodation</i>	<i>Accommodation Only</i>	
1.	Tuition fee	700,000	700,000	700,000
2.	Other Expenses			
i.	Meal Costs	1,176,000	-	-
ii.	Accommodation	107,100	107,100	-
iii.	Caution money (Non-refundable)	20,000	20,000	20,000
iv.	Library membership fees	30,000	30,000	30,000
v.	Examinations fee	50,000	50,000	50,000
vi.	Certification	40,000	40,000	40,000
vii.	Students' Organization fee	10,000	10,000	10,000
viii.	Registration fee	10,000	10,000	10,000
ix.	Student's Identity Card	10,000	10,000	10,000
x.	Medical Contribution (NHIF)	50,400	50,400	50,400
xi.	Capitation fee	10,000	10,000	10,000
xii.	Prospectus	-	-	-
xiii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
xiv.	Graduation gown	40,000	40,000	40,000
xv.	Transcript fee	10,000	10,000	10,000
xvi.	Sub-total; Other Expenses	1,583,500	407,500	300,400
xvii.	Total fees	2,283,500	1,107,500	1,000,400

Table 6: Payment Options (TZS)

	In campus		Off campus
	<i>Meals and accommodation</i>	<i>Accommodation only</i>	
Tuition fee	700,000	700,000	700,000
Other Expenses	1,583,500	407,500	300,400
Semester I	1,345,500	757,500	650,400
Semester II	938,000	350,000	350,000

Table 7: Fee structure for Diploma in Engineering, Architecture and Science Courses (2nd & 3rd Year) private sponsored students in (TZS)

S/N	Item	In campus		Off campus
		<i>Meals and accommodation</i>	<i>Accommodation only</i>	
1.	Tuition fee	900,000	900,000	900,000
2.	Other Expenses			
i.	Meal Costs	1,142,400	-	-
ii.	Accommodation	107,100	107,100	-
iii.	Caution money	-	-	-
iv.	Library membership fees	30,000	30,000	30,000
v.	Examinations fee	50,000	50,000	50,000
vi.	Certification	-	-	-
vii.	Students' Organization fee	10,000	10,000	10,000
viii.	Registration fee	10,000	10,000	10,000
ix.	Student's Identity Card	10,000	10,000	10,000
x.	Medical Contribution (NHIF)	50,400	50,400	50,400
xi.	Capitation fee	10,000	10,000	10,000
xii.	Prospectus	-	-	-
xiii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
	Sub-total; Other Expenses	1,439,900	297,500	190,400
	Total fees	2,339,900	1,197,500	1,090,400

Table 8: Payment Options (TZS)

	In campus		Off campus
	<i>Meals and accommodation</i>	<i>Accommodation only</i>	
Tuition fee	900,000	900,000	900,000
Other Expenses	1,439,900	297,500	190,400
Semester I	1,318,700	747,500	640,400
Semester II	1,021,000	450,000	450,000

Table 9: Fee structure for Diploma in Business Administration and Agri Business Course (2nd and 3rd Year) private sponsored students in (TZS)

S/N	Item	In campus		Off campus
		<i>Meals and accommodation</i>	<i>Accommodation Only</i>	
1	Tuition fee	700,000	700,000	700,000
2	Other Expenses			
i.	Meal Costs	1,142,400	-	-
ii.	Accommodation	107,100	107,100	-
iii.	Caution money (Non-refundable)	-	-	-
iv.	Library membership fees	30,000	30,000	30,000
v.	Examinations fee	50,000	50,000	50,000
vi.	Certification	-	-	-
vii.	Students' Organization fee	10,000	10,000	10,000
viii.	Registration fee	10,000	10,000	10,000
ix.	Student's Identity Card	10,000	10,000	10,000
x.	Medical Contribution (NHIF)	50,400	50,400	50,400
xi.	Capitation fee	10,000	10,000	10,000
xii.	Prospectus	-	-	-
xiii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
	Sub-total; Other Expenses	1,439,900	297,500	190,400
	Total fees	2,139,900	997,500	890,400

Table 10: Payment Options (TZS)

	In campus		Off campus
	<i>Meals and accommodation</i>	<i>Accommodation only</i>	
Tuition fee	700,000	700,000	700,000
Other Expenses	1,583,500	407,500	300,400
Semester I	1,345,500	757,500	650,400
Semester II	938,000	350,000	350,000

Table11: Fee structure for Diploma in **Biotechnology** (1st Year) private sponsored students in (TZS)

S/N	Item	In campus		Off campus
		<i>Meals and accommodation</i>	<i>Accommodation Only</i>	
1	Tuition fee	1,100,000	1,100,000	1,100,000
2	Other Expenses			
i.	Meal Costs	1,176,000	-	-
ii.	Accommodation	107,100	107,100	-
iii.	Caution money (Non-refundable)	20,000	20,000	20,000
iv.	Library membership fees	30,000	30,000	30,000
v.	Examinations fee	50,000	50,000	50,000
vi.	Certification	40,000	40,000	40,000
vii.	Students' Organization fee	10,000	10,000	10,000
viii.	Registration fee	10,000	10,000	10,000
ix.	Student's Identity Card	10,000	10,000	10,000
x.	Medical Contribution (NHIF)	50,400	50,400	50,400
xi.	Capitation fee	10,000	10,000	10,000
xii.	Prospectus	-	-	-
xiii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
xiv.	Graduation gown	40,000	40,000	40,000
xv.	Transcript fee	10,000	10,000	10,000
	Sub-total; Other Expenses	1,583,500	407,500	300,400
	Total fees	2,683,500	1,507,500	1,400,400

Table 12: Payment Options (TZS)

	In campus		Off campus
	<i>Meals and accommodation</i>	<i>Accommodation only</i>	
Tuition fee	1,100,000	1,100,000	1,100,000
Other Expenses	1,583,500	407,500	300,400
Semester I	1,545,500	957,500	850,400
Semester II	550,000	550,000	550,000

Table 13: Fee structure for Diploma in **Biotechnology** (2nd & 3rd Year) private sponsored students in (TZS)

S/N	Item	In campus		Off campus
		<i>Meals and accommodation</i>	<i>Accommodation only</i>	
1.	Tuition fee	1,100,000	1,100,000	1,100,000
2.	Other Expenses			
i.	Meal Costs	1,142,400	-	-
ii.	Accommodation	107,100	107,100	-
iii.	Caution money	-	-	-
iv.	Library membership fees	30,000	30,000	30,000
v.	Examinations fee	50,000	50,000	50,000
vi.	Certification	-	-	-
vii.	Students' Organization fee	10,000	10,000	10,000
viii.	Registration fee	10,000	10,000	10,000
ix.	Student's Identity Card	10,000	10,000	10,000
x.	Medical Contribution (NHIF)	50,400	50,400	50,400
xi.	Capitation fee	10,000	10,000	10,000
xii.	Prospectus	-	-	-
xiii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
	Sub-total; Other Expenses	1,439,900	297,500	190,400
	Total fees	2,539,900	1,397,500	1,290,400

Table 14: Payment Options (TZS)

	In campus		Off campus
	<i>Meals and accommodation</i>	<i>Accommodation only</i>	
Tuition fee	1,100,000	1,100,000	1,100,000
Other Expenses	1,439,900	297,500	190,400
Semester I	1,418,700	847,500	740,400
Semester II	550,000	550,000	550,000

5.2 FEES STRUCTURE FOR BACHELOR PROGRAMME FULL-TIME STUDENTS (UQF 8)

5.2.1 COSTS PAYABLE TO THE UNIVERSITY BY BACHELOR OF SCIENCES, EDUCATION AND ICT STUDENTS (3 YEARS PROGRAMMES)

Table 15: University's Fees and Other Expenses for Bachelor students under 3 years programme in (TZS) Sciences, Education and ICT

S/N	Description	UQF 8 (1 st Year)	UQF 8 (2 nd Year)	UQF 8 (3 rd Year)
1.	Tuition fee	1,100,000	1,100,000	1,100,000
2.	Other Expenses			
i.	Caution Money (Non-refundable)	20,000	-	-
ii.	Accommodation Fee	107,100	107,100	107,100
iii.	Library Membership	30,000	30,000	30,000
iv.	Examination Fee	120,000	120,000	120,000
v.	Certification	40,000	-	-
vi.	Students' Organization	10,000	10,000	10,000
vii.	Registration	10,000	10,000	10,000
viii.	Student's Identity Card	10,000	10,000	10,000
ix.	Medical Contribution (NHIF)	50,400	50,400	50,400
x.	Capitation fee	10,000	10,000	10,000
xi.	Prospectus	-	-	-
xii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
xiii.	Graduation gown	40,000	-	-
xiv.	Transcript fee	10,000	-	-
	Sub-total; Other Expenses	477,500	367,500	367,500
	Total fees	1,577,500	1,467,500	1,467,500

Table 16: Payment Options (TZS)

Description	<i>UQF 8 1st Year</i>	<i>UQF 8 2nd Year</i>	<i>UQF 8 3rd Year</i>
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Tuition fee	1,100,000	1,100,000	1,100,000
Other Expenses	477,500	367,500	367,500
Semester I	1,027,500	917,500	917,500
Semester II	550,000	550,000	550,000

Table 17: University's Fees and Other Expenses for Bachelor of Sciences in Biotechnology, Science in Chemistry and Environmental Science and Technology 3 years programme in (TZS)

S/N	Description	UQF 8 (1st Year)	UQF 8 (2 nd Year)	UQF 8 (3 rd Year)
1.	Tuition fee	1,400,000	1,400,000	1,400,000
2.	Other Expenses			
i.	Caution Money	20,000	-	-
ii.	Accommodation Fee	107,100	107,100	107,100
iii.	Library Membership	30,000	30,000	30,000
iv.	Examination Fee	120,000	120,000	120,000
v.	Certification	40,000	-	-
vi.	Students' Organization	10,000	10,000	10,000
vii.	Registration	10,000	10,000	10,000
viii.	Student's Identity Card	10,000	10,000	10,000
ix.	Medical Contribution (NHIF)	50,400	50,400	50,400
x.	Capitation fee	10,000	10,000	10,000
xi.	Prospectus	-	-	-
xii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
xiii.	Graduation gown	40,000	-	-
xiv.	Transcript fee	10,000	-	-
	Sub-total; Other Expenses	477,500	367,500	367,500
	Total fees	1,877,500	1,767,500	1,767,500

Table 18: Payment Options (TZS)

Description	<i>UQF 8 1st Year</i>	<i>UQF 8 2nd Year</i>	<i>UQF 8 3rd Year</i>
Tuition fee	1,400,000	1,400,000	1,400,000
Other Expenses	477,500	367,500	367,500
Semester I	1,177,500	1,067,500	1,067,500
Semester II	700,000	700,000	700,000

5.2.2 COSTS PAYABLE TO THE UNIVERSITY BY BACHELOR OF ENGINEERING AND TECHNOLOGY IN ARCHITECTURE STUDENTS (4 YEARS PROGRAMMES)

Table 19: University's Fees and Other Expenses for Bachelor students under 4 years programme in (TZS)

S/N	Description	UQF 8 (1 st Year)	UQF 8 (2 rd Year)	UQF 8 (3 rd Year)	UQF 8 (4 th Year)
1.	Tuition fee	1,100,000	1,100,000	1,100,000	1,100,000
2.	Other Expenses				
i.	Caution Money (Non-refundable)	20,000	-	-	-
ii.	Accommodation Fees	107,100	107,100	107,100	107,100
iii.	Library Membership	30,000	30,000	30,000	30,000
iv.	Examination Fee	120,000	120,000	120,000	120,000
v.	Certification	40,000	-	-	-
vi.	Students' Organization	10,000	10,000	10,000	10,000
vii.	Registration	10,000	10,000	10,000	5,000
viii.	Student's Identity Card	10,000	10,000	10,000	10,000
ix.	Medical Contribution	50,400	50,400	50,400	50,400
x.	Medical Capitation	10,000	10,000	10,000	10,000
xi.	Prospectus	-	-	-	-
xii.	Quality Assurance fee (TCU)	20,000	20,000	20,000	20,000
xiii.	Graduation gown	40,000	-	-	-
xiv.	Transcript fee	10,000	-	-	-
	Sub-total; Other Expenses	477,500	367,500	367,500	367,500
	Total Fees	1,577,500	1,467,500	1,467,500	1,467,500

Table 20: Payment Options (TZS)

Description	UQF 8 1 st Year	UQF 8 2 nd Year	UQF 8 3 rd Year	UQF 8 4 th Year
Tuition fee	1,100,000	1,100,000	1,100,000	1,100,000
Other Expenses	477,500	367,500	367,500	367,500
Semester I	1,027,500	917,500	917,500	917,500
Semester II	550,000	550,000	550,000	550,000

Table 21: University's Fees and Other Expenses for Bachelor students in Business Administration in (TZS)

S/N	Description	UQF 8 (1 st Year)	UQF 8 (2 nd Year)	UQF 8 (3 rd Year)
1.	Tuition fee	800,000	800,000	800,000
2.	Other Expenses			
i.	Caution Money (Non-refundable)	20,000	-	-
ii.	Accommodation Fees	107,100	107,100	107,100
iii.	Library Membership	30,000	30,000	30,000

iv.	Examination Fee	120,000	120,000	120,000
v.	Certification	40,000	-	-
vi.	Students' Organization	10,000	10,000	10,000
vii.	Registration	10,000	10,000	10,000
viii.	Student's Identity Card	10,000	10,000	10,000
ix.	Medical Contribution (NHIF)	50,400	50,400	50,400
x.	Capitation fee	10,000	10,000	10,000
xi.	Prospectus	-	-	-
xii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
xiii.	Graduation gown	40,000	-	-
xiv.	Transcript fee	10,000	-	-
xv.	Sub-total; Other Expenses	477,500	367,500	367,500
	Total fees	1,257,500	1,167,500	1,167,500

Table 22: Payment Options (TZS)

Description	<i>UQF 8 1st Year</i>	<i>UQF 8 2nd Year</i>	<i>UQF 8 3rd Year</i>
Tuition fee	800,000	800,000	800,000
Other Expenses	477,500	367,500	367,500
Semester I	877,500	767,500	767,500
Semester II	400,000	400,000	400,000

Table 23: University's Fees and Other Expenses for Bachelor students in Agribusiness in (TZS)

S/N	Description	UQF 8 (1 st Year)	UQF 8 (2 nd Year)	UQF 8 (3 rd Year)
1.0	Tuition fee	1,000,000	1,000,000	1,000,000
2.0	Other Expenses			
i.	Caution Money (Non-refundable)	20,000	-	-
ii.	Accommodation Fee	107,100	107,100	107,100
iii.	Library Membership	30,000	30,000	30,000
iv.	Examination Fee	120,000	120,000	120,000
v.	Certification	40,000	-	-
vi.	Students' Organization	10,000	10,000	10,000
vii.	Registration	10,000	10,000	10,000
viii.	Student's Identity Card	10,000	10,000	10,000
ix.	Medical Contribution (NHIF)	50,400	50,400	50,400
x.	Capitation fee	10,000	10,000	10,000
xi.	Prospectus	-	-	-
xii.	Quality Assurance fee (TCU)	20,000	20,000	20,000
xiii.	Graduation Fee	40,000	-	-
xiv.	Transcript	10,000	-	-
	Sub-total; Other Expenses	477,500	407,500	407,500
	Total fees (TZS)	1,477,500	1,407,500	1,407,500

Table 24: Payment Options (TZS)

Description	UQF 8 1 st Year	UQF 8 2 nd Year	UQF 8 3 rd Year
Tuition fee	1,000,000	1,000,000	1,000,000
Other Expenses	477,500	367,500	367,500
Semester I	977,500	867,500	867,500
Semester II	500,000	500,000	500,000

5.2.3 COSTS PAYABLE DIRECTLY TO THE STUDENTS BY SPONSORS

Table 25: Costs payable direct to the students by sponsors for Bachelor in Sciences, Education and ICT (3 Years Programmes) in TZS

S/N	Description	UQF 8 (1 st Year)	UQF 8 (2 nd Year)	UQF 8 (3 rd Year)
1	Industrial Practical Training (IPT)	700,000	700,000	-
2	Book / Stationery costs	200,000	200,000	200,000
3	Final project Printing	0	0	120,000
4	Special faculty requirements	300,000	300,000	120,000
5	Accommodation and Meals Allowance	1,837,500	1,785,000	1,785,000
6	Transport fare to attend IPT	Variable	Variable	
	TOTAL	3,037,500	2,985,000	2,225,000

Table 26: Costs payable direct to the students by sponsors for Bachelor in Engineering and Technology in Architecture 4 Years Programmes in (TZS)

S/N	DESCRIPTION	UQF 8 (1 ST YEAR)	UQF 8 (2 RD YEAR)	UQF 8 (3 RD YEAR)	UQF 8 (4 TH YEAR)
1	Industrial Practical Training	700,000	700,000	700,000	-
2	Book / Stationery costs	200,000	200,000	200,000	200,000
3	Final project Printing	-	-	-	120,000
4	Special faculty requirements	300,000	300,000	300,000	120,000
5	Accommodation and Meals costs	1,837,500	1,785,000	1,785,000	1,785,000
6	Transport fare to attend IPT	Variable	Variable	Variable	
	TOTAL	3,037,500/=	2,985,00/=	2,985,000/=	2,225,000/=

Table 27: Costs Payable Direct to the Student by Sponsors for Bachelor of Science in Biotechnology Programme (3 Years In TZS)

S/N	Description	UQF 8 (1 st Year)	UQF 8 (2 nd Year)	UQF 8 (3 rd Year)
1	Industrial Practical Training (IPT)	700,000	700,000	-
2	Book / Stationery costs	200,000	200,000	200,000
3	Final Project Printing	-	-	
4	Special Faculty Requirements	300,000	300,000	300,000
5	Accommodation and Meals costs	2,400,000	2,400,000	2,400,000
6	Transport fare to attend IPT	Variable	Variable	-

	TOTAL	3,600,000	3,600,000	2,900,000
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Table 28: Costs Payable Direct to the Student by Sponsors for Bachelor of Science in Chemistry Programme (3 Years In TZS)

S/N	Cost item	UQF8(1 st Year)	UQF8(2 nd Year)	UQF 8 (3 rd Year)
1	Book & stationary Allowance*	200,000	200,000	200,000
2	Special Faculty Allowance	300,000	300,000	300,000
3	Field Practical Training	700,000	700,000	
4	Meals and Accommodations	1,200,000	1,200,000	1,200,000
	Total	2,400,000	2,400,000	1,700,000

Table 29: Costs Payable Direct to the Student by Sponsors for Bachelor in Environmental Science and Technology Programme (3 Years In TZS)

S/N	Description	UQF8(1st Year)	UQF8(2 nd Year)	UQF8(3 rd Year)
1	Industrial Practical Training (IPT)	700,000	700,000	-
2	Book/Stationery costs	200,000	200,000	200,000
3	Final Project Printing	-	-	
4	Special Faculty Requirements	300,000	300,000	300,000
5	Accommodation and Meals costs	2,400,000	2,400,000	2,400,000
6	Transport fare to attend IPT	Variable	Variable	-
	TOTAL	3,600,000	3,600,000	2,900,000

*Amounts Payable Direct to the Student by Sponsors reflect the minimum requirements. Sponsors are free to pay their Students according to their ability.

5.2.4 UNIVERSITY FEE STRUCTURE FOR FOREIGN STUDENTS FOR ACADEMIC YEAR 2024/2025 (FEES AND OTHER DIRECT COSTS PAYABLE TO THE UNIVERSITY)

		Diploma Programmes			Bachelor Programmes			
		1 st Year	2 nd Year	3 rd Ye ar	1 st Year	2 nd Year	3 rd Year	4 th Year
S/N	ITEM	USD	USD	USD	USD	USD	USD	USD
1	Tuition fee (per year)	1,840	1,840	1,840	2,000	2,000	2,000	2,000
2	Application fee	30	-	-	30	-	-	-
3	Other direct University fee –per year: (Caution money, Library membership fees, Examinations fee, Certification, Students' Organization fee, Registration fee, Student's Identity Card, Medical Contribution (NHIF), Student's Relief Fund, Prospectus, NACTE Registration)	500	450	450	500	450	450	450
	TOTAL	2,370	2,290	2,290	2,530	2,450	2,450	2,450

5.2.4.1 INDICATIVE STIPEND AND OTHER ALLOWANCES PAYABLE TO FOREIGN STUDENTS

S/N	ITEM	Diploma Programmes	Bachelor Programmes UQF 8
		USD	USD
1	Accommodation (Annually)	300	300
2	Meals (Annually)	1,500	1,500
3	Books and stationery allowance (Annually)	500	8,00
GRAND TOTAL		2,300	2,600

5.3 INSTALLMENTS PAYABLE

The tuition fee may be paid in TWO Instalments; ONE Instalment in each Semester, while all **Other Expenses / Direct Cost** must be paid in full at the beginning of each academic year. Students are required to pay their fees by generating a control number, the payment can be done through M-Pesa, Tigo Pesa and Airtel Money. The process of generating control Number will be instructed in the University website (www.must.ac.tz),

6.0 GENERAL PROVISIONS

- i. Admission to the University is open to bona fide students or persons meeting the entry requirements. Such persons shall be required to go through registration formalities to confirm their status as bona fide students.
- ii. To be admitted in the first year of study at Mbeya University of Science and Technology you must have relevant certificates entitling him/her to go for the course he/she has applied for and duly approved by the relevant authority or have other qualifications considered equivalent by the University.
- iii. A student from a similar institution wishing to be admitted into the second year of study at MUST, must have passed all examinations in the relevant programmes in the preceding year of study.
- iv. No student from another institution shall be admitted to the final year of study at Mbeya University of Science and Technology.
- v. A student, who has been admitted and does not report for registration in a particular year, may re-apply for admission during the coming Academic year provided the admission requirements remain the same.
- vi. A student who postponed studies for more than two consecutive academic years shall be deemed to have terminated studies. Therefore, a student interested to continue with studies at University shall be required to apply for re-admission in the first year of study.

6.1 APPLICATION FEES

Applicants must pay an application fee to be determined by the Council from time to time. All Application fees shall be payable to the University Bank Account directly or by using mobile phone after generating **Control Number** as it will be directed in the application procedures of a particular academic year.

The filled Online Application Information must be submitted before the deadline set for Application submission of the specific round in the online system

6.2 PAYMENT OF FEES

Students will only be registered upon payment of prescribed fees whose amount shall be determined from time to time.

6.3 GUARANTEE OF SPONSORSHIP

Applications can only be considered once the University receives satisfactory evidence that the student will be adequately financed during his or her course at the University. Applicants who need assistance to meet the University fees and expenses should seek bursaries from funding organizations.

6.4 MBEYA UNIVERSITY OF SCIENCE AND TECHNOLOGY ACADEMIC YEAR

The academic year for Certificate, Diploma and Bachelor Degree Programmes will begin in October every year, otherwise stated differently, and shall end as indicated by the University Academic Almanac.

6.5 REGISTRATION DEADLINE

Deadline of registration for all beginners shall be **two weeks** after the first day of Orientation Week. The deadline of registration for continuing students shall be **two weeks** after the University opens. All beginners shall have to submit original certificates on the registration day and must attend orientation week without missing.

6.6 STUDENTS TRANSFER

Student transfers typically refer to the process where a student moves from one institution to another or within the same institution. There are two forms of transfers namely; intra-university and inter-university transfers.

6.6.1 Intra-University Transfer

Intra-university transfer shall mean transfer from one-degree programme to another within Mbeya University of Science and Technology. The conditions are as follows;

- a) A student shall be allowed to apply for transfer from one-degree programme to another provided they meet the minimum entry criteria of such programmes;
- b) A student will not be allowed to transfer from the degree programme to which he/she was admitted at MUST to another unless the following conditions are met:
 - i. Completion of registration and payment of University and Administrative fees;
 - ii. Availability of a vacancy in the preferred programme;
 - iii. Meet the minimum admission requirements for the sought programme;

- iv. Payment of a non- refundable fee of TZS. 10,000 for Tanzanian students or USD 30 for foreign students;
- v. The application for transfer window will be opened and published on the University Website in the first semester;
- vi. The candidate shall be required to pay all prescribed fees and other related costs arising from the transfer process to the new programme.

6.6.2 Inter-University Transfer

Inter-University Transfer shall mean transfer from one University to the other within the same or different programme provided the applicant meets minimum entry criteria of such programmes.

The transfer from other institutions to MUST for first year students shall be permissible under the following conditions:

- a) Must be admitted in other university during that particular academic year;
- b) The programme to which transfer is sought must have empty slots to accommodate students;
- c) The applicant must possess the minimum entry requirements for that particular degree programme;
- d) Before completing the application for Inter-University Transfer, a candidate shall be required to pay a TZS 50,000 non-refundable fee or such as shall be determined by the University Council;
- e) The University shall approve transfers in writing and submit them to TCU for validation within the set deadline;
- f) Other TCU regulations related to Inter University Transfer shall apply mutatis mutandis; and
- g) For Bachelor degree students, Student transfer shall only be accepted after receiving approval from TCU.

6.7 STUDENTS' NAMES

No change of names by students will be permitted during the course of study at the University and students will be allowed to use names appearing on certificates only which qualified them for admission.

6.8 POSTPONEMENT OF STUDIES

No student is allowed to postpone studies after commencement of academic year, except under special circumstances. Permission to postpone studies will be considered after producing satisfactory evidence for the reasons of postponement and producing a written approval from one's sponsor.

A student who has postponed studies shall be allowed to be away from studies for a **maximum of two academic years only** if she/he is to be allowed for registration to the same year of study. Otherwise, the student will be required to apply afresh for re-admission.

6.9 ADMISSION REQUIREMENTS**6.10 ENTRY REQUIREMENTS**

Applicants may join, Diploma and Bachelor Programmes through direct entry scheme

**6.10.1 ADMISSION REQUIREMENTS FOR DIPLOMA PROGRAMMES FOR THE ACADEMIC YEAR
2025/2026**

The following are the minimum entry requirements for Diploma Programmes:

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
1	Diploma in Architecture	MBD01	<p>Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-religious subjects, three of which must be Mathematics, Physics, Chemistry/Geography</p> <p>OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting.</p> <p>OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two of which must be among the following subjects: Mathematics, Physics, Chemistry/Geography with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.</p>	3Years
2	Diploma in Biomedical Equipment Engineering	MBD02	<p>Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-religious subjects in Mathematics, Physics, Chemistry and Biology. OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-religious subjects, Mathematics, Engineering Science, Chemistry and Biology. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the</p>	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			following subjects: Mathematics, Physics, Chemistry, Biology with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	
3	Diploma in Business Administration	MBD03	Possession of Certificate in business Administration and other related qualifications including Certificate in agriculture, Community Development. OR Possession of an Advanced Certificates for Secondary Education with at least 1 principal pass and 1 subsidiary OR Possession of Certificate of NVA level 3, ATEC I (NBAA) Foundation stage I (PSPTB/NBMM).	3Years
4	Diploma in Civil Engineering	MBD04	Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Physics, Chemistry OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	3Years
5	Diploma in Computer Engineering	MBD05	Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Physics, Chemistry OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-Religious subjects, three	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	
6	Diploma in Computer Science	MBD06	<p>This programme will be open to candidates who have; the Certificate of Secondary Education Examination (CSEE) with a minimum pass in at least four(4) non-Religious subjects, three of which must be; Mathematics, Physics and Chemistry.</p> <p>OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non- Religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/ Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA OR For candidate who missed the above qualifications will have to undergo Foundation course and attain a minimum GPA of 3.0 and must have a certificate of Secondary Education Examination (CSEE) with pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Physics, Chemistry, Geography and Computer Science.</p> <p>For international applicants:</p>	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			Applicants with international who have completed their higher secondary education or equivalent diplomas in related certificates must submit their certificates to TCU/NACTE for verification to comply with the admission requirements stated in this section.	
7	Diploma in Electrical and Electronic Engineering	MBD07	<p>Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Physics, Chemistry</p> <p>OR</p> <p>Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.</p>	3Years
8	Diploma in Automotive and Auto electrical Engineering	MBD08	<p>Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) Nonreligious subjects, three of which must Mathematics, Physics, Chemistry OR</p> <p>Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non- Religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical</p>	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	
9	Diploma in Food Science and Technology	MBD09	Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least Four (4) non-Religious subjects three of which must be Mathematics, Physics/Chemistry and Biology. OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Engineering Science/Chemistry and Biology and any one of the following subjects: Architectural Drafting/Building, Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Mathematics, Physics/Chemistry, Biology with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	3Years
10	Diploma in Highway Engineering	MBD10	Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Physics, Chemistry OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	
11	Diploma in Information and Communication Technology	MBD11	<p>This programme will be open to candidates who have; the Certificate of Secondary Education Examination (CSEE) with a minimum pass in at least four (4) non-Religious subjects, two (2) of which must be; Mathematics and Physics/Geography/ Biology/ Chemistry /Computer Science. OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non- Religious subjects, three of which must be Mathematics, Engineering Science, Biology, Geography, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting, Electronics and Computer, Printing, Commercial and Business support services, Transport and logistics, OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by NACTVET OR For candidate who missed the above qualifications will have to undergo Foundation course and attain a minimum GPA of 3.0 and must have a certificate of Secondary Education Examination (CSEE). The candidate must have demonstrated a certain talent related to the filled. The talent will be assessed through reports and portfolios. OR For candidate who missed the above qualifications will have to undergo Foundation course and attain a minimum GPA of 3.0 and must</p>	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			<p>have a certificate of Secondary Education Examination (CSEE). The candidate must have passed in at least one of the following subjects; Mathematics, Physics, Geography, Biology and Chemistry.</p> <p>OR Possession of Certificate of Secondary Education Examination (CSEE) from Vocational Education with pass in Mathematics/Engineering Science and Biology/ Computer application Or any engineering/ICT.</p> <p>For international applicants:</p> <p>Applicants with international who have completed their higher secondary education or equivalent diplomas in related certificates must submit their certificates to TCU/NACTE for verification to comply with the admission requirements stated in this section</p>	
12	Diploma in Laboratory Science and Technology	MBD12	<p>Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects in Mathematics, Physics, Chemistry and Biology. OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-Religious subjects, Mathematics, Engineering Science, Chemistry and Biology. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Mathematics, Physics, Chemistry, Biology with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.</p>	3Years
13	Diploma in Mechanical Engineering	MBD13	<p>Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) Nonreligious subjects, three of which must Mathematics, Physics, Chemistry OR</p> <p>Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non- Religious subjects, three of which must be Mathematics,</p>	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	
14	Diploma in Mechatronics Engineering	MBD14	Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) Nonreligious subjects, three of which must Mathematics, Physics, Chemistry OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non- Religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	3Years
15	Diploma in Mining Engineering	MBD15	Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Physics, Chemistry. OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects:	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	
16	Diploma in Agribusiness	MBD16	Possession of a certificate (NQF 6) or NTA 4 in agribusiness, agriculture, professional technician level II certificate. OR Possession of an Advanced Certificate of Secondary Education Examination (ACSEE) with two principal passes in science subjects, or Geography.	2Years
17	Diploma in Electronics and Telecommunication Engineering	MBD17	Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Physics, Chemistry. OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-Religious subjects, three of which must be Mathematics, Engineering Science, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-Religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	3Years
18	Diploma of Business Administration in Accounting and Finance	MBD	Possession of Certificate in business Administration and other related qualifications including Certificate in agriculture, Community Development. OR Possession of an Advanced Certificates for Secondary Education with at least 1 principal pass and 1 subsidiary OR Possession of Certificate of NVA level	2Year

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			3, ATEC I (NBAA) Foundation stage I (PSPTB/NBMM).	
19	Diploma in Business Information System and Technology	MBD	<p>This programme will be open to candidates who have; the Certificate of Secondary Education Examination (CSEE) with a minimum pass in at least four (4) non-Religious subjects, two (2) of which must be; Mathematics and Physics /Geography/ Biology/ Chemistry /Computer Science. OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non- Religious subjects, three of which must be Mathematics, Engineering Science, Biology, Geography, Chemistry and any one of the following subjects: Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting, Electronics and Computer, Printing, Commercial and Business support services, Transport and logistics, OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-religious subjects, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by NACTVET OR For candidate who missed the above qualifications will have to undergo Foundation course and attain a minimum GPA of 3.0 and must have a certificate of Secondary Education Examination (CSEE). The candidate must have demonstrated a certain talent related to the filled. The talent will be assessed through reports and portfolios.</p> <p>OR For candidate who missed the above qualifications will have to undergo Foundation course and attain a minimum GPA of 3.0 and must have a</p>	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
			<p>certificate of Secondary Education Examination (CSEE). The candidate must have passed in at least one of the following subjects; Mathematics, Physics, Geography, Biology and Chemistry.</p> <p>OR Possession of Certificate of Secondary Education Examination (CSEE) from Vocational Education with pass in Mathematics/Engineering Science and Biology/Computer application Or any engineering /ICT.</p> <p>For international applicants:</p> <p>Applicants with international who have completed their higher secondary education or equivalent diplomas in related certificates must submit their certificates to TCU/NACTE for verification to comply with the admission requirements stated in this section</p>	
20	Diploma of Business Administration in Marketing and Entrepreneurship	MBD	<p>Possession of Certificate in business Administration and other related qualifications including Certificate in agriculture, Community Development. OR Possession of an Advanced Certificates for Secondary Education with at least 1 principal pass and 1 subsidiary OR Possession of Certificate of NVA level 3, ATEC I (NBAA) Foundation stage I (PSPTB/NBMM).</p>	2Years
21	Diploma in Biotechnology		<p>Possession Certificate of Secondary Education Examination (CSEE) with a minimum “D” pass in at least four (4) non-religious subjects which must be Biology, Chemistry, Physics, Mathematics /Nutrition.</p>	3Years
22	Diploma in Interior Design Technology		<p>Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) of which must be Mathematics , Physics/Engineering Science, Chemistry/Geography</p> <p>OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) subjects, two of which must be among the following subjects: Mathematics, Physics, Chemistry/Geography with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.</p>	3Years

S/N	Programme Name	Code	Entry requirements	Programme Duration (YRS)
23	Diploma in Landscape Design		Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) of which must be M a t h e m a t i c s , Physics/Engineering Science, Chemistry/Geography OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) subjects, two of which must be among the following subjects: Mathematics, Physics, Chemistry/Geography with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	3Years
24	Diploma in Applied Statistics		Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-religious subjects, two of which must be Mathematics and English OR Possession of Certificate of Secondary Education Examination (CSEE) from Technical Secondary Schools with a pass in at least four (4) non-religious subjects, two of which must be Mathematics and English and any two of the following subjects: Engineering Science/Chemistry, Architectural Drafting/Building Construction, Electrical Engineering Science/Electrical Drafting, Workshop Technology/Mechanical Drafting. OR Possession of Certificate of Secondary Education Examination (CSEE) with a pass in at least four (4) non-religious subjects, two must be among the following subjects: Mathematics and English with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	3Years

ADMISSION REQUIREMENTS FOR BACHELOR PROGRAMMES FOR ACADEMIC YEAR 2025/2026 (For Holders of Form Six Qualifications)

S/N	Programme	Code	Admission Requirements	Minimum Institutional Admission points	Admission Capacity	Programmes Duration
1.	Bachelor of Business Administration	MB001	Two principal passes in the following subjects: History, Geography, Kiswahili, English Language, French, Arabic, Fine Art, Economics, Commerce, Accountancy, Physics, Chemistry, Biology, Advanced Mathematics, Agriculture, Computer Science or Nutrition. OR Two principal passes of E in History, Geography, Kiswahili, English Language, French, Arabic, Fine Art, Economics, Commerce, Accountancy, Physics, Chemistry, Biology, Advanced Mathematics, Agriculture, Computer Science or Nutrition with Foundation course of out with minimum GPA of 3.0	4.0	160	3
2.	Bachelor of Civil Engineering	MB002	Two principal passes of at least “D” grade in Mathematics and Physics; In addition, an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level. OR Possession of two principal passes of E in Advanced Mathematics and Physics with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	150	4
3.	Bachelor of Electrical and Electronic Engineering	MB031	Two principal passes of at least “D” grade in Advanced Mathematics and Physics; In addition an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level. OR Possession of two principal passes of E in Advanced Mathematics and Physics with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	100	4
4.	Bachelor of Technology in Architecture	MB004	Two principal passes at least” D” grade in Advanced Mathematics and Physics or Chemistry or Geography; in addition, an applicant must have minimum pass of D in Mathematics, Physics, and Chemistry/Geography at O level. OR Possession	4.0	80	4

S/N	Programme	Code	Admission Requirements	Minimum Institutional Admission points	Admission Capacity	Programmes Duration
			of two principal passes of E in Advanced Mathematics and Physics/ Chemistry/ Geography with Foundation Programme of the OUT with a minimum GPA of 3.0.			
5.	Bachelor of Mechanical Engineering	MB005	Two principal passes of at least “D” grade at Advanced Level in Mathematics and Physics. Those without at least an “E” grade in Chemistry at A-Level must have a Credit at O-Level. Or Holders of Ordinary Diploma (NTA Level 6) or Diploma (UQF 6) in Mechanical, Automotive or Mechatronics Engineering respectively, all with an average of B or GPA of 3.0 or Full Technician Certificate (FTC) in Mechanical, Automotive, Automobile, Mechanical Engineering with Industrial Safety and Occupational Health or Mechatronics Engineering respectively, with an average of C.	4.0	100	4
6.	Bachelor of Computer Engineering and Technology	MB006	Two principal passes of at least “D” grade in Advanced Mathematics and Physics; In addition, an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level OR Possession of two principal passes of E in Advanced Mathematics and Physics with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	100	4
7.	Bachelor of Science with Education	MB007	Two principal passes of at least “D” grade in Physics and Mathematics or Physics and Chemistry or Chemistry and Biology or Mathematics and Chemistry. In addition, an applicant must have a pass in Mathematics, Physics, Chemistry and Biology at O-Level. OR Possession of two principal passes of E in Physics and Mathematics or Physics and Chemistry or Chemistry and Biology or Mathematics and Chemistry with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	160	3

S/N	Programme	Code	Admission Requirements	Minimum Institutional Admission points	Admission Capacity	Programmes Duration
8.	Bachelor of Laboratory Sciences and Technology	MB008	Two principal passes of at least “D” grade in Biology and Chemistry or Physics; In addition, an applicant must have a pass in Mathematics, Physics, Chemistry and Biology at O-Level. OR Possession of two principal passes of E in Biology and Chemistry or Physics with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	135	3
9.	Bachelor of Science in Telecommunication Engineering	MB009	Two principal passes in Advanced Mathematics and Physics at a minimum of “D” grade; In addition, an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level. OR Possession of two principal passes of E in Advanced Mathematics and Physics with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	100	4
10.	Bachelor of Computer Science	MB010	For form VI applicants who have completed their A level studies before 2014 and from 2016 the minimum entry qualification is two Principal Level passes with a total of at least 4.0 points in Mathematics and Physics or Chemistry or Computer. For form VI applicants who have completed their A level studies in 2014 and 2015 their minimum entry qualifications are two Principal passes (Two Cs) with a total of 6.0 points in Mathematics and Physics or Chemistry or Computer.	4.0	65	3
11.	Bachelor of Science in Information and Communication Technology	MB011	For form VI applicants who have completed their Advanced Certificate of Secondary Education (ACSEE) studies before 2014 and from 2016 the minimum entry qualification is two Principal Level passes with a total of at least 4.0 points in Physics, Mathematics, Geography, Biology, Chemistry, Computer Science and Business Studies or Accountancy or Economics.	4.0	100	3

S/N	Programme	Code	Admission Requirements	Minimum Institutional Admission points	Admission Capacity	Programmes Duration
			For Form VI applicants who have completed their Advanced Certificate of Secondary Education (ACSEE) studies in 2014 and 2015 their minimum entry qualifications are two Principal passes (Two Cs) with a total of 6.0 points in Physics, Mathematics, Geography, Biology, Chemistry or Economics			
12.	Bachelor of Technical Education in Electrical and Electronics Engineering	MB012	Two principal passes (D and above) in Physics and Mathematics. In addition, an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level. OR Possession of two principal passes of E in Advanced Mathematics and Physics, with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	100	4
13.	Bachelor of Technical Education in Mechanical Engineering	MB013	Two principal passes (D and above) in Physics and Mathematics. In addition, an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level. OR Possession of two principal passes of E in Advanced Mathematics and Physics, with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	100	4
14.	Bachelor of Technical Education in Civil Engineering	MB014	Two principal passes (D and above) in Physics and Mathematics. In addition, an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level. OR Possession of two principal passes of E in Advanced Mathematics and Physics, with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	100	4
15.	Bachelor of Technical Education in Architectural Technology	MB015	Two principal passes (D and above) in Physics and Mathematics. In addition, an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level. OR Possession of two principal passes of E in Advanced Mathematics and Physics, with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	100	4

S/N	Programme	Code	Admission Requirements	Minimum Institutional Admission points	Admission Capacity	Programmes Duration
16.	Bachelor of Technology in Landscape Architecture	MB016	Two principal passes at least "D" grade at Advanced Level in Biology and Physics or Chemistry or Geography at A-Level. In addition, an applicant must have a minimum of "D" in Mathematics, Physics, Biology and Chemistry/ Geography at O-level. Possession of two principal passes of E in Biology and Physics or Chemistry or Geography at A-Level. with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	140	4
17.	Bachelor of Engineering in Data Science	MB017	For form VI applicants who have completed their A-level studies before 2014 and from 2016, the minimum entry qualification is two Principal Level passes with a total of at least 4.0 points in Physics, Advanced Mathematics, and Computer Science. For Form VI applicants who have completed their A level studies in 2014 and 2015 their minimum entry qualifications are two Principal passes (Two Cs) with a total of 6.0 points in Physics, Advanced Mathematics/Computer Science.	4.0	50	4
18.	Bachelor of Science in Food Science and Technology	MB018	Two principal passes of at least "D" grade in Chemistry and one subject among the following: Biology, Physics, Nutrition, Agriculture, Advanced Mathematics or Geography. In addition, an applicant must have minimum pass of D in Physics/Chemistry, Biology and Mathematics at O-level	4.0	150	3
19.	Bachelor of Science in Natural Resources Conservation	MB019	Two principal passes of at least "D" grade at Advanced Level in Biology, and Chemistry/ Geography/ Agriculture/ Nutrition; In addition, an applicant must have minimum pass of D grade in Biology and Chemistry/Geography/Agriculture and Nutrition At O-Level	4.0	100	3

S/N	Programme	Code	Admission Requirements	Minimum Institutional Admission points	Admission Capacity	Programmes Duration
20.	Bachelor of Agribusiness Management and Technology	MB020	Two Principal Passes in the following subjects: Biology, Geography, Agriculture and Physics, Chemistry, Advanced mathematics, Economics, History, Food and Nutrition, Commerce, Accountancy. In Addition, an applicant must have a pass in (4) non- Religious subjects of which one must be among the following; Biology, Commerce, Geography or Agriculture.	4.0	200	3
21.	Bachelor of Sciences in Biotechnology	MB021	Two principal passes of at least „D“ grade at Advanced Level in Mathematics, Biology and Chemistry or Physics.	4.0	60	
22.	Bachelor of Science in Chemistry	MB022	Two principal passes in Chemistry and in one of the following subjects: Physics, Mathematics, Biology, Geography or Nutrition. In addition, an applicant MUST have passes in chemistry, physics and mathematics at O' Level.	4.0	100	
23.	Bachelor in Environmental Science and Technology	MB023	Two principal passes of at least 'D' grade at Advanced Level in Chemistry, Physics, Biology, Advanced Mathematics or Geography. In addition, an applicant must have a minimum pass of "D" in Biology and Mathematics at O-Level.	4.0	80	
24.	Bachelor of Technical Education in Telecommunications Engineering	MB024	Two principal passes (D and above) in Physics and Mathematics. In addition, an applicant must have minimum pass of D in Mathematics, Physics and Chemistry at O level. OR Possession of two principal passes of E in Advanced Mathematics and Physics,with Foundation Programme of the OUT with a minimum GPA of 3.0.	4.0	120	4
25.	Bachelor of Applied Nuclear Sciences	MB025	Two principal passes (D and above) of a minimum in Physics, Chemistry/ Geography/ Biology/ Mathematics / Computer.	4.0	70	3
26.	Bachelor of Science in Aquatic Sciences and Aquaculture Technologies	MB026	Two principal passes (D and above) in Biology, and one from the following subjects: Chemistry / Geography / Agriculture/Nutrition /Economics.	4.0	40	3

S/N	Programme	Code	Admission Requirements	Minimum Institutional Admission points	Admission Capacity	Programmes Duration
27.	Bachelor of Science in Health Information science	MB027	Two principal passes in Biology and either Chemistry or Physics or Nutrition or Geography with a minimum of 6 points.	6.0	30	3
28.	Bachelor of Science in Urban and Regional Planning	MB028	Two principal passes at least “D” grade in Mathematics or Physics or Chemistry or Biology or Geography or Economics or Computer Science.	4.0	70	4
29.	Bachelor of Applied Informatics in Industrial Automation	MB029	Two principal passes in Physics, Geography, Biology, Chemistry, Mathematics or Computer / Computer Science. Those without Advanced Mathematics Pass must have at least a principal pass in Basic Applied Mathematics at A-level and a minimum of grade ‘C’ in Basic Mathematics at O-Level.	4.0	100	3
30.	Bachelor of Technical Education in Computer Science	MB030	Two Principal passes in Chemistry/Advanced Mathematics/Biology/Computer Science and Physics	4.0	100	3
31.	Bachelor of Science in Electronics and Automation Engineering	MB032	Two principal passes of at least “D” grade at Advanced Level in Mathematics and Physics. Those without a Principal or subsidiary level pass in Chemistry /Geography / Computer Science must have a Credit at O-Level.	4.0	50	4
32.	Bachelor of Engineering in Construction Technology	MB033	Two principal passes in the following science subjects: Mathematics, Physics, Chemistry and Computer Studies.	4.0	80	4
33.	Bachelor of Science in Mechatronics Engineering	MB034	Two passes at D or above Advanced Level in Mathematics and Physics. In Addition, an applicant must have ‘C’ or above in English, Mathematics, Physics and Chemistry at O’ level.	4.0	80	4
34.	Bachelor of Science in Petroleum Storage and Transportation Engineering	MB035	Two principal passes of at least “D” grade at Advanced Level in Mathematics and Physics. Those without at least an “E” grade in Chemistry or Geography at A Level must have a Credit at O-Level.	4.0	50	4
35.	Bachelor of Science in Electrical and Renewable Energy Technology	MB036	Two principal passes of at least “D” grade at Advanced Level in Mathematics and Physics with at least an “E” grade in Chemistry or Geography.	4.0	60	4

S/N	Programme	Code	Admission Requirements	Minimum Institutional Admission points	Admission Capacity	Programmes Duration
36.	Bachelor in Instrumentation and Control Engineering	MB037	Two principal passes of at least “D” grade at Advanced Level in Mathematics and Physics with at least an “E grade in Chemistry or Geography.	4.0	60	4
37.	Bachelor of Science in Information and Computer Networking	MB038	Two Principal Level passes in Physics or Mathematics or Computer Science and any other of the following subjects such as Geography, Biology, Chemistry, Accountancy, Economics and Business Studies.	4.0	80	3
38.	Bachelor of Applied Informatics in Marketing	MB039	Two Principal passes in the following subjects: Physics, Mathematics, Geography, Biology, Chemistry, Computers Science, Bookkeeping and Commerce, Economics, Food and Human Nutrition, Agriculture, Business studies and Accountancy	4.0	30	3

6.10.2 ADMISSION REQUIREMENTS FOR BACHELOR PROGRAMMES FOR ACADEMIC YEAR 2024/2025 (For Holders of Diploma or Equivalent Qualifications)

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
1.	Bachelor of Business Administration	MB001	Diploma in Business Administration, Education, Marketing Social Studies, Industrial Relations, Economic Studies, Public Sector Finance Management, Information Technology with Accounting or Human Resource Management, Financial Administration, Business Administration, Local Government Accounting and Finance, Insurance and Risk Management, Customs and Tax Management, Freight Clearing and Forwarding, Statistics, Business Management, Procurement and Logistic Management or Banking and Finance with an average of “B” or a minimum GPA of 3.0	140	3
2.	Bachelor of Civil Engineering	MB002	Holder of Diploma in Civil Engineering/Highway Engineering with at least a GPA of 3. Or Holder of Full Technician Certificate (FTC) in Civil Engineering with at least an average of C grade at 3.0 points.	100	4

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
			Or Holder of Diploma in Civil Engineering/Highway Engineering with less than 3.0 GPA or Holder of Full Technician Certificate (FTC) in Civil Engineering with at less average of C grade of 3.0 points who will pass the recognized bridge course.		
3.	Bachelor of Electrical Engineering	MB031	Diploma (UQF 6) in Electrical and Electronics Engineering, Mechanical Engineering, Computer Engineering, Telecommunications Engineering, Biomedical Equipment Engineering and Mechatronics Engineering or related fields with an average of B or GPA of 3.0 or Full Technician Certificate (FTC) in above mentioned engineering Programmes with an average of C In addition, an applicant must have a minimum of “D” grade in Mathematics, Physics and Chemistry at O-Level. OR In addition, an applicant must have at least four (4) passes at O-Level, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	50	4
4.	Bachelor of Technology in Architecture	MB004	Diploma or Full Technician Certificate (FTC) in Architecture, Architectural Technology, Technical Education in Architectural Technology with an average of “B” grade or a minimum GPA of 3.0 or an average of “C” grade for FTC holders. In addition, an applicant must have a minimum of “D” grade in Mathematics, Physics and Chemistry/ Geography at O-Level. OR In addition, an applicant must have at least four (4) Passes at O-Level, two must be among the following subjects: Physics, Mathematics and Chemistry/ Geography with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	80	3
5.	Bachelor of Mechanical Engineering	MB005	Diploma or Full Technician Certificate (FTC) in Mechanical, Automotive, Automobile or Mechatronics Engineering Technical Education in Mechanical, Agro mechanics with an average of “B” grade or a minimum GPA of 3.0 or an average of “C” grade for FTC holders in addition, an applicant must have a minimum of “D” grade in Mathematics, Physics and Chemistry at O-Level. OR In addition, an applicant must have at least four (4) Passes at O-Level, two must be among the following subjects:	100	4

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
			Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.		
6.	Bachelor of Computer Engineering and Technology	MB006	Diploma or Full Technician Certificate (FTC) in Computer Engineering, Computer Science, Software Engineering, Telecommunication Engineering, Information and Communication Technology (ICT), Electrical and Electronics or Mechatronics Engineering with an average of “B” grade or a minimum GPA of 3.0 or an average of “C” grade for FTC holders. In addition, an applicant must have a minimum of “D” grade in Mathematics, Physics and Chemistry at O-Level. OR In addition, an applicant must have at least four (4) Passes at O-Level, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	25	4
7.	Bachelor of Science in Education	MB007	Diploma in Education, Diploma in Laboratory Science and Technology, Diploma in Technical Education with an average of “B” or a minimum GPA of 3.0.	90	3
8.	Bachelor of Laboratory Sciences and Technology	MB008	Diploma or Full Technician Certificate (FTC) in Laboratory Science and Technology with an average of “B” grade or a minimum GPA of 3.0 or an average of “C” grade for FTC holders in addition, an applicant must have a minimum of “D” grade in Mathematics, Physics, Chemistry and Biology at O-Level. OR In addition, an applicant must have at least four (4) Passes at O-Level, two must be among the following subjects: Physics, Chemistry, Biology and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	95	3
9.	Bachelor of Engineering in Telecommunication Systems	MB009	Diploma or Full Technician Certificate (FTC) in Electronics and Telecommunication or Electrical and Electronic or Electrical Engineering with an average of “B” grade or a minimum GPA of 3.0 or an average of “C” grade for FTC holders in addition, an applicant must have a minimum of “D” grade in Mathematics, Physics and Chemistry at O-Level. OR Two principal passes of at least “D” grade at Advanced Level in Mathematics and Physics also must have a Certificate of Secondary Education Examination (CSEE) with a minimum pass of “D” grade in at least four (4) non-religious subjects,	50	4

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
			three of which must be Basic Applied Mathematics, Physics, Chemistry In addition, an applicant must have at least four (4) Passes at O-Level, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA. Or Two principal passes of at least “D” grade at Advanced Level in Mathematics and Physics also must have a Certificate of Secondary \Education Examination (CSEE) with a minimum pass of “D” grade in at least four (4) non-religious subjects, three of which must be Basic Applied Mathematics, Physics, Chemistry		
10.	Bachelor of Computer Science	MB010	Diploma or Full Technician Certificate (FTC) in Computer Engineering, Computer Science, Software Engineering, Telecommunication Engineering, Information and Communication Technology (ICT) with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have four passes at O-Level, among them two must be Basic Mathematics and English.	10	3
11.	Bachelor of Science in Information and Communication Technology	MB011	Diploma or Full Technician Certificate (FTC) in Computer Engineering, Computer Science, Electrical and Electronics, Information and Communication Technology (ICT), or Mechatronics Engineering with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have four passes at O-Level; among them two must be Basic Mathematics and English.	50	3
12.	Bachelor of Technical Education in Electrical and Electronics Engineering	MB012	Diploma in Electrical and Electronic Engineering, Mechanical Engineering, Computer Engineering, Telecommunications Engineering, Chemical and processing Engineering, Biomedical Equipment Engineering and Mechatronics Engineering or related fields with an average of B or GPA of 3.0 or Full Technician Certificate (FTC) in above mentioned engineering Programmes with an average of C from recognized institution.	30	4
13.	Bachelor of Technical Education in Mechanical Engineering	MB013	Diploma (NTA level 6) in Mechanical Engineering, Mechanical Engineering with Industrial Safety and Occupational Health, Automotive or Mechatronics Engineering, technical	20	4

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
			Education in Mechanical Engineering (DTEME), Technical Education (DTE), Full technician Certificate (FTC) in Mechanical Engineering, Full Technician Certificate (FTC) in Engineering with an average of B or GPA not less than 3.0		
14.	Bachelor of Technical Education in Civil Engineering	MB014	Ordinary Diploma (NTA level 6) in Civil Engineering or Full Technician Certificate (FTC) in Civil Engineering with an average of B or GPA not less than 3.0. In addition, an applicant must have at least four (4) Passes at O-Level, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	20	4
15.	Bachelor of Technical Education in Architectural Technology	MB015	Diploma or Full Technician Certificate (FTC) in Architecture with an average of "B" grade or a minimum GPA of 3.0 or an average of "C" grade for FTC holders OR An applicant must have at least four (4) Passes at O-Level, two must be among the following subjects: Physics, Mathematics and Chemistry/ Geography with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	20	4
16.	Bachelor of Technology in Landscape Architecture	MB016	Diploma or Full Technician Certificate (FTC) in Architecture, Architectural Technology, Technical Education in Architectural Technology with an average of "B" grade or a minimum GPA of 3.0 or an average of "C" grade for FTC holders. In addition, an applicant must have a minimum of "D" grade in Mathematics, Physics and Chemistry/ Geography at O-Level	20	4
17.	Bachelor of Engineering in Data Science	MB017	Diploma or Full Technician Certificate (FTC) in Computer Engineering, Computer Science, Software Engineering, Telecommunication Engineering, Information and Communication Technology (ICT) with an average of "B" grade or a minimum GPA of 3.0 or an average of "C" grade for FTC holders. OR In addition, an applicant must have at least four (4) Passes at O-Level, two must be among the following subjects: Physics, Chemistry and Mathematics with possession of TRADE TEST GRADE I / NVA LEVEL III issued by VETA.	20	4
18.	Bachelor of Science in Food Science and	MB018	Diploma in Food Sciences and Technology, Laboratory Science and Technology or Food Science and Nutrition with	20	3

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
	Technology		an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have a pass in at least Four (4) passes at O-level, three of which must be Mathematics, Physics/Chemistry and Biology.		
19.	Bachelor of Science in Natural Resources Conservation	MB019	Diploma in Wildlife Management, Wildlife Conservation, Forestry, Fisheries, Beekeeping, with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have four passes at O-Level; among them two must be Biology and Geography, Chemistry, Nutrition or Agriculture.	30	3
20.	Bachelor of Agribusiness Management and Technology	MB020	Diploma in Agribusiness, Agriculture, Agro mechanics and Irrigation with an average of “B” or a minimum GPA of 3.0. In addition, an applicant must have a minimum of “D” grade in one of the following subjects Agriculture or Commerce, Biology or Geography at O-Level.	100	3
21.	Bachelor of Sciences in Biotechnology	MB021	Diploma in Food Sciences and Technology, Laboratory Science and Technology or Food Science and Nutrition with an average of B or GPA not less than 3.0. In addition, an applicant must have a minimum of “D” grade in one of the following subjects: Physics, Geography, Nutrition or Agriculture at O-Level.	20	3
22.	Bachelor of Science in Chemistry	MB022	Diploma in education or other diploma in sciences with an average of B or GPA not less than 3.0. In addition, an applicant MUST have passes in chemistry, physics and mathematics at O’ Level.	20	3
23.	Bachelor in Environmental Science and Technology	MB023	Diploma in Secondary Education with any of the following teaching subjects; Biology, Chemistry, Physics and Mathematics with an average of B or GPA not less than 3.0. OR Foundation Programme of The OUT with a minimum GPA of 3.0. In addition, an applicant must have a minimum pass of “D” in Biology and Mathematics at O-Level	40	3
24.	Bachelor of Technical Education in Telecommunications Engineering	MB024	Diploma (UQF / NTA Level 6) in Electronics and Telecommunication or Electrical and Electronic or Electrical Engineering or Electronics Engineering, Computer Engineering, Mechatronics and other related program, all with an average of B or GPA of 3.0 and possession of Certificate of Secondary Education Examination (CSEE) with a pass in Mathematics, Physics, and Chemistry / Geography / Computer Science OR Full Technician Certificate (FTC) in Electronics and	30	4

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
			Telecommunication or Electrical and Electronic or Electrical Engineering or Industrial Automation or Electronics Engineering, all with an average of B and possession of Certificate of Secondary Education Examination (CSEE) with a pass in Mathematics, Physics, and Chemistry / Geography / Computer Science OR Foundation Certificate of the OUT with a minimum GPA of 3.0. In addition, a candidate must have an advance certificate of Secondary Education Examination (ACSEE).		
25.	Bachelor of Applied Nuclear Sciences	MB025	Diploma in Medical imaging or Radiography with an average of “B” or a minimum GPA of 3.0 In addition, an applicant must have a minimum of “D” grade in the following subjects: Physics, Mathematics, Chemistry, Biology and English at O-Level. OR Diploma in Education with Physics and Chemistry or Mathematics or Biology with an average of B or GPA not less than 3.0 OR Diploma (NTA level 6) in Laboratory Sciences and Technology with an average of B or GPA not less than 3.0 OR FTC in Laboratory Technology. In addition, an applicant must have a minimum of “D” grade in the following subjects: Physics, Mathematics, Chemistry, Biology and English at O-Level.	30	3
26.	Bachelor of Science in Aquatic and Aquaculture Technologies	MB026	Diploma in Aquaculture, Fisheries, Aquatic Sciences, Animal science, Wildlife Management, Wildlife Conservation, Education (Science subjects/Biology, Chemistry/Geography/Agriculture /Nutrition) with an average of B or GPA not less than 3.0. OR Diploma of Sciences in courses such as Aquaculture, Fisheries, Aquatic Sciences, Animal science, Wildlife Management, Wildlife Conservation, Education (Science subjects/Biology, Chemistry/Geography/Agriculture /Nutrition) with an average of B or GPA not less than 3.0	20	3
27.	Bachelor of Science in Health Science Information	MB027	Diploma in Health Sciences (Health Information Science, Nursing and midwifery, Clinical Medicine, Public Health, Environmental Health or Health Records, Optometry, Pharmaceutical Sciences, Medical Laboratory Sciences, Physiotherapy, Clinical Dentistry or Diagnostic Radiography) with an average of “B” or a minimum GPA of 3.0	20	3

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
28.	Bachelor of Science in Urban and Regional Planning	MB028	Diploma in Urban Planning and Design or Urban and Regional Planning, Landscape Architecture or Architecture or Cartography or Geographical Information System or Geomatics or Regional Development Planning or Highway Engineering or Land Management and Valuation or Civil Engineering or Urban Development and Environmental Management or other related field with an average GPA of 3.0, OR Full Technician Certificate (FTC) in related field with an average of C from recognized institutions.	30	4
29. Bachelor of A	Bachelor of Applied Informatics in Industrial Automation	MB029	Diploma in Business Computing, Multimedia Technology, Computer Engineering/Science or Information and Communication Technology (ICT) or Electrical and Electronics Engineering or Electronics and Telecommunication Engineering, Mechatronics Engineering, Mechanical Engineering respectively, all with an average of B or GPA of 3.0. Applicants must have an O' level certificate with a pass in Mathematics and Physics. OR Full Technician Certificate (FTC In Computer Engineering/Science or Information and Communication Technology (ICT) or Electrical and Electronics Engineering or Mechatronics Engineering, Electronics and Telecommunication Engineering and Mechanical Engineering respectively all with an average of 'B' grade. Applicants must have an O'level certificate with a pass in Mathematics and Physics. OR Foundation Certificate of the OUT with a minimum GPA of 3.0. Applicants must have O'level certificate with a pass in at least four (4) nonreligious subjects, three of which must be Mathematics, Physics and Computer Science.	20	3
30.	Bachelor of Technical Education in Computer Science	MB030	Diploma with at least four passes (Ds and above) in ordinary secondary school or NVA Level III or equivalent foreign qualifications as established by either NECTA or VETA; and At least a GPA of 3.0 for ordinary Diploma (NTA Level 6); OR Average of "B" for Full Technician Certificate (FTC).	20	3
31.	Bachelor of Science in Electronics and Automation Engineering	MB032	Diploma (UQF / NTA Level 6) in Electronics and Telecommunication or Electrical and Electronic or Electrical Engineering or Industrial Automation or Electronics Engineering, all with an average of B or GPA of 3.0 and possession of Certificate of Secondary	17	4

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
			Education Examination (CSEE) with a pass in Mathematics, Physics, and Chemistry / Geography OR Full Technician Certificate (FTC) in Electronics and Telecommunication or Electrical and Electronic or Electrical Engineering or Industrial Automation or Electronics Engineering, all with an average of B and possession of Certificate of Secondary Education Examination (CSEE) with a pass in Mathematics, Physics, and Chemistry /Geography.		
32.	Bachelor of Engineering in Construction Technology	MB033	Diploma in Construction Technology Engineering / Civil Engineering/Highway Engineering/Architecture/Technology in Architecture / Water Resources Engineering/Quantity Surveying/Land Survey/Electrical Engineering/Mechanical Engineering with at least a GPA of 3.0. OR Full Technician Certificate (FTC) in Construction Technology Engineering / Civil Engineering/Highway Engineering/ Architecture/Technology in Architecture /Water Resources Engineering/Quantity Surveying/ Land Survey/Electrical Engineering/Mechanical Engineering with at least an average of C grade at 3.0 points.	20	4
33.	Bachelor of Science in Mechatronics Engineering	MB034	Diploma with at least a GPA of 3.0 or equivalent in Mechatronics, Mechanical, Electrical, Electronics, Computer, Biomedical, Automotive or Chemical Engineering from recognized institution. OR graduate from vocational stream secondary school with diploma of one the above fields with a GPA of 3.0 or above	20	4
34.	Bachelor of Science in Petroleum Storage and Transportation Engineering	MB035	Diploma (NTA Level 6) in Petroleum Storage and Transportation Engineering, Petroleum Engineering, Petroleum Geoscience, Civil Engineering, Mining Engineering, Mechanical Engineering, Electrical Engineering, Industrial Engineering, Computer Engineering, Telecommunications Engineering, Chemical and processing Engineering, Mineral Processing Engineering (Metallurgy), Mechanical Engineering with industrial Safety and Occupational Health, Geotechnical Engineering, Marine Engineering, and Mechatronics Engineering, all with an average of B or GPA of 3.0 or Full Technician Certificate	12	4

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
			(FTC) in above mentioned engineering programmes with an average of C, all from recognized institution		
35.	Bachelor of Science in Electrical Renewable Energy and Technology	MB036	Diploma (UQF 6) in Electrical and Electronics Engineering, Mechanical Engineering, Computer Engineering, Telecommunications Engineering, Chemical and processing Engineering, Biomedical Equipment Engineering and Mechatronics Engineering or related fields with an average of B or GPA of 3.0 or Full Technician Certificate (FTC) in above mentioned engineering Programmes with an average of C from recognized institution	20	4
36.	Bachelor in Instrumentation and Control Engineering	MB037	Diploma (UQF 6) in Electrical and Electronics Engineering, Mechanical Engineering, Computer Engineering, Telecommunications Engineering, Chemical and processing Engineering, Biomedical Equipment Engineering and Mechatronics Engineering or related fields with an average of B or GPA of 3.0 or Full Technician Certificate (FTC) in above mentioned engineering Programmes with an average of C from recognized institution	27	4
37.	Bachelor of Science in Information and Computer Networking	MB038	Diploma (NTA Level 6) in Computer Engineering/Science or Information and Communication Technology (ICT) or Telecommunication Engineering, Electrical and Electronics or Mechatronics Engineering respectively and Business Computing all with an average of B or GPA of 3.0. In addition, an applicant must have Mathematics, Geography, Physics, Chemistry at O' level.	20	3
38.	Bachelor of Applied Informatics in Marketing	MB039	Diploma (NTA Level 6) in Business Computing, Multimedia Technology, Computer Engineering/Science or Information and Communication Technology (ICT) or Electrical and Electronics or Mechatronics Engineering, Information Technology, Information Systems, Marketing, Marketing Management, Business Analytics, Digital Communication respectively, all with an average of B or GPA of 3.0. In addition, an applicant must have a pass in Mathematics and English at O'level. OR Full Technician Certificate (FTC) in Computer Engineering/Science or Information and Communication Technology (ICT) or Electrical and Electronics or Mechatronics Engineering or Information Technology or Information System or Marketing or	20	3

S/N	Programme	Code	Admission Requirements	Admission Capacity	Programme Duration (YRS)
			Marketing Management respectively, all with an average of B. In addition, an applicant must have a pass in Mathematics and English at O'level		

7.0 UNIVERSITY GENERAL REGULATIONS

Upon admission all first-year students must obtain and thoroughly read the following:

- i. Students' By-laws.
- ii. Conditions for Government Sponsorship
- iii. Examination Regulations.
- iv. Library Regulations
- v. Industrial Practical Training Regulations
- vi. Constitution of MUSTSO
- vii. Any Other Relevant Rules, Guidelines and Regulations of the University

Any of these regulations can be obtained from the Director of Undergraduate Studies, Directorate of Student Services or Heads of respective Departments and University Library. Students can also access these Regulations directly from MUST website: www.must.ac.tz

8.0 COURSES OFFERED IN VARIOUS PROGRAMMES

8.1 COLLEGE OF ENGINEERING AND TECHNOLOGY (CET)

8.1.1 DEPARTMENT OF CIVIL ENGINEERING

Programmes

The Department offers the following Programmes:

- a) Diploma in Civil Engineering
- b) Diploma in Highway Engineering
- c) Bachelor of Civil Engineering

8.1.1.1 LABORATORIES AND WORKSHOPS

- i. Pneumatic and Hydraulics Laboratory
- ii. Soil and Materials Testing Laboratory
- iii. Land Surveying Laboratory

8.1.1.2 LIST OF STAFF

(Head of Department)

Dr. Partice Nyangi Mkono	Ph.D. in Structural Engineering (HUST, China), MSc. Civil Eng. (USTHB, Algeria), BSc. Civil Eng. (USTHB, Algeria).
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Professors:

Prof. Zacharia Katambara	Ph.D. WRE (Witwatersrand-South Africa), MSc. WRE Engineering (UDSM), BSc Civil Engineering (UDSM)
Prof. Duwa H. Chengula	Ph.D. Materials Science (Kassel University – Germany), MSc. Highway Eng. (UDSM), BSc. Civil Eng. (UDSM), FTC Civil Eng. (MTC)

Senior Lecturers:

Dr. Gislar Kifanyi	Ph.D. WRE (Tshwane University of Technology – SA), MEM. (UDSM), PGD (UDSM), BSc Civil Eng. (UDSM)
Dr. Partice Nyangi Mkono	Ph.D. in Structural Engineering (HUST, China), MSc. Civil Eng. (USTHB, Algeria), BSc. Civil Eng. (USTHB, Algeria)

Lecturers:

Mr. Joseph K. Mnkeni	MSc. Highway Eng. (UDSM), PGD Highway Eng. (UDSM), ADE Civil Eng. (DIT), FTC Civil Eng. (TCA)
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Assistant Lecturers

*Mr. Asson S. Malisa	MSc. Materials Science Engineering, (NMAIST); BSc. Civil Engineering. (UDSM)
*Mr. George Lupakisyo	MSc. WRE (UDSM), BSc Civil Engineering. (UDSM).
*Mr. Martin Swila	MSc. Structural Engineering (UDSM), BSc. Civil Engineering, (UDSM)
Mr. Ivor J. Ndimbo	Master of Technology Water Resources Development. (IIT-Roorkee INDIA); BSc. Civil Engineering (UDSM).
Mr. Mathew A. Gwao	MSc. Geographical Information Systems (UDSM) BSc. Land Survey (UDSM)
*Mr. Daudi J. Makelemo	MSc. Construction Economics and Management (ARU), BSc. Civil Engineering (ARU).
*Mr. Richard M Mkindo	MTech. Structural Eng. (NITK – India), Bachelor Civil Engineering (MUST)
Mr. Asifiwe Z. Swalo	MTech. Transportation Eng. (NITK – India), Bachelor Civil Engineering (MIST), Ordinary Diploma Civil Engineering (DIT).
Mr. Mussa G. Magaka	MSc. Structural Engineering (UDSM), Bachelor Civil Engineering (MIST).
*Mr. Adam Shaaban Mgana	MSc. Environmental Engineering (Cyprus International University- Cyprus), BSc. Environmental Engineering (Cyprus International University- Cyprus), Diploma in Water Supply and Sanitation Engineering (Water Institute)
Mr. Kizito Patrick Mwilongo	MSc. Materials Science and Engineering (Structural Materials) (Nelson Mandela African Institution of Science and Technology, Arusha – Tanzania), BSc. Civil Engineering (St. Augustine University of Tanzania, Mwanza – Tanzania).
Ms. Margaret S. Kironde	BSc. in Environmental Science and Management (ARU)
Mr. Isaac Sagamiko	MSc. Structural Engineering (UDSM), Bachelor of Civil Engineering (MUST).
Mr. Baraka Mosses	MSc. in Civil Engineering (MUST), BSc in Civil Engineering (Arusha Technical College)
Ms. Mary Joseph Kotini	MSc. in Civil Engineering (MUST), BSc in Civil Engineering (MUST)

Tutorial Assistants

Mr. Venance R. Mwandupe	BEng. Civil (MIST), FTC Civil Eng. (MTC),
*Ms Shamsa M. Nassibu	Bachelor Civil Engineering (MUST), FTC Civil Eng. (TCA).
Mr. Cyriacus J. Rugakingira	BSc. Civil (UDSM); FTC. Civil (Dar es Salaam Technical College)
Mr. George C. Lyimo	BSc. Civil and Structural Engineering (UDSM); FTC. Civil (ATC)
Mr. Herfrid J. Mgeni	ADE. Civil (MIST); FTC. Civil (MTC)
*Mr. Lameck Owiti	Bachelor Civil Engineering (MUST)

Mr. Alfred B. Nyingi	Bachelor Civil Engineering (MUST), OD. Civil (ATC)
*Mr. Lameck Simon Kongo	BSc. in Geoinformatics (Ardhi University)
Mr. Tony Mbugi	Bachelor of Civil Engineering (MUST), Diploma in Civil Engineering (MUST)
Mr. Frank Mashiku	Bachelor of Civil Engineering (MUST)
Mr. Sebastiano D. Nayungeko	Bachelor of Civil Engineering (MUST)
Ms. Namayan N. Lemeirut	MSc. in Civil Engineering (MUST), Bachelor of Civil Engineering (MUST)

Instructors

Mr. Crodiwick W. Ruvunduka	Bachelor Civil Engineering (DIT), Ordinary Diploma Transportation Engineering (TCA).
*Mr. Kizito A. Ngowi	MSc. in Geographical Information System (UDSM), Bsc. Urban & Reg. Planning (ARU); Ordinary Diploma in Cartography (Ardhi Inst.-Tabora) .
Mr. Stephano S. Maduka	Bachelor Civil Engineering (MUST, Ordinary Diploma in Transportation Engineering (ATC)
*Mr. Goodluck M. Masige	MSc. Water and Sanitation Utility Management (AgroParis-France), Bsc in Civil Engineering (MUST)
Mr. Mohamed J. Mohamed	MSc. Highway Eng. (UDSM), PGD Transportation Eng. (UDSM), ADE Civil Eng. (DIT), FTC Civil Eng. (DTC)
Mr. Edson B. Rogasian	Bachelor Degree in Civil Engineering (MUST), Ordinary Diploma in Civil Engineering (MIST)
Mr. Godfrey Mbungula	Bachelor Civil Engineering (MUST), FTC (DIT)

Laboratory Engineers

*Mr. Nehemia Matabalo	Bachelor Degree in Civil Engineering (MUST), OD. Civil Eng. (MUST)
Mr. Aaron J. Maganga	Bachelor Degree in Civil Engineering (MUST), FTC in Water Laboratory Technology (Water Resource Institute)

Technicians

Mr. Samwel J. Kihogo	Bachelor Degree in Civil Engineering (MUST), Ordinary Diploma in Civil Engineering (MIST)
Ms. Editha Z. Faida	Ordinary Diploma in Civil Engineering (MUST)

Artisans

Mr. Joseph Gesu	Senior Artisan I
Mr. Lukonde Ng'andu	Senior Artisan I
Mr. George Mbilinyi	Senior Artisan I

Office Secretary

Ms. Eliza Daniel Mwaisabila Diploma in Secretarial Studies and Ordinary Diploma in Business Administration

On study leave**Secondment***8.1.1.3 PROGRAMME COURSES****DIPLOMA IN CIVIL ENGINEERING****A. Diploma in Civil Engineering (1st Year)****Semester I**

Code	Course Name	Core or Elective	Credits
MS 6121	Algebra	Core	6
NS 6139	Physical Science I	Core	6
HS 6142	Communication skills	Core	6
IT 6116	Basic Computer Applications	Core	5
HS 6141	Elements of Development Studies	Core	6
CE 6101	Building Construction I	Core	7
CE 6102	Building Workshop Practice I	Core	10
CE 6103	Civil Engineering Materials I	Core	9
CE 6104	Introduction to Engineering Drawing	Core	8
CE 6105	Road Construction I	Core	6
TOTAL			68

Semester II

Code	Course Name	Core or Elective	Credits
MS 6122	Basics of Calculus	Core	6
NS 6145	Physical Science II	Core	6
IT 6117	Computer Applications	Core	5
BM 6141	Entrepreneurship	Core	6
CE 6107	Building Workshop Practice II	Core	12
CE 6108	Land Surveying	Core	6
CE 6109	Road Maintenance I	Core	6
CE 6110	Soil Mechanics I	Core	9
CE 6111	Structural Mechanics I	Core	6
TOTAL			62

B. Diploma in Civil Engineering (2nd Year)**Semester I**

Code	Course Name	Core or Elective	Credits
MS 6221	Calculus	Core	6
CE 6201	Building construction II	Core	8
CE 6202	Building Design and Drawing	Core	8
CE 6204	Civil Engineering Materials II	Core	8
CE 6205	Pavement Design and Construction	Core	6
CE 6206	Soil Mechanics II	Core	9
CE 6207	Structural Mechanics II	Core	6
CE 6208	Industrial practical training	Core	10
TOTAL			61

Semester II

Code	Course Name	Core or Elective	Credits
MS 6321	Probability and Statistics	Core	6
CE 6209	Technical Report Writing	Core	7
CE 6211	Construction Management I	Core	5
CE 6212	Construction Survey	Core	8
CE 6213	Quantity Surveying I	Core	6
CE 6214	Reinforced Cement Concrete Design I	Core	8
CE 6215	Road Maintenance II	Core	6
CE 6217	Water Supply	Core	8
CE 6218	Building Construction III	Core	6
TOTAL			60

C. Diploma in Civil Engineering (3rd Year)**Semester I**

Code	Course Name	Core or Elective	Credits
CE 6302	Construction management II	Core	7
CE 6303	Fluid Mechanics and Hydraulics	Core	8
CE 6304	Quantity Surveying II	Core	7
CE 6305	Reinforced Cement Concrete Design II	Core	7
CE 6306	Structural Timber Design	Core	8
CE 6307	Project I	Core	8
CE 6308	Industrial Practical Training	Core	10
CE 6317	Building Maintenance	Core	9
TOTAL			64

Semester II

Code	Course Name	Core or Elective	Credits
CE 6312	Civil Engineering Materials III	Core	8
CE 6311	Construction Management III	Core	8
CE 6309	Foundation Engineering	Core	8
CE 6310	Reinforced Cement Concrete Design III	Core	8
CE 6315	Structural Steel Design	Core	8
CE 6314	Wastes Management	Core	8
CE 6316	Project II	Core	12
CE 6317	Building Maintenance	Core	8
TOTAL			60

DIPLOMA IN HIGHWAY ENGINEERING**A. Diploma in Highway Engineering (1st Year)****Semester I**

Code	Course Name	Core or Elective	Credits
MS 6121	Algebra	Core	6
NS 6139	Physical Science I	Core	6
HS 6142	Communication skills	Core	6
IT 6116	Basic Computer Applications	Core	5
HS 6141	Elements of Development Studies	Core	6
CE 6101	Building Construction I	Core	7
CE 6102	Building Workshop Practice I	Core	10
CE 6103	Civil Engineering Materials I	Core	9
CE 6104	Introduction to Engineering Drawing	Core	8
CE 6105	Road Construction I	Core	6
TOTAL			68

Semester II

Code	Course Name	Core or Elective	Credits
MS 6122	Basics of Calculus	Core	6
NS 6145	Physical Science II	Core	6
IT 6117	Computer Applications	Core	5
BM 6141	Entrepreneurship	Core	6
CE 6107	Building Workshop Practice II	Core	12
CE 6108	Land Surveying	Core	6
CE 6109	Road Maintenance I	Core	6
CE 6110	Soil Mechanics I	Core	9
CE 6111	Structural Mechanics I	Core	6
TOTAL			62

B. Diploma in Highway Engineering (2nd Year)**Semester I**

Code	Course Name	Core or Elective	Credits
MS 6221	Calculus	Core	6
CE 6201	Building construction II	Core	8
CE 6202	Building Design and Drawing	Core	8
CE 6204	Civil Engineering Materials II	Core	8
CE 6205	Pavement Design and Construction	Core	6
CE 6206	Soil Mechanics II	Core	9
CE 6207	Structural Mechanics II	Core	6
CE 6208	Industrial practical training	Core	10
TOTAL			61

Semester II

Code	Course Name	Core or Elective	Credits
MS 6321	Probability and Statistics	Core	6
CE 6209	Technical Report Writing	Core	7
CE 6211	Construction Management I	Core	5
CE 6212	Construction Survey	Core	8
CE 6213	Quantity Surveying I	Core	6
CE 6214	Reinforced Cement Concrete Design I	Core	8
CE 6215	Road Maintenance II	Core	6
CE 6217	Water Supply	Core	8
CE 6218	Building Construction III	Core	6
TOTAL			60

C. Diploma in Highway Engineering (3rd Year)**Semester I**

Code	Course Name	Core or Elective	Credits
CE 6330	Airport, Harbor and Railway Engineering	Core	8
CE 6323	Route design	Core	8
CE 6324	Pavement Materials	Core	9
CE 6325	Traffic and Transportation Engineering	Core	7
CE 6326	Urban Transportation Planning	Core	8
CE 6306	Structural Timber Design	Core	8
CE 6308	Industrial Practical Training	Core	10
CE 6307	Project I	Core	8
TOTAL			66

Semester II

Code	Course Name	Core or Elective	Credits
CE 6329	Social and Environmental Management	Core	8
CE 6328	Hydraulics and fluid mechanics	Core	8
CE 6311	Construction Management III	Core	8
CE6326	Pavement Engineering	Core	8
CE 6314	Structural Steel Design	Core	8
CE 6327	Basic Bridge Construction and maintenance	Core	8
CE 6316	Project II	Core	12
TOTAL			60

BACHELOR OF CIVIL ENGINEERING**A. Bachelor of Civil Engineering (1st Year)****Semester I**

Code	Course Name	Core or Elective	Credits
MS 8101	Linear Algebra and Calculus	Core	6
HS 8101	Communication Skills	Core	8
CS 8104	Programming Concepts	Core	6
DS 8101	Development Studies	Core	6
CE 8101	Engineering Drawing I	Core	9
CE 8102	Construction Technology I	Core	9
CE 8103	Workshop practice	Core	8
CE 8104	Structural Mechanics I	Core	8
TOTAL			70

Semester II

Code	Course Name	Core or Elective	Credits
MS 8102	Advanced Calculus	Core	6
DS 8108	Development Perspectives	Core	6
CS 8110	Advanced C Programming	Core	9
CE 8105	Engineering Drawing II	Core	9
CE 8106	Construction Technology II	Core	7
CE 8107	Building Construction	Core	8
CE 8108	Structural Mechanics II	Core	8
CE 8109	Land Survey	Core	9
TOTAL			60

B. Bachelor of Civil Engineering (2nd Year)**Semester I**

Code	Course Name	Core or Elective	Credits
MS 8201	Differential Equations	Core	6
CE 8201	Soil Mechanics I	Core	6
CE 8102	Civil Engineering Materials -I	Core	6
CE 8203	Fluid Mechanics	Core	6
CE 8204	Engineering Survey I	Core	9
CE 8205	Road Design, Construction and Maintenance	Core	8
CE 8206	Concrete Technology	Core	6
CE 8207	Structural Analysis I	Core	6
CE 8116	Industrial Practical Training	Core	10
Total			63

Semester II

Code	Course Name	Core or Elective	Credits
MS 8303	Statistics and Numeric Analysis	Core	6
CE 8208	Engineering Survey II	Core	9
CE 8209	Fluid Mechanics and Hydraulics	Core	9
CE 8210	Engineering Geology	Core	6
CE 8211	Civil Engineering Materials -II	Core	9
CE 8212	Soil Mechanics II	Core	6
CE 8213	Structural Analysis II	Core	9
CE 8214	Building Planning and Drawing	Core	6
Total			60

C. Bachelor of Civil Engineering (3rd Year)

Semester I

Code	Course Name	Core or Elective	Credits
CE 8301	Quantity Survey I	Core	7
CE 8302	Geometric Design and Traffic Engineering	Core	9
CE 8303	Reinforced Concrete Design and Detailing I	Core	9
CE 8304	Foundation Engineering	Core	9
CE 8305	Highway Engineering Materials	Core	8
CE 8306	Construction Management	Core	8
CE 8307	Engineering Hydrology	Core	6
CE 8216	Industrial Practical Training II	Core	10
Total			66

Semester II

Code	Course Name	Core or Elective	Credits
CE 8308	Building Services	Core	6
CE 8309	Quantity Surveying II	Core	8
CE 8310	Reinforced Concrete Design and Detailing II	Core	9
CE 8311	Water Supply Engineering	Core	9
CE 8312	Contract Planning and Administration	Core	7
CE 8313	Pavement Design and Construction	Core	9
CE 8314	Research Methodology	Core	7
CE 8315	Construction of Multi-Storey Structures	Core	8
Total			63

D. Bachelor of Civil Engineering (4th Year)**Semester I**

Code	Course Name	Core or Elective	Credits
BM 8108	Entrepreneurship Education	Core	6
CE 8402	Structural Steel Design	Core	6
CE 8403	Waste Water Management	Core	8
CE 8404	Pavement Maintenance	Core	6
CE 8405	Bridge Design and Construction	Core	7
CE 8406	Pre-Stressed Concrete Design	Elective	8
CE 8407	Irrigation Engineering and Technology	Elective	
CE 8408	Project I	Core	15
CE 8316	Industrial Practical Training III	Core	10
Total			66

Semester II

Code	Course Name	Core or Elective	Credits
CE 8401	Engineering Economics	Core	6
CE 8409	Design of Masonry and Retaining Structures	Core	6
CE 8410	Structural Timber Design	Core	6
CE 8411	Solid Waste Management	Core	7
CE 8412	Industrial Building Construction	Core	6
CE 8413	Hydraulic Structures	Core	8
CE 8414	Transportation Engineering	Elective	6
CE 8415	Water Resources Management	Elective	
CE 8416	Project II	Core	15
Total			60

8.1.2 DEPARTMENT OF GEOSCIENCE AND MINING TECHNOLOGY

Programmes

The Department currently offers two (2) Programmes:

- A. Diploma in Mining Engineering
- B. Bachelor of Science in Petroleum Storage and Transportation Engineering

8.1.2.1 LABORATORIES AND WORKSHOPS

- i. Mining Laboratory
- ii. Engineering Geology and Rock Mechanics Laboratory
- iii. Mechatronics and Fluid Transport Laboratory
- iv. Soil Mechanics Laboratory
- v. Hydrogeology and Water Quality Laboratory
- vi. Mineralogy, Petrology & Geochemistry Laboratory
- vii. Surveying and Remote Sensing Laboratory

8.1.2.2 LIST OF STAFF

(Head of Department)

Dr. Alex W. Mwang'ande	PhD. Oil & Gas Wells Eng. (China University of Petroleum, East China); MSc. Petroleum Eng. (Norwegian University of Science and Technology); BSc. Mech. Eng. (UDSM)
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Lecturers:

Dr. Alex W. Mwang'ande	PhD. Oil & Gas Wells Eng. (China University of Petroleum, East China); MSc. Petroleum Eng. (Norwegian University of Science and Technology); BSc. Mech. Eng. (UDSM)
Dr. Muya Somo Mgaza	PhD. Geotechnical Eng. (Huazhong University of Science and Technology [HUST]); MSc. Geotechnical Eng. (HUST); BSc. Geology (UDSM).
Dr. Raphael Iddphonc Mkini	PhD. Oil and Natural Gas Eng. (China University of Geosciences, Wuhan); MSc. Renewable Energy. Eng (UDSM); BSc. Mech. Eng. (UDSM)
Dr. Alvin Kajongo Mulashani	PhD. Oil and Natural Gas Eng. (China University of Geosciences, Wuhan); MSc. Oil and Gas Dev. Eng. (Xi'an Shiyou, China); BSc. Mech. Eng. (MIST).
Dr. Melckzedek M. Mgimba	PhD. Oil and Natural Gas Eng. (China University of Geosciences, Wuhan); MSc. Petroleum Eng. (Norwegian University of Science and Technology); BSc. Mining Eng. (UDSM)

Dr. Osmund E. Mwangupili:	PhD in Oil and Gas Field Development Engineering (China University of Petroleum, East China); MSc. Oil and Natural Gas Eng. (China University of Petroleum, East China); BSc. Mining Eng. (UDSM)
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Assistant lecturers

Mr. Wilson L. Ngole	MSc. Petroleum Eng. (Norwegian University of Science and Technology); BSc. Mining Eng. (UDSM)
Mr. Nickson N. Lushasi*	MSc. Oil and Natural Gas Eng. (China University of Geosciences, Wuhan); BSc. Mining Eng. (UDSM)
Mr. Salehe R. Mayange*	MSc. Hydrogeology (University of Badji Mokhtar Annaba [UBMA] – Algeria); BSc. Applied Geology (UBMA).
Mr. Oltingey T. Lindi*	MSc. Petroleum Eng. (Norwegian University of Science and Technology); BSc. Mining Eng. (UDSM)
Mr. Deus A. Msumange*	MSc. Mining Eng. (Karadeniz Technical University, Turkey); BSc. Geology (Badji Mokhtar Annaba University [UBMA], Algeria)

Instructors

Mr. Frank A. Mwakyembe*	BSc. Mining Eng. (UDSM)
Mr. Abasi A. Hawaii	BSc. Mining Eng. (UDSM)

Laboratory Engineer

Mr. Justine Konradi Sungura	BSc in Mining Eng. (UDOM)
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Technicians

Ms. Asha Thobias Chiwanga	B.Eng in Mining Eng (DIT); Ordinary Diploma in Mining Eng. (MRI-Dodoma)
Ms. Novelina J. Mnyama	B.Eng in Mining Eng (DIT); Diploma in Mining Eng. (MUST)

Office Secretary

Ms. Marjory E. Katage*	Certificate in Social work
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**On study leave*

8.1.2.3 PROGRAMME COURSES

DIPLOMA IN MINING ENGINEERING

A. Diploma in Mining Engineering (1st Year)

Semester-I

Code	Name	Core or Elective	Credits
GM 6101	Introduction to Mining	Core	6
GM 6102	Introduction to Physical Geology	Core	6
CE 6118	Introduction to Engineering Drawing	Core	8
CE 6120	Building Workshop Practice – I	Core	10
CE 6208	Land Surveying - I	Core	6
MS 6128	Advanced Mathematics - I	Core	6
NS 6141	Advance Physics - I	Core	6
HS 6116	Elements of Development Studies	Core	6
HS 6117	Communication Skills	Core	6
IT 6116	Introduction to Computer	Core	6
TOTAL			66

Semester-II

Code	Name	Core or Elective	Credits
GM 6103	Introduction to Basics of Surface Mining	Core	9
GM 6104	Basic Mineralogy, Petrology and Ore Geology	Core	6
GM 6105	Introduction to Safety and Risk Assessment in Mining	Core	9
CE 6122	Building Workshop Practice – II	Core	12
CE 6215	Land Surveying- II	Core	6
MS 6129	Advanced Mathematics - II	Core	6
NS 6140	Advanced Physics - II	Core	6
BM 6122	Entrepreneurship	Core	6
IT 6117	Computer Application	Core	6
TOTAL			66

B. Diploma in Mining Engineering (2nd Year)**Semester I**

Code	Name	Core or Elective	Credits
GM 6201	Drilling and Blasting- I	Core	12
GM 6202	Mine Equipment and Maintenance Management	Core	12
GM 6203	Introduction to Mine Environment	Core	9
GM 6204	Field Practical Training-I	Core	10
CE 6307	Fluid Mechanics and Hydraulics	Core	9
MS 6221	Calculus	Core	6
NS 6221	Advanced Physics - III	Core	6
TOTAL			64

Semester II

Code	Name	Core or Elective	Credits
GM 6205	Drilling and Blasting-II	Core	12
GM 6206	Introduction to Rock Mechanics	Core	12
GM 6207	Introduction to Mineral Economics and Mining Regulatory Framework	Core	12
GM 6208	Basics of Ore Dilution and Production Control	Core	6
GM 6209	Basics of Technical Report Writing	Core	6
GM 6210	Small Scale Mining Techniques	Core	6
MS 6225	Advanced Mathematics - III	Core	6
NS 6223	Advanced Physics - IV	Core	6
TOTAL			66

C. Diploma in Mining Engineering (3rd Year)

Semester I

Code	Name	Core or Elective	Credits
GM 6301	Underground Mining	Core	12
GM 6302	Introduction to Tailing Storage Facilities	Core	9
GM 6303	Introduction to Mine Surveying	Core	9
GM 6304	Mining Laboratory - I	Core	6
GM 6305	Introduction to Hydrogeology	Core	9
GM 6306	Project – I	Core	9
GM 6307	Field Practical Training- II	Core	10
TOTAL			64

Semester - II

Code	Name	Core or Elective	Credits
GM 6308	Underground Mine Support Systems	Core	9
GM 6309	Mine Ventilation	Core	12
GM 6310	Material Handling System	Core	9
GM 6311	Mining Laboratory – II	Core	6
GM 6312	Introduction to Management in Mining	Core	9
GM 6313	Introduction to Mineral Processing Techniques	Core	12
GM 6314	Project – II	Core	9
TOTAL			66

8.1.2.4 PROGRAMME COURSES

BACHELOR OF SCIENCE IN PETROLEUM STORAGE AND TRANSPORTATION ENGINEERING**A. Bachelor of Science in Petroleum Storage and Transportation Engineering (1st Year)****Semester-I**

Code	Name	Core or Elective	Credits
ME8101	Engineering Drawing I	Core	7
ME8102	Engineering Materials	Core	6
ME 8103	Strength of Materials	Core	6
ME8104	Manufacturing Engineering I	Core	8
GM 8121	Introduction to Petroleum Engineering	Core	8
ME 8106	Environmental Engineering	Core	6
IT 8116	Computer Applications	Core	7
MS 8121	Linear Algebra and Calculus	Core	6
HS 8142	Communication Skills	Core	6
DS 8101	Development Studies	Core	6
TOTAL			66

Semester-II

Code	Name	Core or Elective	Credits
ME8107	Engineering Drawing II	Core	9
GM 8122	Introduction to Reservoir Engineering	Core	9
ME8109	Manufacturing Engineering II	Core	10
GM 8123	Natural Gas Engineering	Core	9
CE 8109	Land Survey	Core	9
DS 8108	Development Perspectives	Core	6
BM 8141	Entrepreneurship	Core	6
MS 8122	Applied Calculus	Core	6
TOTAL			64

B. Bachelor of Science In Petroleum Storage and Transportation Engineering (2nd Year)**Semester I**

Code	Name	Core or Elective	Credits
ME8201	Computer Aided Drafting I	Core	9
GM 8221	Natural Gas processing	Core	7.5
ME 8404	Turbo Machinery	Core	6
GM 8222	Pipes and pipe Joints	Core	6
GM 8223	Multiphase flow in pipes	Core	6
EE 8240	Fundamental of Electrical Engineering	Core	6
MS 8221	Differential Equations	Core	6
GM 8224	Industrial Practical Training I	Core	10
ME8203	Engineering Thermodynamics	Core	7
TOTAL			63.5

Semester II

Code	Name	Core or Elective	Credits
ME 8211	Fluid Mechanics	Core	6
GM 8225	Pumps and Compressors	Core	9
ME 8414	Air Conditioning System	Core	8
ME 8315	Heat Transfer	Core	6
GM 8226	Introduction to Field Development and Operations	Core	9
EE 8241	Electrical Machines I	Core	7
GM 8227	Design and management of Oil and Gas depots	Core	6
GM 8228	Fundamentals of Oil and Gas storage and transportation engineering	Core	9
MS 8222	Statistics and Numerical Methods	Core	6
TOTAL			66

C. Bachelor of Science In Petroleum Storage and Transportation Engineering (3rd Year)

Semester I

Code	Name	Core or Elective	Credits
GM 8321	Design and operation of oil and gas pipelines	Core	9
ME 8304	Industrial energy Management	Core	6
ME 8306	Research Methodology	Core	7
GM 8322	Liquefied Natural Gas (LNG)	Core	7
GM 8327	Petroleum Economics	Core	9
GM 8324	Industrial Practical Training II	Core	10
GM 8325	Petroleum Leasing, Regulations and Practices	Core	6
ME 8406	Refrigeration System	Core	8
TOTAL			62

Semester - II

Code	Name	Core or Elective	Credits
GM 8326	Properties of petroleum fluids	Core	12
GM 8323	Mini Project	Core	10
ME 8312	Control Systems Engineering	Core	6
ME 8314	Engineering Operations Management	Core	6
ME 8411	Automation and Robotics	Core	7
GM 8328	Design of Petroleum Filling Stations and Storage Facilities	Core	12
GM 8329	Computer applications in Petroleum Engineering	Core	12
TOTAL			65

C. Bachelor of Science In Petroleum Storage and Transportation Engineering (4th Year)

Semester I

Code	Name	Core or Elective	Credits
ME 8403	Materials Handling Design	Core	6
GM 8421	Petroleum Management, Political Economy and Ethics	Core	12
GM 8422	Fault diagnosis of equipment for Oil- Gas storage and transportation	Core	12
GM 8423	Project I	Core	10
GM 8424	Industrial Practical Training III	Core	10
GM 8425	Quality Assurance and Control	Core	12
TOTAL			62

Semester - II

Code	Name	Core or Elective	Credits
GM 8426	Introduction to Health, Safety and Environment in Oil - Gas Storage and Transportation	Core	12
ME 8410	Engineering Ethics and Professional Conduct	Core	6
GM 8427	Offshore Oil and Gas technology	Core	12
ME 8416	Industrial Supervisor Skill and leadership	Core	6
GM 8428	Natural Gas Transportation and Distribution	Core	12
GM 8429	Project II	Core	12
TOTAL			60

8.1.3 DEPARTMENT OF ELECTRICAL AND POWER ENGINEERING**Programmes**

Currently, the Department offers four (4) programmes:

- i. Diploma in Electrical and Electronics Engineering
- ii. Bachelor of Electrical and Electronics Engineering
- iii. Bachelor of Science in Electrical and Renewable Energy Technology
- iv. Bachelor of Instrumentation and Control Engineering

8.1.3.1 LIST OF STAFF**(Head of Department)**

Dr. Isaka J. Mwakitalima, PhD. Electrical Eng. (Delhi Technological University, India), MEng. Sustainable Energy (NM-AIST), Bachelor Electrical and Electronics Eng. (SJCET), Dip.Ed. Electrical & Electronics, (Klerruu TTC), FTC. Electrical Eng. (ATC)

Senior Lecturers

Dr. Arthur Mngoma Omari, PhD Sustainable Energy Science and Engineering (NM-AIST), MSc Electrical Engineering (Kharkov State Technical University of Agriculture- Ukraine), Tech. Ed. (Morogoro)

Lecturers

Dr. Isaka J. Mwakitalima, PhD. Electrical Eng. (Delhi Technological University, India), MEng. Sustainable Energy (NM-AIST), Bachelor Electrical and Electronics (SJCET), Dip.Ed. Electrical & Electronics (Klerruu TTC), FTC. Electrical Eng. (ATC).

Dr. Owdean M. Suwi, PhD. Elect. Eng. (UDSM), Msc. Elect. Eng. (UDSM), BSc. Elect Eng., (UDSM). Tech. Ed. (Morogoro)

Assistant Lecturers

Mr. Watson E. Yotham,	MSc. Elect. Eng. (UDSM), BSc. Elect. Eng. (UDSM), Tech. Ed. (Morogoro)
*Mr. Sospeter I. Gabriel,	MSc. Elect. Eng. (UDSM), B. Eng. Elect. (DIT), FTC Elect.Eng. (DIT)
Mr. Vincet V. Massawe,	MSc Elect.Eng. (St. Petersburg State Polytechnical University-Russia); BSc Elect. Eng. (Russia); FTC in Mech. Eng. (ATC)
*Mr. Godwin E Mnkeni,	MSc. Elect. Eng. (UDSM), ADE Elect. Eng. (DIT), Dip. Elect. Eng. (Kidatu), Tech. Ed. (Morogoro)
*Mr. Exaud S. Tweve,	MSc. Elect. Eng. (UDSM), ADE Elect.Eng. (DIT), FTC Elect. Eng. (MTC)
Mr. Nicholaus G. Moyo,	MSc. Elect. Eng. (UDSM), PGD Elect. Eng. (UDSM), ADE (Elect. Eng. (DIT), FTC (ATC)
*Mr. Wilbert Ruta	MSc. Elect. Eng (JKUo A), BEng. Electrical and Electronics (MUST), Diploma Electrical and Electronics (MIST)
Mr. Joshua J. Mlay	MEng. Power Engineering and Engineering Thermophysics (HUST-CHINA), BEng. Electrical and Electronics (MUST), DEng. Electrical and Electronics (MUST)
*Mr. Emmanuel G Swetala	MTech Electrical Power Systems (JNTUA-INDIA), BSc. Electrical Engineering (UDSM)
*Mr. Salehe S. Malamla	Masters of Electrical Eng. Shandong University, China, BSc-Electrical (SAUT)
Mr. Stuart Brown	M. Eng. Power Systems (University of Buea, Cameroon), BSc. Electrical (SAUT)
*Mr. Godfrey John Patrice	MEng. Electrical Eng (Maharaja Sayajirao, university of Baroda, India), BTech Electrical and Electronics Eng. (Jawaharlal Nehru Technological University, India)
Ms. Prisca Matondo Masanja	MSc. (Power Systems & High voltage (UDSM), BEng. Electrical and Electronics (JCET)

Tutorial Assistants

Mr. Makunja O. Bwire	BEng. Electrical Engineering (MUST), DEng Electrical and Electronics (MIST)
Mr. Romanus P. Lyanda	BSc. Electrical Engineering (UDSM)
Mr. Fredy F. Loita	BSc. Electrical Engineering (UDSM)
*Mr. Fredy F. Loita	BSc. Electrical Engineering (UDSM)
Mr. Gwamaka Mwasomola	BEng. Electrical and Electronics (MUST)
Mr. Mabick Wambura	BEng. Electrical Engineering (MUST), DEng. Electrical and Electronics (MIST)
*Mr. Edward Marwa Mkami	BEng. Electrical and Electronics (MUST)
Mr. Mnaka philipo Ndyanido	BEng. Electrical and Electronics (MUST)

Mr. Mussa Salanya Petro	BEng. Electrical and Electronics (MUST)
Mr. Gerald Kasase	BEng. Electrical and Electronics (MUST)
Mr. Laban Richard Ntahumbwa	BEng. Electrical and Electronics (MUST)
Mr. Kelvin Materius Mwinuka	BTEE. Electrical and Electronics Eng. (MUST)
Mr. Abbas Omar Abbas	BEng. Electrical and Electronics (MUST)

Instructors

Mr. Raphael J. Mwasoni	MSc. Power Electronics and Drives (UDSM), BEng. Electrical Engineering (DIT), DTE (KLERRUU TTC), FTC Electrical (MTC)
Mr. Novatus Kimenyuka	BEng. Electrical and Electronics (MUST), Deng. Electrical and Electronics (MIST)
Mr. Andrew S. Mwampulo	MEng. Clean Energy Technologies (MUST), Beng.. in Electrical and Electronics (MUST), DSE (Butimba Teachers College)
Mr. Furahini I Shelukindo	BEng. Electrical and Electronics (MUST), Deng. Electrical and Electronics (MUST)

Technicians

Mr. Mateso Stephano Ntinyako	Dip. Eng. (St. Joseph University in Tanzania)
Mr. Aden Daud Mlwafu	Dip. Eng. (MUST)

Artisans

Mr. Joseph Nsembele	Trade Test Grade One (Mbeya VTC)
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**On study leave*

8.1.3.2 PROGRAMME COURSES

DIPLOMA IN ELECTRICAL AND ELECTRONIC ENGINEERING

A. Diploma in Electrical and Electronics Engineering (1st Year)

Semester I

Fundamental Courses		
Code	Name	Credits
MS 6121	Advanced Mathematics I	6
NS 6139	Physical Science I	6
HS 6117	Communication Skills	6
IT 6116	Introduction to Computer	6
HS 6116	Element of Development Studies	6
Core Courses		
EE 6116	Basics of Electrical engineering I	6
EE 6117	Basics of Electrical Installation and Maintenance	6
EE 6118	Fundamental of Electrical Materials	6
EE 6119	Electrical Workshop Technology I	8
EE 6120	Technical Drawing I	6
ET 6116	Basic of Electronics	6
TOTAL		68

Semester II

Fundamental Courses		
Code	Name	Credits
MS 6122	Advanced Mathematics I I	6
NS 6145	Physical Science II	6
BM6122	Entrepreneurship	6
IT 6117	Computer Applications	6
Core Courses		
ET 6117	Analogue Electronics	6
ET 6118	Analogue Electronics Lab	8
EE 6121	Basic of Electrical Engineering II	6
EE 6122	Electrical Measurements	6
EE 6123	Technical Drawing II	6
EE 6124	Electrical Workshop Technology II	8
TOTAL		64

B. Diploma in Electrical and Electronics Engineering (2nd Year)**Semester I**

Fundamental Courses		
Code	Name	Credits
MS 6221	Advanced Mathematics III	6
CS 6224	Computer Programming Basics	7
Core Courses		
EE 6201	Industrial Practical Training I	10
ET 6201	Digital Electronics I	6
EE 6202	DC Machines	7
EE 6203	Domestic Installation Testing and Commissioning	6
EE 6204	Electrical Equipments	6
EE 6205	Fundamental of automations I	6
EE 6206	Electrical Measurement Lab	6
EE 6207	Power Plant	6
TOTAL		66

Semester II

Fundamental Courses		
Code	Name	Credits
ST 6221	Advanced Mathematics IV	6
CS 6202	Object Orient Programming	7
Core Courses		
EE 6208	AutoCAD	7
EE 6209	Electrical power Transmission and Distribution	7
ET 6206	Digital Electronics II	8
EE 6210	Fundamental of Automation II	6
EE 6211	Introduction to Engineering Software	8
EE 6212	Statics AC Machines	7
EE 6213	Static and Dynamic Machines Control	9
TOTAL		66

D. Diploma in Electrical and Electronic Engineering (3rd Year**Semester I**

Core Courses		
Code	Name	Credits
EE 6301	Industrial Practical Training II	10
EE 6302	Basic of Control System Engineering	6
EE 6303	Basics of Power Protection	7
EE 6304	Electrical Drives I	6
ET 6302	Microprocessor and Microcontrollers	8
EE 6305	Motor and Transformer Rewinding	8
EE 6306	Power System Operations and Control	7
EE 6307	Power Electronics	6
EE 6308	Project I	8
TOTAL		66

Semester II

Core Courses		
Code	Name	Credits
EE 6317	Basic Telecommunication Engineering	6
EE 6309	Control Engineering	7
EE 6310	Electrical Drives II	6
EE 6311	Electrical Installations	6
EE 6312	Induction Motors	6
EE 6313	Power Protection	6
EE 6314	Programmable Logic Controller	7
EE 6315	Synchronous Machines	6
EE 6316	Renewable Energy	6
EE 6317	Project II	10
TOTAL		66

BACHELOR OF ELECTRICAL AND ELECTRONIC ENGINEERING**A. Bachelor of Electrical and Electronic Engineering (1st Year)****Semester I**

Code	Title	Credit
EE 8101	Fundamentals of Electrical Measurement	4
EE 8102	Fundamentals of Electronics	4
EE 8103	Basics of Workshop Technology and Practice	9
EE 8104	Basics of Electrical Engineering	6
EE 8105	Electrical Installation and Safety	4
IT 8116	Computer Application	6
ME 8176	Fundamental of Technical Drawings I	5
MS 8121	Linear Algebra and Calculus	6
HS8101	Communication Skills	9
DS8101	Development Studies	6
BM 8108	Entrepreneurship	9
TOTAL		68

Semester II

Code	Title	Credit
EE 8106	Fundamental of Electronics Devices	6
EE 8107	Fundamentals of Electrical Power Systems	6
EE 8108	Fundamentals of Electrical Machines	9
EE 8109	Workshop Technology & Practice	9
EE 8110	Electrical Maintenance	6
EE 8111	Basics of Control Engineering	6
IT 8117	Computer Networking	7
ME8177	Technical Drawing	5
MS 8122	Advanced Calculus	6
DS 8108	Development Perspective	6
TOTAL		66

B. Bachelor of Electrical and Electronic Engineering (2nd Year)**Semester I**

Core courses		
Code	Title	Credit
EE 8201	Industrial Practical Training I	10
EE 8202	Electrical Network Analysis	6
EE 8203	Electrical Measurement and Instrumentation.	6
EE 8204	Fundamentals of Analogue Electronics	6
EE 8205	Basics of Engineering Electromagnetic	6
ME 8277	Fundamental of Engineering Mechanics	5
EE 8206	Power Plant	6
EE 8207	Engineering software	5
MS 8221	Differential Equations	6
ME 8276	Engineering drawing I	6
TOTAL		62

Semester II

Core courses		
Code	Title	Credit
MS 8222	Numerical Analysis and Statistics	6
EE 8208	Electrical Circuits Analysis	6
ME 8278	Computer Aided Drafting	6
EE 8210	Basic of Power Systems	7
EE 8212	Analogue electronics	6
EE 8213	Engineering electromagnetic	6
ME 8279	Engineering Thermodynamics	6
EE 8215	Electrical Engineering Materials	6
EE 8216	Basics of Computer systems engineering	6
CS 8204	Computer Programming	5
TOTAL		60

C. Bachelor of Electrical and Electronic Engineering (3rd Year)**Semester I**

Core Courses		
Code	Title	Credit
EE 8301	Industrial Practical Training II	10
EE 8302	DC Electrical Machines	8
EE 8303	Modelling in Control Systems Engineering	8
EE 8211	Electrical Power Transmission and Distribution	8
EE 8305	Basics of Power Electronics	8
EE 8306	Fundamental of Digital Electronics	7
IT 8317	Object Oriented Programming	6
EE 8308	Basics of Analogue Telecommunication	5
TOTAL		60

Semester II

Core Courses		
Code	Title	Credit
EE 8309	Environmental Engineering Management	6
EE 8310	3 – Phase AC Machines	7
EE 8304	Electrical power systems Analysis	7
EE 8311	Control System Engineering Analysis	7
EE 8312	Microprocessor	6
EE 8314	Power Electronics Circuits	7
EE 8315	Digital electronics	7
EE 8316	Basics of Digital Telecommunication	5
EE 8317	Electrical Safety and Maintenance	6
EE 8318	Research Methodology	6
TOTAL		64

D. Bachelor in Electrical and Electronic Engineering (4th Year)**Semester I**

Core Courses		
Code	Title	Credit
EE 8401	Industrial Practical Training III	10
EE 8402	3 – Phase AC Synchronous Machines	8
EE 8403	Digital Control System Engineering	9
EE 8404	Programmable Logic Controller	6
EE 8315	Electrical Power Systems Dynamics	9
EE 8406	Power Electronics Converters	6
EE 8407	Engineering Operation Management	6
EE 8408	Project I	12
TOTAL		66

Semester II

Core Courses		
Code	Title	Credit
EE 8409	Laws for Engineers	6
EE 8410	Electrical Drives	9
EE 8411	Digital systems engineering	6
EE 8412	High voltage Engineering	8
EE 8413	Engineering Economic	6
EE 8414	Switchgear and Protection Engineering	8
EE 8415	Renewable Energy Technologies (RE)	6
EE 8416	Project II	12
TOTAL		61

BACHELOR OF SCIENCE IN INSTRUMENTATION AND CONTROL ENGINEERING**A. Bachelor of Instrumentation and Control Engineering (1st Year)****Semester I**

Core Courses		
Code	Title	Credit
HS 8101	Communication Skills	6
DS 8103	Development Studies	6
MS 8121	Linear Algebra and Calculus	6
ME 8176	Fundamental of Technical Drawing	10
EP 8101	Engineering Workshop Practices	10
EP 8103	Basics of Electrical Engineering	8
EP 8104	Introduction to Computers and Programming for Engineers	8
EP 8102	Fundamentals of Electronics	6
TOTAL		60

Semester II

Core Courses		
Code	Title	Credit
MS 8122	Applied Calculus	6
DS 8108	Development Studies	6
EP 8114	Basics of Mechanical Engineering	8
EP 8110	Computer Aided Drafting	8
EP 8112	Computer Programming for Engineers	10
ME 8177	Technical Drawing	10
BM 8141	Entrepreneurship	6
EP 8113	Basics of Electrical Machines	8
TOTAL		62

B. Bachelor of Instrumentation and Control Engineering (2nd Year)**Semester I**

Core Courses		
Code	Title	Credit
EP 8201	Industrial Practical Training	6
EP 8214	Circuit Theory	10
MS 8221	Differential Equations	6
EP 8215	Environmental Engineering	8
EP 8216	Electrical Measurement	14
EP 8217	Analogue Electronics	14
EP 8218	Linear Integrated Circuits and Applications	8
TOTAL		66

Semester II

Core Courses		
Code	Title	Credit
MS 8222	Statistics and Numerical Methods	6
EP 8219	Digital Electronics	14
EP 8220	Sensors and Transducers	8
EP 8221	Digital signal processing	8
EP 8222	Engineering Software	8
EP 8223	Applied Thermal and Fluid dynamics	8
EP 8213	Electrical Engineering Material	10
MS 8222	Statistics and Numerical Methods	6
TOTAL		62

C. Bachelor of Instrumentation and Control Engineering (3rd Year)**Semester I**

Core Courses		
Code	Title	Credit
EP 8301	Industrial Practical Training	10
EP 8315	Microprocessor and micro controller	8
EP 8316	Control Systems	10
EP 8317	Industrial Instrumentation I	10
EP 8318	Power electronics I	8
EP 8319	Process control I	10
EP 8320	Embedded Systems	8
EP 8321	Principle of Robotics	8
TOTAL		72

Semester I

Core Courses		
Code	Title	Credit
EP 8322	Applied soft computing	8
EP 8323	Power plant Instrumentation	8
EP 8324	Industrial Instrumentation II	10
EP 8325	Advanced Control system	7
EP 8326	Data communication Engineering	6
EP 8327	Industrial Instrumentation Lab	6
EP 8328	Process control II	6
EP 8329	Digital control system	10
TOTAL		61

D. Bachelor of Instrumentation and Control Engineering (4th Year)**Semester I**

Core Courses		
Code	Title	Credit
EP 8401	Practical Training III	10
EP 8402	Power Electronics Converters	9
EP 8404	Project Planning and Management	7
EP 8415	Industrial data networks	8
EP 8416	Control System Simulation Lab	6
EP 8417	PLC, SCADA and DCS Lab	6
EP 8407	Project I	12
EP 8418	Analytical Instrumentation	9
EP 8419	Biomedical instrumentation	9
TOTAL		72

Semester II

Core Courses		
Code	Title	Credit
EP 8420	System Identification and Adaptive Control	9
EP 8421	Instrumentation in Petrochemical Industries	8
EP 8408	Engineering Ethics and Professional Conduct	9
EP 8422	Entrepreneurship for Engineers	9
EP 8414	Logic and distributed Control system	8
EP 8413	Project II	12
TOTAL		55

BACHELOR OF SCIENCE IN ELECTRICAL AND RENEWABLE ENERGY TECHNOLOGY**A. Bachelor of Science in Electrical and Renewable Energy (1st Year)****Semester I**

Core Courses		
Code	Title	Credit
EP 8101	Basics of Workshop Technology and Practice	9
EP 8102	Fundamentals of Electronics	6
EP 8103	Basics of Electrical Engineering	6
MS 8121	Linear Algebra and Calculus	6
HS 8101	Communication Skills	6
DS 8101	Development Perspectives	6
BM 8140	Entrepreneurship and Marketing for Engineers	6
EP 8104	Introduction to Computers and Programming for Engineers	8
EP 8105	Engineering Drawing	9
TOTAL		62

Semester II

Core Courses		
Code	Title	Credit
EP 8112	Computer programming for Engineers	9
EP 8106	Workshop Technology and Practice	9
EP 8107	Energy and Environment	6
EP 8108	DC Electrical Machines	9
EP 8109	Basics of Control Engineering	8
EP 8110	Computer Aided electrical Drafting	9
EP 8111	Basics of Renewable Energy Technology	6
MS 8122	Applied Calculus	6
DS 8108	Development Perspective	6
TOTAL		68

B. Bachelor of Science in Electrical and Renewable Energy (2nd Year)**Semester I**

Core Courses		
Code	Title	Credit
EP 8201	Industrial Practical Training I	10
MS 8221	Differential Equations	6
EP 8202	AC Machines	7
EP 8214	Engineering Thermodynamics and Heat Transfer	7
EP 8203	Biomass Energy Utilization	7
EP 8204	Electrical Network Analysis	7
EP 8205	Electrical Measurements and Instrumentation	9
EP 8206	Basics of Engineering Electromagnetic	7
ME 8277	Fundamentals of Engineering Mechanics	6
TOTAL		66

Semester II

Core Courses		
Code	Title	Credit
MS 8222	Statistics and Numerical Methods	6
EP 8207	Electrical Circuits Analysis	8
EP 8208	Wind Energy Design and Utilization	9
EP 8209	Classical Control Systems Engineering	8
EP 8210	Geothermal Energy	9
EP 8211	Basics of Power Systems	7
EP 8212	Engineering Electromagnetic	8
EP 8213	Electrical Engineering Materials	7
TOTAL		62

C. Bachelor of Science in Electrical and Renewable Energy Technology (3rd Year)**Semester I**

Core Courses		
Code	Title	Credit
EP 8301	Industrial Practical Training II	10
EP 8302	Solar Energy Conversion Technology	7
EP 8303	Modern Control Systems Engineering	8
EP 8304	Electrical Power Transmission and Distribution	9
EP 8305	Energy Efficient Buildings	6
EP 8306	Analogue Electronics	7
EP 8307	Energy Storage Systems	7
IT 8317	Object Oriented Programming	6
TOTAL		60

Semester II

Core Courses		
Code	Title	Credit
EP 8308	3-Phase Synchronous AC Machines	9
EP 8309	Electrical Power Systems Analysis	9
EP 8310	Renewable Energy Simulation Laboratory	9
EP 8311	Hydrogen Energy and Fuel Cell	8
EP 8312	Hydro Power (HP) Systems	9
EP 8313	Digital Electronics	7
EP 8314	Electrical Safety and Maintenance	9
TOTAL		60

Bachelor of Science in Electrical and Renewable Energy (4th Year)**Semester I**

Core Courses		
Code	Title	Credit
EP 8401	Industrial Practical Training III	10
EP 8402	Power Electronics Converters	9
EP 8403	High Voltage Engineering	9
EP 8404	Project Planning and Management	7
EP 8405	Electrical Power Systems Dynamics	9
EP 8406	Thermal Power Plant Engineering	9
EP 8407	Project I	12
TOTAL		65

Semester II

Core Courses		
Code	Title	Credit
EP 8408	Engineering Ethics and Professional Conduct	6
EP 8409	Programmable Logic Controller	8
EP 8410	Renewable Energy Grid Integration	9
EP 8411	HVDC Transmission	10
EP 8412	Electrical Power Systems Protection	10
EP 8413	Project II	12
EP 8408	Engineering Ethics and Professional Conduct	6
TOTAL		55

8.1.4 THE DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING

Programmes

The Department offers five (5) Programmes:

- a) Diploma in Mechanical Engineering
- b) Diploma in Mechatronics Engineering
- c) Diploma in Automotive and Auto-electrical Engineering
- d) Bachelor of Mechanical Engineering
- e) Bachelor of Science in Mechatronics Engineering

8.1.4.1 LABORATORIES AND WORKSHOPS

- i. Mechatronics and safety Laboratory
- ii. Energy Laboratory
- iii. Renewable Energy Laboratory
- iv. Machine Shop
- v. Welding Workshop
- vi. Automotive Workshop
- vii. Foundry Workshop
- viii. Forging Workshop
- ix. Materials Laboratory

8.1.4.2 LIST OF STAFF

Head of Department

Dr. Wambura M. Mwita	PhD Mech. Eng. (UJ-SA), MSc Mech. Eng. (CPUT-SA), BSc Mech. Eng. (UDSM).
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Senior Lecturer

Dr. Alexander. N. Mtawa	PhD Mech. Eng. SMS (CPUT, SA), MSc Tech. of M/C. Eng. (SOFIA, Bulgaria), FTC Mech. Eng. (TCA).
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Lecturers

Dr. Wambura M. Mwita	PhD Mech. Eng. (UJ-SA), MSc Mech. Eng. (CPUT-SA), BSc Mech. Eng. (UDSM).
Dr. Joel Mbwiga	PhD Renewable Energy (UDSM), MSc Renewable Energy Eng. (UDSM) BSc Electro. Mech Eng. (UDSM)

Dr. Masoud Kamoleka	PhD Mech Eng. (HEU-China), MSc Renewable. Energy Eng. (UDSM), BSc. Electro-Mech. Eng. (UDSM).
Dr. Vicent Marwa	PhD Renewable Energy (NM-AIST), MSc Energy Eng. (UDSM), PGDE Mech, ADE Mech. (MIST), FTC Auto. Eng. (TCA).
Dr. Ballo L. Mwendapole	PhD, Oil-Gas, Storage and Transportation Eng. (China University of Petroleum-EAST CHINA),), MSc Energy Eng. (UDSM), PGDE Mech. (UDSM), ADE Mech. (MIST), FTC Mech. Eng. (MTC).

Assistant Lecturers

Mr. Lekamere N. Kariwa	MSc. Renewable Energy Eng. (UDSM), B. Eng. Mechanical (DIT), Diploma in Technical Education (Kleruu), FTC Automotive Eng. (TCA).
Mr. Emmanuel A. Mwangomo	MSc Renewable Energy Eng. (UDSM), BSc Mech. Eng. (UDSM) Diploma in Ed. (Kleruu).
Mr. Silla W. Livifile*	MSc. Prod Eng. (UDSM), PGDE Mech. (UDSM), ADE Mech. (MIST), FTC. Mech. Eng. (TCA).
Mr. Yasini S. Nalinga.	MSc. Energy Eng. (NM-AIST), B. Eng. Mechanical (MIST), FTC Mechanical Eng. (MTC).
Mr. Philemon X. Mutabilwa*	MSc Mech. Eng. (UB-Botswana), B. Eng. Mechanical (DIT), FTC Mech. (DIT)
Mr. Sikudhan L. Mpuhus	Master of Mechatronics Eng. (University of Technology Malaysia -UTM) B.Eng. Mechanical. (MUST), Diploma in Mech. Eng. (MIST).
Mr. Paulo K. Shayo	Master of Mechatronics Eng.(Ashesi University-Ghana), BEng Mechanical (MUST).
Mr. Paulo S. Zebedayo	MSc Materials (NM-AIST), B.Eng. Mechanical (MUST), Diploma in Mech. Eng. (MUST).

Tutorial Assistants

Mr. Israel Komba	MSc. Prod Eng. (UDSM), PGDE Mech. (UDSM), ADE Mech. (DIT), DTE Mech. (Kleruu), FTC Mech. Eng. (DIT).
Mr. Jonathan Lunyungu	PGDE-Mechanical (UDSM), ADE Mech. (MTC), FTC Mech. (MTC).
Mr. Yerima D. Gwau	B.Eng. Mechanical (MUST), DTE (Kleruu), FTC. Mech. Eng. (TCA)
Mr. Erasto S. Hebuka.	B.Eng. Mechanical. (DIT), DTE (Kleruu), FTC Mechanical (DTC).
Mr. Shanel B. Mbawala	B. Auto. Eng. (NIT).
Mr. Gabriel Leonard Swilla*	BEng Mechanical (MUST).
Mr. Ramadhan A.Swai*	BEng Mechanical (MUST).

Mr. Musa Daud*	BEng Mechanical (MUST).
Mr. Nsajigwa L. Mbamba*	BEng Mechanical (MUST), Diploma in Mech. Eng. (MUST).
Mr. Lugaila Ndatulu Rumwecha	BEng Mechanical (MUST).
Mr. Hamis Mabula Masele	BEng Mechanical (MUST).

Instructors

Dr. Petro D Ndalila	PhD, Oil-Gas, Storage and Transportation Eng. China University of Petroleum (EAST CHINA), MSc Renewable Energy (UDSM), BSc Chemical and Process Eng. (UDSM).
Mr. Evans N. Tweve	MSc. Mech.Eng. (UDSM), PGDE-Mechanical. (UDSM), ADE.Mechanical. (MIST), FTC. Mechanical. Eng. (MTC)
Mr. Seuri S. Kilakoi*	MSc Energy (CIMAV, Mexico), B.Eng. Mechanical (DIT), FTC Mechanical Eng. (MTC).
Mr. Samwel E. Mwasanjobe	B. Eng. Mechanical MUST), Dip. Marine. Eng. (Mbegan).
Mr. Michael T. Mwakyonya	Master in Sustainable Energy (DIT), ADAE-Automotive Engineering (NIT), DAE-Automotive Eng. (NIT).
Mr. Emmanuel S. Sakarani	B.Eng. Mechanical (MUST) Diploma in Mechanical Eng. (ATC).
Mr. Kassim S. Fakhi	B.Eng. Mechanical (MUST) Diploma (Edu)-(Morogoro TTC).

Laboratory Engineers

Mr. Hamisi M. Egari	BEng Mechanical (MUST), Diploma in Automotive Eng. (ATC).
Mr Innocent J Nambuo	BEng Mechanical (MUST), Diploma in Mechatronics Eng. (MUST).
Mr. Kulwa K. Lutema	BEng Mechanical (MUST), Diploma in in Automotive Eng. (ATC).

Artisans

Ms. Palestina Ndelwa	Trade Test Grade II in welding and Metal Fabrication (NVTD -Dar).
Mr. Nelson Tawete*	Motor Vehicle Mechanics Level III-VETA –Morogoro.

**On study leave*

8.1.4.3 PROGRAMMES COURSES

DIPLOMA IN MECHANICAL ENGINEERING

A. Diploma in Mechanical Engineering (1st Year)

Semester I

Code	Name	Credit
ME 6116	Engineering Drawing I	9
ME 6117	Engineering Materials I	9
ME 6118	Introduction to Automotive Technology	9
ME 6119	Basics of Metal Fabrication	9
IT 6117	Fundamental of Computer Application	6
HS 6141	Elements of Development Studies	6
HS 6142	Communication Skills	6
MS 6121	Algebra	6
TOTAL		60

Semester II

Code	Name	Credit
ME 6120	Engineering Drawing II	9
ME 6121	Engineering Materials II	9
ME 6122	Automotive Systems	9
ME 6123	Machine Tools	9
ME 6124	Mechanical Engineering Science I	6
CS 6124	Computer programming	6
BM 6141	Entrepreneurship	6
MS 6122	Basics of Calculus	6
TOTAL		60

B. Diploma in Mechanical Engineering (2nd Year)**Semester 1**

Code	Name	Credit
ME 6201	Computer Aided Drafting I	9
ME 6202	Strength of Materials	6
ME 6204	Welding Technology	9
ME 6205	Thermodynamics	8
ME 6206	Mechanical Engineering Science II	6
ME 6207	Engineering Measurement and Control	6
MS 6221	Calculus	6
ME 6208	Industrial Practical Training I	10
TOTAL		60

Semester II

Code	Name	Credit
ME 6209	Computer Aided Drafting II	9
ME 6210	Auto Electrical Systems	9
ME 6211	Fundamental of Foundry Technology	9
ME 6212	Machine Joints and Mechanisms	6
ME 6213	Fluids Mechanics	6
ME 6241	Fundamental of Research Methodology	6
ME 6214	Fundamental of Programmable Logic Controllers	6
EE 6270	Electrical Engineering Science	6
EE 6271	Basic Electronics	6
MS 6228	Discrete Mathematics	6
TOTAL		66

C. Diploma in Mechanical Engineering (3rd Year)**Semester I**

Code	Name	Credit
ME 6301	Bearings and Shaft Design	6
ME 6302	Power Plant I	6
ME 6303	Refrigeration	9
ME 6304	Environment Management	6
ME 6305	Mechatronics Technology	7
MS 6321	Probability and Statistics	6
ME 6307	Project I	10
ME 6308	Industrial Practical Training II	10
TOTAL		60

Semester II

Code	Name	Credit
ME 6309	Power Transmission Components	6
ME 6310	Power plant II	6
ME 6311	Air Conditioning	9
ME 6312	Computer Based Manufacturing	9
ME 6313	Workshop Management	6
ME 6315	Hydraulic and Pneumatic systems	7
ME 6316	Quality Control and Costing Management	7
ME 6317	Project II	10
TOTAL		60

DIPLOMA IN MECHATRONICS ENGINEERING**A. Diploma in Mechatronics Engineering (1st Year)****Semester I**

Code	Name	Credit
ME 6116	Engineering Drawing I	8
ME 6126	Engineering Mechanics	6
ME 6118	Introduction to Automotive Technology	9
ME 6127	Workshop Practice I	9
EE 6170	Fundamentals of Electrical Engineering	8
IT 6117	Fundamental of Computer Application	8
HS 6142	Communication Skills	6
MS 6121	Algebra	6
HS 6141	Elements of Development Studies	6
TOTAL		66

Semester II

Code	Name	Credit
ME 6120	Engineering Drawing II	9
ME 6131	Engineering Measurement and instrumentation	9
ME 6128	Workshop Practice II	10
EE 6172	Analog Electronics	6
BM 6141	Entrepreneurship	6
CS 6124	Computer programming	9
ME 6130	Auto Electrical System	9
MS 6122	Basics of Calculus	6
TOTAL		64

B. Diploma in Mechatronics Engineering (2nd Year)**Semester I**

Code	Name	Credit
ME 6202	Strength of Materials	6
ME 6205	Thermodynamics	6
ME 6224	Embedded control systems	9
EE 6273	Digital electronics	7
ME 6201	Computer Aided Design I	9
ME 6208	Industrial Practical Training I	10
MS 6221	Calculus	6
ME 6242	Engineering Materials	9
TOTAL		62

Semester II

Code	Name	Credit
ME 6212	Machine Joints and Mechanisms	6
ME 6213	Fluid mechanics	6
ME 6215	Programmable Logical Controller	9
ME 6216	Fluid Power	9
ME 6209	Computer Aided Design II	9
ME 6217	Sensor and Actuator Technology	6
EE 6274	Electrical Circuit Analysis	6
ME6241	Fundamentals of Research Methodology	6
MS6228	Discrete Mathematics	6
TOTAL		63

C. Diploma in Mechatronics Engineering (3rd Year)**Semester 1**

Code	Name	Credit
ME 6304	Environmental and Health Studies	7
ME 6306	Mechatronics system design	9
ME 6303	Refrigeration and Air-Conditioning	9
ME 6320	Robotics Technology	9
MS 6321	Probability and Statistics	6
ME 6307	Project I	10
ME 6308	Industrial Practical Training II	10
TOTAL		60

Semester II

Code	Name	Credit
ME 6316	Artificial Intelligence and application	7
EE 6370	Power Electronics and Electrical Drives	7
ME 6312	Computer Based Manufacturing	9
EE 6371	Electrical Machines	9
ME 6313	Workshop Management	6
ME 6323	Maintenance of Mechatronics Systems	9
ME 6324	Control Systems	9
ME 6317	Project II	10
TOTAL		66

DIPLOMA IN AUTOMOTIVE AND AUTO-ELECTRICAL ENGINEERING**A. Diploma in Automotive and Auto-Electrical Engineering (1st Year)****Semester I**

Code	Name	Credit
ME 6116	Engineering Drawing, I	9
ME 6117	Engineering Materials I	9
ME 6123	Basic electrical circuits	7
ME 6118	Introduction to automotive Technology	7
ME 6119	Basics of metal fabrication	9
IT 6117	Fundamental of computer application	6
MS 6141	Elements of Development Studies	6
HS 6142	Communication skills I	6
MS 6121	Algebra	6
TOTAL		66

Semester II

Code	Name	Credit
ME 6120	Engineering Drawing II	9
ME 6121	Engineering Materials II	9
ME 6139	Internal combustion engines	9
ME 6124	Mechanical Engineering Science I	6
ME 6129	Workshop Practice	9
CS 6124	Computer programming	6
BM 6141	Entrepreneurship	6
ME 6144	Vehicle chassis and suspension systems	6
MS 6122	Basic of Calculus	6
TOTAL		66

B. Diploma in Automotive and Auto Electrical Engineering (2nd Year)**Semester I**

Code	Name	Credit
ME 6201	Computer Aided Drafting I	8
ME 6202	Strength of Materials	6
ME 6206	Mechanical Engineering Science II	6
ME 6203	Engine management	9
ME 6204	Welding Technology	9
ME 6205	Thermodynamics	6
ME 6207	Engineering Measurement and Control	6
MS 6221	Calculus	6
ME 6208	Industrial Practical Training I	10
TOTAL		66

Semester II

Code	Name	Credit
ME 6209	Computer Aided Drafting II	9
ME 6210	Auto Electrical Systems	9
ME 6212	Machine joint and mechanisms	6
ME 6213	Fluid Mechanics	6
ME 6214	Fundamentals of Programmable Logical Controllers	7
EE 6270	Electrical Engineering Science	6
EE 6271	Basic Electronics	6
ME 6219	Vehicle Inspection, Maintenance, and Diagnostic Techniques	6
MS 6228	Discrete Mathematics	6
TOTAL		61

C. Diploma in Automotive and Auto-Electrical Engineering (3rd Year)**Semester I**

Code	Name	Credit
ME 6301	Bearing and shaft design	6
ME 6336	Braking and Steering systems	7
ME 6337	Automotive Body Repair	8
ME 6345	Automotive Environmental Management	7
ME 6338	Hybrid and electric vehicle	6
ME 6306	Fundamentals of Research Methodology	6
MS 6321	Probability and statistics	6
ME 6307	Project I	10
ME 6308	Industrial Practical Training II	10
TOTAL		66

Semester II

Code	Name	Credit
ME 6309	Power transmission component	6
ME 6340	Road Transport Operations	6
ME 6341	Heavy Duty Vehicles	7
ME 6342	Auto-electrical systems Diagnosis	8
ME 6343	Automotive Heating Ventilation and Air Conditioning Systems	6
ME 6313	Workshop Management	6
ME 6314	Transmission systems	6
ME 6315	Hydraulic and Pneumatic systems	7
ME 6317	Project II	10
TOTAL		62

BACHELOR OF MECHANICAL ENGINEERING**A. Bachelor of Mechanical Engineering (1st Year)****Semester 1**

Code	Name	Credits
ME 8101	Engineering Drawing I	10
ME 8102	Engineering Materials	6
ME 8103	Strength of Materials	6
ME 8104	Machine Tools Technology	10
ME 8105	Automotive Engineering I	8
MS 8121	Linear Algebra and Calculus	6
BM 8141	Entrepreneurship	6
HS 8142	Communication Skills	6
HS 8141	Development Studies	6
TOTAL		64

Semester II

Code	Name	Credits
ME 8109	Engineering Drawing II	10
ME 8110	Machine Elements and Design I	6
ME 8111	Engineering Mechanics	9
ME 8112	Automotive Engineering II	10
ME 8108	Welding and Metal Fabrication	10
ME 8113	Engineering Thermodynamics	9
ME 8106	Environmental Engineering	6
MS 8122	Applied Calculus	6
TOTAL		66

B. Bachelor of Mechanical Engineering (2nd Year)**Semester 1**

Code	Name	Credits
ME 8201	Computer Aided Design I	8
ME 8203	Machine Elements and Design II	6
ME 8204	Foundry and Forging Technology	10
EE 8240	Fundamental of Electrical and Electronic Engineering	7
ME 8206	Fluid Mechanics	7
MS 8221	Differential Equations	6
ME 8207	Industrial Practical Training I	10
TOTAL		54

Semester II

Code	Name	Credits
ME 8208	Computer Aided Design II	8
ME 8210	Mechatronics	6
ME 8211	Engineering Project Management	6
EE 8241	Fundamentals of Electrical Machines	6
ME 8212	Mechanical Vibration Analysis	6
ME 8213	Material Handling Design	6
ME 8318	Renewable Energy Technologies	6
CS 8200	Computer Programming	7
IT 8217	Computer Networking	6
MS 8222	Statistics and Numerical Methods	6
TOTAL		63

C. Bachelor of Mechanical Engineering (3rd Year)**Semester I**

Code	Name	Credits
ME 8301	Systems Reliability and Plant Maintenance	6
ME 8302	Engineering Design	6
ME 8304	Industrial Energy Management	6
ME 8305	Metal cutting and Machines Processes	8
ME 8306	Engineering Economics and Financial Management	6
ME 8307	Engineering Research Methodology	7
ME 8308	Quality Control and Assurance	6
ME 8309	Computer Aided Engineering (CAE)	7
ME 8310	Industrial Practical Training II	10
TOTAL		62

Semester II

Code	Name	Credits
ME 8311	Fundamentals of Industrial Automation	7
ME 8312	Control Systems Engineering	6
ME 8313	Computer Aided Manufacturing (CAM)	7
ME 8314	Engineering Operations Management	6
ME 8315	Heat Transfer	6
ME 8316	Refrigeration System	8
ME 8317	Engineering Ethics and Professional Conduct	6
ME 8319	Power Plants	6
ME 8320	Project I	10
TOTAL		62

D. Bachelor of Mechanical Engineering (4th Year)**Semester 1**

Code	Name	Credits
ME 8401	Fluid Power and Control	6
ME 8402	Heating, Ventilation, and Air-Conditioning Systems (HVAC)	8
ME 8403	Automation and Robotics	7
CS 8406	Object Oriented Programming	7
ME 8404	Industrial Supervisor Skill and leadership	6
ME 8405	Turbo Machinery	6
ME 8406	Engine Design Technology	6
ME 8407	Project II	10
ME 8408	Industrial Practical Training III	10
TOTAL		66

Semester II

Code	Name	Credits
ME 8409	Industrial Internship	68
TOTAL		68

BACHELOR OF SCIENCE IN MECHATRONICS ENGINEERING**A. Bachelor of Science in Mechatronics Engineering (1st Year)****Semester 1**

Code	Name	Credits
MS 8121	Linear Algebra and Calculus	6
HS 8142	Communication Skills	6
EE 8140	Analog Electronics and Operational Amplifier	7
ME 8101	Engineering Drawing I	10
BM 8141	Entrepreneurship	6
ET 8101	Introduction to Information Technology	6
ME 8115	Materials Technology and Applications	7
ME 8116	Manufacturing Technology	7
ME 8103	Strength of Materials	6
ME 8118	Mechanical Workshop Technology	5
TOTAL		66

Semester II

Code	Name	Credits
MS 8122	Applied Calculus	6
EE 8141	Electrical and Electronic Drafting	8
EE 8104	Principles of Electrical and Electromechanical Engineering	6
CS 8140	Computer Programming	6
ME 8119	Machine Element and Design	7
ME 8113	Engineering Thermodynamics	9
EE 8142	Electric Circuit Analysis	6
ME 8111	Engineering Mechanics	9
EE 8143	Electrical Workshop Technology	6
TOTAL		63

B. Bachelor of Science in Mechatronics Engineering (2nd Year)**Semester 1**

Code	Name	Credits
MS 8221	Differential Equations	6
ME 8201	Computer Aided Design I	8
ET 8240	Digital Electronics	7
EE 8240	Network Analysis and Synthesis	7
ME 8215	Industrial Design Engineering	6
ME 8206	Fluid Mechanics	7
ME 8120	Fundamentals of Mechatronics and Applications	6
EE 8241	Static Electric Machines and Substation Instrumentations	7
ME 8207	Industrial Practical Training I	10
TOTAL		64

Semester II

Code	Name	Credits
CS 8241	Engineering Software	7
ET 8241	Linear Integrated Circuit	6
ET 8242	Embedded System Design	6
ME 8218	Power Plant and Electricity Generation	7
ME 8219	Sensors and Measurement Technology	7
EE 8242	Rotating Electrical Machines and Electric Traction Systems	7
CS 8242	Industrial Networks	6
ME 8220	Energy Conversion and Storage Technologies	7
CS 8243	Python Programming	7
TOTAL		60

C. Bachelor of Science in Mechatronics Engineering (3rd Year)**Semester 1**

Code	Name	Credits
EE 8340	Special Electrical Machines and Applications	5
EE 8341	Power Electronics and Electric Drives	7
EE 8342	Electric Power System and Smart Grid	7
ME 8316	Non-conventional Machining Processes	7
ME 8317	Actuator Technology	6
ME 8318	Automation Technology	7
ME 8319	Computer Aided Manufacturing	5
ET 8340	Signal and Systems	7
ME 8310	Industrial Practical Training II	10
TOTAL		61

Semester II

Code	Name	Credits
MT 8340	Biomedical Instrumentation	8
ME 8321	Automotive Technology	8
ME 8322	Engineering Product Design and Development	7
ME 8323	Computer Aided Design and Virtual Prototyping	7
ME 8324	Nanotechnology	7
ET 8341	Data Acquisition and Signal Conditioning	7
ME 8312	Control Systems Engineering	6
ME 8321	Robotics and Mechanism Design	8
ME 8320	Project I	10
TOTAL		60

D. Bachelor of Science in Mechatronics Engineering (4th Year)**Semester 1**

Code	Name	Credits
CS 8406	Object Oriented Programming	7
ME 8415	Automotive Mechatronics and Modern Vehicles Technologies	10
MT 8440	Biomedical Imaging	10
CS 8440	Machine Vision and Artificial intelligence	8
ME 8418	Engineering Laws, Business Registration and Company Start-up	6
ME 8407	Project II	10
ME 8408	Industrial Practical Training III	10
TOTAL		61

Semester II

Code	Name	Credits
ME 8409	Industrial Internship	66
TOTAL		66

8.1.5 DEPARTMENT OF CHEMICAL PROCESSING AND ENVIRONMENTAL ENGINEERING**Programme**

The Department is in the process of offering Bachelor degree programmes.

8.1.5.1 LIST OF STAFF

(Head of Department)

Lecturers:

Mr. Emmanuel Mwangomo*	MSc Renewable Energy. Eng (UDSM), BSc Energy Eng., (UDSM), Dipl Ed. (Kleruu)
------------------------	--

Instructor

Dr. Dickson P. Ndalila	PhD in Oil-Gas, Storage and Transportation Eng, Chuna University of Petroleum (EAST CHINA), MSc. Energy Eng. (UDSM), BSc. Chemical Proc. Eng. (UDSM).
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8.2 COLLEGE OF ARCHITECTURE AND CONSTRUCTION TECHNOLOGY (CoACT)

8.2.1 DEPARTMENT OF ARCHITECTURE AND ART DESIGN

Programmes

The department offers five (5) programmes:

- i. Diploma in Architecture
- ii. Diploma in Landscape Design
- iii. Diploma in Interior Design Technology
- iv. Bachelor of Science in Architectural Technology
- v. Bachelor of Landscape Architecture

Laboratories and Workshops

- i. Physical Model Making (Construction, Interior & Landscape) & Automation Workshop
- ii. BIM Laboratory
- iii. Acoustic, Light & Simulation Laboratory

8.2.1.1 LIST OF STAFF

(Head of Department)

Justine M. Katabaro***	PhD Eng. In Architecture (Chongqing University, China)***, M. Eng. In Arch. (Chong Qing University, China), B. Arch. (Tianjin University, China)
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Senior Lecturers

Dr. Buberwa M. Tibesigwa	PhD Eng. In Architecture (Chongqing University, China), M.Arch. (HIT China), B. Arch (University of Dar es Salaam)
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Senior Lecturers

Mr. Emmanuel J. Liombo**	PhD in Architecture (Ardhi University), M.Arch. (Univ. of Nairobi, Kenya), B.Arch. (University of Dar es Salaam).
Mr. Kamugisha J. Kajumulo**	PhD Eng. In Construction Management (UDSM)**, MSc. Construction Management (University of Dar es Salaam), B. Arch (University of Dar es Salaam)

Assistant lecturers

Mr. Justine Katabaro***	MSc. Eng. In Arch. (Chong Qing University, China), B. Arch. (Tianjin University, China)
Mr. Benson V. Karumuna***	MSc. Eng. In Arch. (Chongqing University, China), BSc. In Landscape Architecture (Ardhi University)
Mr. Shija P. Ng'wandu*	MSc. Eng. In Arch. (Chongqing University, China), B. Tech-Arch (MUST)
Mr. Kassim A. Choga	M. Arch. (Ardhi University), PGD Arch (Ardhi University), AD Arch. (Ardhi Institute).
Mr. Godfrey B. Sosthenes**	M. Arch (Makerere University, Uganda) **, B. Tech-Arch (MUST), Dip. Civil Engineering (MIST)
Ms. Erica John Makangara	M.Arch (Ardhi University & Hasselt University- Belgium), B. Arch (Ardhi University)
Mr. Nabil Atimamu Abdallah	M.Arch (Ardhi University), B.Arch (Ardhi University)
Mr. Blasius K. Venance	M. Arch in Urban Design (Jadavpur University, India) B. Tech-Arch (MUST), Dip. Arch (MIST)
Mr. Israel J. Mayage	MSc. In Housing (Ardhi University), B. Arch (University of Dar es Salaam)
. Mbasa Segelela*	MSc. In Housing (Ardhi University), B. Arch (University of Dar es Salaam)
Mr. Benjamin M. John*	MSc. In Housing (Ardhi University), B. Arch (University of Dar es Salaam)
Mr. Arnold K. Kashula *	MSc. In Housing (Ardhi University), B. Arch (University of Dar es Salaam)
Mr. Yakobo Rehani**	MSc. In Housing (Ardhi University) **, B. Tech -Arch (MUST), FTC-Architecture (MTC)
Nelson Boniphace Maseswa*	MSc. In Civil Engineering. (Hohai University, China), B. Tech-Arch (MUST)
Ms. Rosemary E. Kavishe*	MSc. In Hydrology and Water Resources Engineering (NM-AIST), BSc. Civil Engineering (St. Joseph University)
Mr. Oscar J. Shiganza	MSc. In Civil Engineering (MUST), BSc. In Civil Engineering (St. Joseph University)
Mr. Juma N. Julius***	MBA in Marketing (UoI), B. Arch (UDSM), Dip. Ed (KLERRUU)

*On Commandment**, On study Leave*, On PhD studying/Completion****

Tutorial Assistants

Mr. Lameck G. Mollel*	B. Arch. (Ardhi University)
Mr. Ibrahim M. Charles	B. Arch (UDSM), MSc. Construction Management (Ardhi University)
Mr. Gasper Massawe	B. Tech. Arch. (MIST), Dipl. Arch. (MIST)
Mr. Marco D. Nassary	B. Tech-Arch (MIST)
Mr. Moses L. Kivuyo	B. Tech-Arch (MUST), Dip. Arch (MIST)
Mr. Mussa Mbogoni	B. Tech-Arch (MUST)
Mr. Samwel Gidion Mnazi	BSc. In Landscape Architecture (Ardhi University)
Ms. Jaqualine Anthony Tarimo	B. Tech-Arch (MUST), Dip. In Architecture (MUST)
Ms. Hadija Boniphace Mkumbo	B. Tech in Architecture (MUST), Diploma in Architecture (MUST)
Ms. Martha Minja	B. Tech in Landscape Architecture (MUST)
Ms. Emmayana Calist Auguli	BSc. In Landscape Architecture (Ardhi University)
Ms. Catherine Joseph Shio	BSc In Landscape Architecture (Ardhi University)
Ms. Herieth Isaya Peter	BSc. In Interior Design (Ardhi University)

Instructors

Mr. Elvis F. Lyimo	BSc. In Landscape Architecture (Ardhi University)
Mr. Jonas.E. Mwamasage	B. Tech-Arch (MUST), Dip-Arch (MUST)

Technicians

Mr. Christopher J. Almasi	FTC. In Architecture (MTC)
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8.2.1.2 DIPLOMA COURSES**DIPLOMA IN ARCHITECTURE****A. Diploma in Architecture (1st Year)****Semester I**

Core Courses		
Code	Name	Credit
AA 6101	Architectural Draughting I	12
AA 6102	Structural Mechanics I	6
AA 6103	Building Construction & Technology I	6
AA 6105	Building Services I	6
AA 6106	Building Materials I	6
DS 6106	Elements of Development Studies	6
MS 6121	Algebra	6
IF 6128	Basic Computer Application I	6
HS 6117	Communication Skills	6
NS 6141	Advanced Physics I	6
TOTAL		66

Semester II

Core Courses		
Code	Name	Credit
AA 6107	Architectural Draughting II	12
AA 6108	Structural Mechanics II	6
AA 6109	Building Construction and Technology II	6
AA 6110	History of Architecture I	6
AA 6104	Architectural Theories I	6
MS 6221	CAD I	6
CS 6202	Basics of Calculus	6
NS 6143	Entrepreneurship	6
AA 6111	Applied Physics	6
IT 6225	Computer Application	6
TOTAL		66

B. Diploma in Architecture (2nd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 6201	Architectural Design I	12
AA 6202	Basics of Structural Design I	6
AA 6203	Construction Detailing I	6
AA 6204	Building Services II	6
AA 6205	Land Surveying I	6
AA 6206	Building Materials II	6
AA 6207	CAD II	6
ST 6223	Calculus	6
NS 6222	Industrial Practical Training (IPT) I	10
TOTAL		64

Semester II

Fundamental Courses		
Code	Name	Credits
AA 6208	Architectural Design II	14
AA 6209	Basics of Structural Design II	6
AA 6210	History of Architecture II	6
AA 6247	Architectural Theories II	6
AA 6211	Land Surveying II	8
AA 6212	Building Maintenance	8
MS 6321	Probability and Statistics	6
AA 6248	Construction Detailing II	10
TOTAL		64

C. Diploma in Architecture (3rd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 6301	Basics of Structural Design III	6
AA 6302	Building Construction & Technology III	8
AA 6303	Cost Estimates and Tendering	6
AA 6304	Project I	12
AA 6305	Professional Practice I	6
AA 6306	Climatic Design	6
AA 6307	Building Services III	6
AA 6339	Industrial Practical Training (IPT) II	10
TOTAL		60

Semester II

Fundamental Courses		
Code	Name	Credits
AA 6308	Project II	18
AA 6309	Thermal Design & Sonic Environment	8
AA 6310	Professional Practice II	8
AA 6311	Architectural Conservation	8
AA 6312	Building Information Modeling	10
AA 6313	Urban & Housing Development	8
TOTAL		60

8.2.1.3 DIPLOMA COURSES**DIPLOMA IN LANDSCAPE DESIGN****A. Diploma in Landscape Design (1st Year)****Semester I**

Core Courses		
Code	Name	Credit
AA 6112	Landscape Design Studio I	14
AA 6113	Fine Art I	10
AA 6114	Landscape Design Principles I	6
CSH 6115	Plant and soil science I	6
MS 6126	Applied Mathematics	6
CS 6102	Computer Application	6
MS 6116	Elements of Development studies	6
HS 6117	Communication Skills	6
	TOTAL	63

Semester II

Core Courses		
Code	Name	Credit
AA 6116	Landscape Design Studio II	14
AA 6117	Fine Art II	10
AA 6118	Landscape Design Principles II	6
CSH 6119	Plant and Soil Science II	6
AA 6120	Plant Design I	6
AA 6121	Landscape Building Materials IC	6
AA 6122	Landscape Construction and Technology I	6
AA 6123	Workshop Practice and Modeling I	6
	TOTAL	66

B. Diploma in Landscape Design (2nd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 6213	Landscape Design Studio III	12
AA 6214	Plant Design II	8
AA 6215	Landscape Building Materials II	8
AA 6216	Landscape Construction and Technology II	6
CM 6212	Survey and Measurements	6
AA 6218	Computer Aided Drafting I	6
AA 6219	Workshop Practice and Modeling II	10
AA 6220	Industrial Practical Training I	10
	TOTAL	66

Semester II

Fundamental Courses		
Code	Name	Credits
AA 6221	Landscape Design Studio IV	14
CSH 6222	Fundamental of Plant Pathology I	6
CSH 6223	Horticulture I	8
CM 6217	Geographical Information Systems (GIS)	6
AA 6225	Basics of Structural Design	6
AA 6226	Computer Aided Drafting II	6
AA 6227	Urban and Landscape Planning	6
AA 6228	Workshop Practice and Modeling II	10
	TOTAL	62

C. Diploma in Landscape Design (3rd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 6314	Landscape Design Studio V	14
CSH 6315	Fundamental of Plant Pathology II	6
AA 6316	Project I: Project Planning	10
CSH 6317	Horticulture II	6
AA 6318	Building Information Modeling (BIM)	6
AA 6319	Sustainable Practice, and Climatic Design	6
AA 6227	Industrial Practical Training (IPT) II	6
	TOTAL	66

Semester II

Fundamental Courses		
Code	Name	Credits
AA 6309	Landscape Design Studio VI	20
AA 6310	Professional Practice	6
AA 6311	Cost Estimation and Tendering	6
AA 6312	Landscape Frontier (Current and emerging issues in Landscape Design)	6
AA 6313	Landscape Conservation and Ecological Restoration	8
BM 6122	Entrepreneurship	6
TOTAL		60

8.2.1.4 DIPLOMA COURSES**DIPLOMA IN INTERIOR DESIGN TECHNOLOGY****B. Diploma in Interior Design Technology (1st Year)****Semester I**

Core Courses		
Code	Name	Credit
AA 6124	Interior Graphics	12
AA 6125	Interior Workshop Technology I	10
AA 6126	Construction Technology I	6
AA 6127	Ergonomics	6
AA 6102	Structural Mechanics	6
MS 6126	Applied Mathematics	6
DS 6117	Elements of Development Studies	6
IF 6128	Basics of Computer Applications	6
HS 6117	Basic Communication Skills	6
TOTAL		64

Semester II

Core Courses		
Code	Name	Credits
AA 6128	Interior Design Studio I	12
AA 6129	Interior Workshop Technology II	10
AA 6130	Construction Technology II	6
AA 6131	Building Systems I	6
AA 6132	Visual Communication I	6
AA 6133	Interior Design Principle and Theory I	6
AA 6134	History of Interior Design I	6
AA 6135	Environmental Science	8
TOTAL		60

B. Diploma in Interior Design Technology (2nd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 6229	Interior Design Studio II	12
AA 6230	Interior Workshop Technology III	10
AA 6231	Construction Technology III	6
AA 6232	Building Systems II	6
AA 6233	Visual Communication II	6
AA 6234	Interior Design Principle and Theory II	6
AA 6235	History of Interior Design II	6
AA 6236	Building Information Modeling I	6
AA 6237	Industrial Practical Training I	10
TOTAL		66

Semester II

Fundamental Courses		
Code	Name	Credits
AA 6238	Interior Design Studio III	12
AA 6239	Interior Workshop Technology IV	10
AA 6240	Construction Technology IV	6
AA 6241	Material Theory and Manufacturing Process I	6
AA 6242	Building Information Modeling II	6
AA 6243	Sustainable Design	6
AA 6244	Simulation Technology I	8
AA 6245	Color Theory and Practice	6
TOTAL		60

C. Diploma in Interior Design Technology (3rd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 6327	Interior Design Studio IV	20
AA 6328	Simulation Technology II	8
AA 6329	Material Theory and Manufacturing Process I	6
AA 6330	Interior Lighting Design	6
AA 6331	Interior Specification and Estimation	8
AA 6332	Industrial Practical Training (IPT) II	10
BM 6122	Entrepreneurship	6
TOTAL		64

Semester II

Fundamental Courses		
Code	Name	Credits
AA 6309	Interior Design Studio IV	40
AA 6310	Product Design and Fabrication	8
AA 6311	Professional Practice	6
	Elective	6
TOTAL		60

Elective Courses		
Code	Name	Credits
AA 6336	Interior Design Restoration	6
AA 6337	Interior Renovation and Refurbishment	6
AA 6338	Interior Design Technologies	6

8.2.1.5 DEGREE COURSES**BACHELOR OF SCIENCE IN ARCHITECTURAL TECHNOLOGY****A. Bachelor of Science in Architectural Technology (1st Year)****Semester I**

Core Courses		
Code	Name	Credits
AA 8101	Architectural Draughting I	12
AA 8102	Construction Technology I	6
AA 8103	Theory of Architecture I	6
AA 8104	History of Architecture I	6
AA 8105	Building Materials I	6
AA 8106	Min-Industrial Practical Training I	6
MS 8129	Applied Mathematics	6
HS 8101	Communication Skills	6
CS 8107	Computer Application	6
BM 8104	Entrepreneurship	6
TOTAL		66

Semester II

Core Courses		
Code	Name	Credits
AA 8108	Architectural Draughting II	12
AA 8107	Structural Mechanics	6
AA 8109	Construction Technology II	6
AA 8110	Theory of Architecture II	6
AA 8111	History of Architecture II	6
AA 8112	Building Materials II	6
AA 8113	Construction Survey	6
AA 8114	Construction Detailing I	6
DS 8102	Development Studies	6
TOTAL		60

B. Bachelor of Science in Architectural Technology (2nd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 8201	Design Studio I	14
AA 8202	Construction Technology III	6
AA 8203	Construction Detailing II	6
AA 8204	Building Physics I	6
AA 8205	Building Services and Installations I	6
AA 8206	Building Structures I	6
AA 8207	Material Science	6
AA 8208	Min- Industrial Practical Training II	6
AA 8209	Industrial Practical Training (IPT) I	8
TOTAL		64

Semester II

Core Courses		
Code	Name	Credits
AA 8210	Design Studio II	14
AA 8211	Product Manufacture Technology	7
AA 8212	Building Physics II	6
AA 8213	Building Renovation and Maintenance I	6
AA 8214	Building Services and Installation II	6
AA 8215	Building Structures II	6
AA 8216	Building Information Modeling (BIM) I	6
AA 8217	Alternative Energy Design	6
AA 8218	Urban Design	6
TOTAL		63

C. Bachelor of Science in Architectural Technology (3rd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 8301	Project I	16
AA 8302	Building Information Modeling (BIM) II	6
AA 8303	Building Simulation Technology I	8
AA 8304	Structural Analysis and Design I	6
AA 8305	Environmental Control and Sustainability I	8
AA 8306	Building Renovation and Maintenance II	6
AA 8307	Min- Industrial Practical Training III	6
AA 8308	Industrial Practical Training (IPT) II	8
TOTAL		64

Semester II*(Industrial Placement For 15 Weeks, Start of this Semester)*

Core Courses		
Code	Name	Credits
AA 8309	Project II	16
AA 8310	Construction Economics	6
AA 8311	Professional Practice and Management	8
AA 8312	Structural Analysis and Design II	6
AA 8313	Building Simulation Technology II	8
AA 8314	Research Methodology	6
AA 8315	Environmental Control and Sustainability II	6
Elective Courses <i>(Students select one Course)</i>		
AA 8316	Landscape Technology	4
AA 8317	Conservation Technology	4
AA 8318	Interior Design	4
AA 8319	Artificial Intelligence in Architecture	4
TOTAL		60

D. Bachelor of Science in Architectural Technology (4th Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 8401	Design Studio III	20
AA 8402	Pre-Design Research	24
AA 8403	Architectural Entrepreneurship	8
AA 8404	Industrial Practical Training (IPT) III	8
TOTAL		60

Semester II

Core Courses		
Code	Name	Credits
AA 8405	Comprehensive Design Project	60
TOTAL		60

8.2.1.5 DEGREE COURSES**BACHELOR OF LANDSCAPE ARCHITECTURE****A. Bachelor of Landscape Architecture (1st Year)****Semester I**

Core Courses		
Code	Name	Credits
AA 8120	Landscape Architectural Draughting I	12
AA 8121	History of Architecture	6
AA 8122	Landscape Materials I	6
AA 8123	Landscape Construction I	6
AA 8124	Principles of Landscape Architectural Design I	8
AA 8125	Min-Industrial Practical Training I	6
MS 8129	Applied Mathematics	6
BM 8104	Entrepreneurship	6
HS 8101	Communication Skills	6
DS 8103	Development Studies	6
TOTAL		68

Semester II

Core Courses		
Code	Name	Credits
AA 8126	Landscape Architectural Draughting II	12
AA 8127	Landscape Surveying	8
AA 8128	Principles of Landscape Architectural Design II	8
AA 8129	History of landscape Architecture	6
AA 8130	Landscape Materials II	6
AA 8131	Landscape Construction II	8
AA 8107	Structural Mechanics	6
CS 8107	Computer Application	6
TOTAL		60

B. Bachelor of Landscape Architecture (2nd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 8220	Landscape Studio Design I	12
AA 8221	Landscape Construction III	8
AA 8222	History and Theory of Architecture and Landscapes	6
AA 8223	Landscape Materials III	6
AA 8224	Botany	6
AA 8225	Lightning Design I	6
AA 8226	Landscape Structural Design	6
AA 8207	Min-Industrial Practical Training II	6
AA 8209	Industrial Practical Training (IPT) I	8
TOTAL		64

Semester II

Core Courses		
Code	Name	Credits
AA8228	Landscape Studio Design II	12
AA 8229	Landscape Construction IV	8
AA8230	Lighting Design II	6
AA 8231	Site Grading I	6
AA8232	Planting and Ecological Design I	8
AA8233	Landscape Services and Installations	6
AA8234	Sustainable Housing Development Planning	6
AA8216	Building Information Modeling (BIM)	8
TOTAL		60

C. Bachelor of Landscape Architecture (3rd Year)**Semester I**

Core Courses		
Code	Name	Credits
AA 8320	Landscape Studio Design III	12
AA 8321	Planting and Ecological Design II	8
AA 8322	Site Grading II	8
AA8323	Simulation and Visualization Technology	8
AA8324	Settlement Planning	8
AA 8325	Urban Landscape Design	8
AA8326	Min-Industrial Practical Training III	6
AA 8327	Industrial Practical Training (IPT) II	8
TOTAL		66

Semester II

Core Courses		
Code	Name	Credits
AA 8327	Landscape Studio Design IV	16
AA 8328	Environmental Science	10
AA 8329	Landscape Professional Practice and Management	12
AA 8330	Sustainable Urban Landscape Infrastructure	8
AA 8331	Landscape Construction Economics	8
AA 8332	Research Methodology	6
TOTAL		60

D. Bachelor of Landscape Architecture (4th Year)**Semester I**

Core Courses		
Code	Name	Credits
AA8410	Pre-design Research	30
AA8411	Disaster Management	6
AA 8412	Landscape Conservation and Management	6
AA 8413	Contemporary Landscape Architecture	6
AA8414	Landscape Architectural Entrepreneurship	8
AA 8415	Industrial Practical Training (IPT) III	8
TOTAL		64

Semester II

Core Courses		
Code	Name	Credits
AA8416	Comprehensive Design Project	60
TOTAL		60

8.2.2 DEPARTMENT OF CONSTRUCTION MANAGEMENT AND TECHNOLOGY (CMT)

Programmes

The department offers two (2) programmes:

- i. Bachelor of Science in Urban and Regional Planning
- ii. Bachelor of Engineering in Construction Technology

Laboratories and Workshops

- i. Physical Model Making (Urban Planning, Design & Construction) Workshop
- ii. GIS Computer Laboratory
- iii. Survey Laboratory

8.2.2.1 LIST OF STAFF

(Head of Department)

David A. Mwipopo**	Prospective PhD Candidate (Urban Planning) **, MSc. Urban Planning and Management (Ardhi University, Dar es Salaam), BSc. Urban and Regional Planning (Ardhi University, Dar es Salaam).
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Senior Lecturers

Dr. Ramadhani S. Tekka	PhD in Management Science and Engineering (CQU, China), Masters of Engineering Management (University of Dar es Salaam), Bsc. in Geomatics (University of Dar es Salaam).
Dr Yazid H. Mwishwa	PhD in Constr. Management (University of Dar es Salaam), Master of Science in Engineering Management (University of Dar es Salaam), Postgraduate Diploma in Engineering Management (University of Dar es Salaam), Advanced Diploma in Civil Engineering (Dar es Salaam Institute of Technology).

Lecturers

Dr. Juma A. Mpangule	PhD in Construction Engineering Science (Dortmund University, German), MSc. Construction Economics and Management (Ardhi University, Dar es Salaam), BSc. Building Economics (University of Dar es Salaam).
Dr. Japhary Shengeza	PhD Civil Engineering (MUST), MSc. Construction Economics and Management (Ardhi University, Dar es Salaam), BSc. Building Economics (University of Dar es Salaam).

Assistant lecturers

Mr. Baraka N. Budogo*	MSc. Urban Planning and Management (Ardhi University, Dar es Salaam), Bachelor Degree in Urban Development and Environmental Management (IRDP, Dodoma).
Mr. David A. Mwipopo	MSc. Urban Planning and Management (Ardhi University, Dar es Salaam), BSc. Urban and Regional Planning (Ardhi University, Dar es Salaam).
Mr. Evidence Machenje	Master of Science in Natural Resources Assessment and Management (University of Dar es Salaam), Bachelor of Urban and Regional Planning (University of Dar es Salaam).
Ms. Getrude A. Mboya	Master of Disaster Risk Management (Ardhi University, Dar es Salaam), BSc. Urban and Regional Planning (Ardhi University, Dar es Salaam).
Mr. Herbert B. Kimboi	MSc. Construction Management (Makerere University, Uganda), BSc. In Science in Building Economics (University of Dar es Salaam).
Mr. Moses Moyo***	MSc. Material Science and Engineering (Nelson Mandela University) BSc. Civil and Structural Engineering (University of Dar es Salaam).
Mr. Philemon A. Mwakiwone	Master of Engineering in Urban Design and Rural Planning (Beijing Jiaotong University), Bachelor of Urban and Regional Planning (University of Dar es Salaam).

Tutorial Assistants

Mr. Aboubakary S. Kimiro*	Bachelor of Science in Urban and Regional Planning (Ardhi University, Dar es Salaam).
Ms. Adelina S. Kalinga***	Bachelor of Science in Building Economics (Ardhi University, Dar es Salaam).
Ms. Blandina E. Atugonza	Bachelor of Science in Geomatics (Ardhi University, Dar es Salaam).
Mr. Elius P. Tibesigwa	Bachelor of Science in Building Economics (Ardhi University, Dar es Salaam).
Ms. Edna Machumu*	Bachelor of Science in Geomatics (Ardhi University, Dar es Salaam).
Mr. Godfrey Angalia	Bachelor of Science in Building Economics (Ardhi University, Dar es Salaam).
Mr. Hokins E. Moshi*	Bachelor of Civil Engineering (MUST), Ordinary Diploma in Civil Engineering (MUST).

Mr. Masanja D. Machilu	Bachelor of Science in Geomatics (Ardhi University, Dar es Salaam).
Mr. Melchior V. Shukuru***	Bachelor of Science in Geoinformatics (Ardhi University, Dar es Salaam).
Mr. Prosper P. Kaigarula	Bachelor of Science in Urban and Regional Planning (Ardhi University, Dar es Salaam).
Mr. Uwezo W. Nzoya	Bachelor of Science in Urban and Regional Planning (Ardhi University, Dar es Salaam).
Ms. Winfrida M. Mnyeke	Bachelor of Science in Building Economics (Ardhi University, Dar es Salaam).

Technicians

Mr. Amiri I. Muhalila	Ordinary Diploma in Geomatics (Ardhi Institute Morogoro).
Ms. Nancy Kashangaki	Ordinary Diploma in Land and Mine Surveying (University of Dar es Salaam).

*On Commandment**, On study Leave*, On PhD studying/Completion****

8.2.2.2 DEGREE COURSES**A: BACHELOR OF ENGINEERING IN CONSTRUCTION TECHNOLOGY****A. Bachelor of Engineering in Construction Technology (1st Year)****Semester I**

Course Code	Course Name	Credit
BM 8108	Development Studies	6
HS 8101	Communication Skills	6
CM 8118	Fundamentals of Construction Sciences	8
AA 8101	Architectural Draughting I	10
CM 8114	Fundamentals of Construction Infrastructures	8
CM 8115	Soil Mechanics	8
CM 8116	Civil Engineering Works	8
CM 8117	Construction Materials	8
Total		62

Semester II

Course Code	Course Name	Credit
CS 8107	Computer Application	6
DS 8108	Development Perspectives	6
AA 8107	Structural Mechanics	8
AA 8108	Architectural Draughting II	8
AA 8113	Construction Surveying	6
CM 8119	Building Information Modelling I	8
CM 8120	Construction Drawing and CAD	6
CM 8121	Construction Technologies	8
MS 8125	Statistics and Coordinate Geometry	8
Total		64

B. Bachelor of Engineering in Construction Technology (2nd Year)**Semester I**

Course Code	Course Name	Credit
CM 8216	Construction of Transportation Infrastructures I	8
CM 8217	Building Utilities I	6
CM 8218	Construction Estimate and Costing Technology	6
CM 8219	Construction Law I	6
CM 8220	Sustainable Construction Practices I	8
CM 8221	Construction Equipment and Machinery	8
CM 8222	Structural Element Design and Detailing I	8
MS 8221	Differential Equations	6
CM 8223	Industrial Practical Training (IPT) I	10
Total		66

Semester II

Course Code	Course Name	Credit
CM 8224	Building Utilities II	6
CM 8225	Construction Law II	6
CM 8226	Construction of Transportation Infrastructures II	8
CM 8227	Sustainable Construction Practices II	8
CM 8228	Construction Material Testing	8
CM 8229	Structural Elements Design and Detailing II	8
CM 8230	Building Information Modelling II	8
CM 8231	Modern Construction Practice	8
CM 8232	Construction of Building Infrastructures I	6
Total		66

iii. Bachelor of Engineering in Construction Technology (3rd Year)

Semester I

Course Code	Course Name	Credit
CM 8316	Construction Finance and Budgeting	6
CM 8317	Construction Contract Administration	6
CM 8318	Construction Project Management I	6
CM 8319	Professional Practice	8
CM 8320	Construction of Buildings Infrastructures II	8
CM 8321	Construction of Water Infrastructures	8
CM 8322	Advanced Structural Designs	8
CM 8323	Industrial Practical Training (IPT) II	10
Total		60

Semester II

Course Code	Course Name	Credit
AA 8316	Research Methods	6
CM 8324	Construction of Environmental Infrastructures	8
CM 8325	Construction of Energy Infrastructures	8
CM 8326	Construction Project Management II	8
CM 8327	Construction Safety and Risk Management	6
CM 8328	Foundation Engineering	8
CM 8329	Building Codes and Regulations	8
CM 8330	Innovation Project I	10
Total		62

iv. Bachelor of Engineering in Construction Technology (4th Year)

Semester I

Course Code	Course Name	Credit
CM 8409	Industrial Attachment	50
CM 8410	Industrial Practical Training (IPT) III	10
Total		60

Semester II

Course Code	Course Name	Credit
CM 8411	Contract Procurement Implementation and Evaluation	10
CM 8412	Innovation Project II	50
Total		60

B: BACHELOR OF SCIENCE IN URBAN AND REGIONAL PLANNING

i. Bachelor of Science in Urban and Regional Planning (1st Year)

Semester I

Course Code	Course Name	Credits
LS 8101	Building Design Studio	15
AA8105	Building Materials	6
LS 8102	History of Planning and Urban Design	6
IF 8112	Computer Application	6
HS 8101	Communication Skills	6
DS 8108	Development Studies	6
LS 8103	Spatial Statistics	6
LS 8104	Visual Communication for Building Design	12
Total		63

Semester II

Course Code	Course Name	Credits
LS 8105	Site Planning and Housing Estate Design Studio	15
LS 8106	Site Planning and Design Theory	6
LS 8107	Geographic Information System and Cartographic Mapping Techniques	9
LS 8108	Spatial Data Collection Tools and Techniques	9
LS 8109	Urban and Regional Economics	6
LS 8110	Principles of Laws and Practice	6
LS 8111	Topographic Surveying	6
LS 8112	Housing Systems and Community Facilities	6
Total		63

ii. Bachelor of Science in Urban and Regional Planning (2nd Year)**Semester I**

Course Code	Course Name	Credits
LS 8201	Neighbourhood Planning and Design Studio	15
LS 8202	Neighbourhood Planning and Design Theories	6
LS 8203	Visual Communication for Neighbourhood Planning and Design	6
LS 8204	Urban Infrastructure Planning and Design	6
LS 8205	Local governance and Urban Planning	6
LS 8206	Land and Planning Laws	5
LS 8207	Digital Cartography and Geo-Visualization in Geographic Information System	6
LS 8208	Planning for Sustainable and Smart Cities	6
LS 8209	Industrial Practical Training I	10
Total		66

Semester II

Course Code	Course Name	Credits
LS 8210	Informal Settlement Regularization Studio	15
LS 8211	Urban Planning Interventions in Informal Settlements	8
LS 8212	Participation and Resource Mobilization in Spatial Planning	6
LS 8213	Planning for Urban Resilience	6
LS 8214	Participatory Geographic Information System in Spatial Planning	9
LS 8215	Cadastral Surveying	6
LS 8216	Land Administration	6
ST 8223	Quantitative Techniques	6
Total		62

iii. Bachelor of Science in Urban and Regional Planning (3rd Year)

Semester I

Course Code	Course Name	Credits
LS 8301	Urban Design Studio	15
LS 8302	Urban Design Theories and Concepts	6
LS 8303	Urban Redevelopment Scheme	5
LS 8304	Landscape Planning and Design	6
LS 8305	Visual Communication for Urban Design	6
LS 8306	Urban Development Control	6
LS 8307	Applied Geographic Information Systems in Decision Making	6
LS 8308	Inclusive Urban Planning and Design	6
LS 8309	Industrial Practical Training II	10
Total		66

Semester II

Course Code	Course Name	Credits
LS 8310	General Planning Scheme Studio	15
LS 8311	City Forms and Urbanization	6
LS 8312	Remote Sensing	8
LS 8313	Land Use and Urban Transport Planning	7
LS 8314	Finance and Budgeting for Planners	6
LS 8315	Practice of Change of Use and Amendment of Detailed Scheme	6
LS 8316	Research Methodology	6
LS 8317	Project Planning, Monitoring and Evaluation	6
Total		60

iv. Bachelor of Science in Urban and Regional Planning (4th Year)

Semester I

Core Courses

Course Code	Course Name	Credits
LS 8401	Land Use and Regional Planning Studio	15
LS 8402	Regional Planning Theories	5
LS 8403	Land Use Planning Concepts and Theories	5
LS 8404	Applied Geographic Information System in Land Use Change Analysis	5
LS 8405	Land Use Conflict Resolution	4
LS 8406	Village Land Use Planning and Management	5
LS 8407	Professional Practice	5
LS 8408	Dissertation I	6
LS 8409	Industrial Practical Training (III)	10
Total		66

Semester I
Elective Courses

Course Code	Course Name	Credits
BM 8340	Entrepreneurship and Management	6
LS 8410	Policy Analysis, Formulation and Implementation	6
LS 8411	Development Communication and Resource Mobilization	6

Semester II

Course Code	Course Name	Credits
LS 8412	Dissertation II	60
Total		60

8.3 COLLEGE OF INFORMATION AND COMMUNICATION TECHNOLOGY (CoICT)

8.3.1 DEPARTMENT OF INFORMATION SYSTEMS AND TECHNOLOGY

Programmes

The Department offers three (3) programmes:

- i. Diploma in Information and Communication Technology
- ii. Bachelor of Science in Information and Communication Technology
- iii. Bachelor of Science in Information and Computer Networking

8.3.1.1 LABORATORIES AND WORKSHOPS

- i. Computer Maintenance and Repair Laboratory
- ii. Two Computer Software Application Laboratories

8.3.1.2 LIST OF STAFF

Head of Department

Dr. Stanley Leonard	PhD in Information Science and Engineering (MUST), MSc in Telecom Eng. (UDOM), BEng (DIT), FTC (Comp. Eng) (DIT)
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Lecturers

Dr. Twahir R. Kazema	PhD in Information and Communication Science Engineering (Electronics and Telecommunication)-NMAIST, MSc-in in Information and Communication Science Engineering-NMAIST, BEng in Electronics and Communication-St..Joseph University Tanzania.
Dr. Nabahani B. Hamadi	PhD in Computer Science (BJUT - China), MSc. Automated systems software (KHNURE-Ukraine), BSc. Computer science (KHNURE - Ukraine)
Dr. Phesto P. Namayala	PhD in Computer Science (UDOM), MSc. in Comp (HU, UK), BSc with Comp (UDSM)
Mr. Francis Ruambo*	MSc. (HU, Sweden), BSc (SPSU, RUSSIA)

Assistant Lecturers

Mr. Justin A. Mwakatobe*	MSc. (PWR, Poland)
Ms. Magreth Dunstan Giga*	MSc-Computer Science-University of Madras, BSc. in Computer Science (St. Joseph University-Tanzania)

Mr. Tumain Mbinda

MSc in Cybersecurity-National Forensic Science University (INDIA),
BSc. Computer Science (St. Joseph)

Mr. Award Magemo

MSc in Information Technology (MUST), BSc. Computer Science &
Eng.(St. Joseph University-Tanzania)

Tutorial Assistant

Mr. Edwin P. Nchia

Advanced Diploma (IFM)

Mr. Daniel I. Bynite

FTC (TCA); B. Eng.& Tech (DSTU) Russian Federation

Ms. Beatrice Mayowela*

BSc. Computer Science & Eng (St. Joseph University-Tanzania)

Ms. Joyce Fred Peter

BSc. Computer and Information Security (UDOM)

Mr. Nicodemus Sanga

BSc.ICT (Tumaini University)

**On study leave*

8.3.1.3 PROGRAMME COURSES

DIPLOMA IN INFORMATION AND COMMUNICATION TECHNOLOGY

A. Diploma in Information and Communication Technology (1st Year)

Semester 1

Code	Name	Credits (Hrs)
MIS 6125	Business Mathematics	6
HS 6117	Communication Skills	6
Core Courses		
Code	Name	Credits (Hrs)
IT 6116	Programming concept	9
CS 6117	Computer Systems Maintenance and Repair	9
IT 6117	Fundamental of ICT	6
IT 6118	Computer Networks	9
IT 6119	Basic Electronics	6
IT 6120	Multimedia Technologies	9
TOTAL		60

Semester II

Fundamental Courses		
Code	Name	Credits (Hrs)
MIS 6126	Advanced Business Mathematics	6
BM 6122	Entrepreneurship	10
BM 6117	Basics of Management Principles	6
Core Courses		
Code	Name	Credits (Hrs)
IT 6121	Introduction to Operating System	6
IT 6125	Computerized Accounting	6
IT 6122	Management Information Systems	6

IT 6123	Computer Networks Design and Management	10
IT 6124	Introduction to Database	10
TOTAL		60

B. Diploma in Information and Communication Technology (2nd Year)**Semester 1**

Core Courses		
Code	Name	Credits (Hrs)
IT 6218	Introduction to Software Engineering	6
IT 6220	Data Structure and File Handling	9
IT 6221	Object-Oriented Programming JAVA	9
IT 6222	Multimedia Application Production	9
IT 6223	Microprocessor Technologies	6
IT 6224	E-commerce	6
IT 6225	Computer Architecture	6
IT 6219	Web Application Development	9
TOTAL		60

Semester II

Core Courses		
Code	Name	Credits (Hrs)
IT 6226	Business start-up and Management	6
IT 6212	Website Design and Hosting	9
IT 6213	Digital Electronics	6
IT 6214	Object Oriented Programming C++	9
IT 6215	Management of Technology and Innovation	6
IT 6216	Systems Analysis and Design	6
IT 6217	Database Systems Design and Management	9
IT 6211	Industrial Practical Training I	10
TOTAL		61

C. Diploma in Information and Communication Technology (3rdYear)**Semester 1**

Code	Name	Credits (Hrs)
IT 6311	E-marketing	6
IT 6315	Industrial Practical Training II	10
IT 6312	Mobile Application Development	9
IT 6317	Project I	12
IT 6313	IT Project Management	9
IT 6314	Open Source Software Development	9
IT 6316	Cyber Security	9
TOTAL		64

Semester II

Code	Name	Credits (Hrs)
IT 6324	Business Management	6
Core Courses		
IT 6318	Human Computer Interactions	9
IT 6319	Cloud Computing	9
IT 6320	Artificial Intelligence	9
IT 6321	Project II	12
IT 6322	Mobile Networks and Computing	9
IT 6323	Ethics and Laws of IT	6
TOTAL		60

BACHELOR OF INFORMATION AND COMMUNICATION TECHNOLOGY**A. Bachelor of Information and Communication Technology (1st Year)****Semester I**

Fundamental Courses		
Code	Name	Credit (Hrs)
HS 8101	Communication Skills	6
DS 8101	Development Studies	6
MS 8121	Business Mathematics	6
Core Courses		
Code	Name	Credits (Hrs)
IT 8101	Fundamentals of ICT	9
IT 8102	Management of Information System	9
IT 8103	Multimedia Technologies	9
IT 8104	Programming Concepts	9
CS 8106	Computer Maintenance and Repair	9
TOTAL		63

Semester II

Code	Name	Credits (Hrs)
IT 8106	Industrial Management	8
IT 8107	Python Programming	6
IT 8108	Database Design and Implementation	8
IT 8109	Professional Practice and IT laws	6
IT 8110	Computer Networks	8
IT 8111	Operating Systems	7
IT 8112	IT Technical Support	6
IT 8113	Object-Orientated Programming	8
IT 8114	Industrial Practical Training (IPT) I	10
TOTAL		67

B. Bachelor of Information and Communication Technology (2nd Year)**Semester 1**

Fundamental Courses		
Code	Name	Credit (Hrs)
IT 8214	Financial Management	6
Core Courses		
Code	Name	Credits (Hrs)
IT 8201	Computer System Administration and Network Management	9
IT 8202	Problem Solving	8
IT 8203	Mobile Application Development	9
IT 8204	Software Engineering	8
IT 8205	Applied Networks	8
IT 8206	System Analysis and Design	9
IT 8207	Management of Technology and Innovation	6
TOTAL		63

Semester II

Fundamental Courses		
Code	Name	Credit (Hrs)
T 8215	Technical and Business Writing	6
BPP 845	Research Methodology	6
BM 8108	Entrepreneurship	6
Core Courses		
Code	Name	Credit (Hrs)
IT 8208	Human Computer Interaction	8
IT 8209	System Integration and Deployment	8
IT 8210	Data Mining and Warehousing	8
IT 8211	IT Project Management	8
IT 8212	Animation Development	9
IT 8213	Industrial Practical Training (IPT) II	10
TOTAL		69

C. Bachelor of Information and Communication Technology (3rd Year)**Semester 1**

Core Courses		
Code	Name	Credits (Hrs)
IT 8301	Cyber Security and Network Management	10
IT 8302	Web Development	10
IT 8303	Open-Source Software Development	10
IT 8304	JAVA Programming	10
IT 8305	Artificial Intelligence	10
IT 8306	Final Year Project 1	12
TOTAL		62

Semester II

Core Courses		
Code	Name	Credits (Hrs)
IT 8307	Mobile Networks and Computing	10
IT 8308	Cloud Computing	10
IT 8309	E-Commerce	10
IT 8310	Business Intelligence and Analytics	10
IT 8311	Internet of Things (IoT)	10
IT 8312	Final Year Project 2	12
TOTAL		62

BACHELOR OF SCIENCE IN INFORMATION AND COMPUTER NETWORK**A. Bachelor of Science in Information and Computer Network (1st Year)****Semester 1**

Core Courses		
Code	Name	Credits (Hrs)
DS 8102	Development Studies	9
MS 8225	Discrete Mathematics	6
HS 8117	Communication Skills	6
CS 8111	Computer Systems Architecture	9
IT 8130	Information Systems	9
IT 8131	Computer Network Engineering	9
IT 8132	Programming Concepts	9
IF 8106	Operating Systems	9
TOTAL		62

Semester II

Core Courses		
Code	Name	Credits (Hrs)
ST 8124	Basic Statistics and Probability Theory	9
IT 8133	Data Communication	6
IT 8134	Object Oriented Programming	9
IT 8135	Computer Network Design and Implementation	9
IT 8136	Information Ethics and Legal Issues	6
IT 8143	Hardware and Software Integration	9
IT 8137	Routing and Switching	9
IT 8108	Database Design and Implementation	9
TOTAL		66

B. Bachelor of Science in Information and Computer Network (2nd Year)**Semester 1**

Core Courses		
Code	Name	Credits (Hrs)
IT 8204	Computer Network Management	9
IT 8237	Management Information Systems	6
MS 8121	Linear Algebra and Calculus	6

Core Courses		
Code	Name	Credits (Hrs)
IT 8239	Linux Operating System	9
IT 8240	Systems Analysis and Design	6
IT 8241	Enterprise Wireless Design and Implementation	9
CS 8214	Artificial Intelligence	9
IT 8242	Industrial Practical Training I	10
TOTAL		64

Semester II

Core Courses		
Code	Name	Credits (Hrs)
CS 8238	Networking Troubleshooting	9
IT 8243	Geographical Information System	9
IT 8244	Web Technologies	9
IT 8245	Mobile Networking	9
IT 8246	Network Security	6
IT 8247	Information Policy and Governance	6
IT 8248	Information Technology Project Management	6
CS 8222	Big Data	9
TOTAL		63

C. Bachelor of Science in Information and Computer Network (3rd Year)**Semester I**

Core Courses		
Code	Name	Credits (Hrs)
IT 8348	Industrial Practical Training II	10
IT 8349	Network Forensics	9
IT 8351	Windows Server Administration	9
IT 8352	Cloud Computing and Virtualization	9
IT 8353	Ethical Hacking	9
IT 8354	Final Year Project I	12
IT 8355	Machine Learning	6
IT 8365	Cloud-Native Infrastructure (Elective)	9
IT 8366	AI Ethics (Elective)	9
TOTAL		64

Semester II

Core Courses		
Code	Name	Credits (Hrs)
IT 8357	Digital Forensics	9
IT 8358	Internet of Things	9
IT 8360	Business Continuity and Disaster Recovery	9
BM 8341	Entrepreneurship	6
IT 8361	Natural Language Processing	9
IT 8362	Final Year Project II	12
IT 8363	Block Chain Technologies (Elective)	9
IT 8364	Quantum Networking (Elective)	9
TOTAL		63

8.3.2 DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Programmes

The Department offers five (5) Programmes:

- i. Diploma in Computer Science
- ii. Diploma in Computer Engineering
- iii. Bachelor of Computer Engineering
- iv. Bachelor of Computer Science
- v. Bachelor of Engineering in Data Science

8.3.2.1 LABORATORIES AND WORKSHOPS

- i. Computer Maintenance and Repair Laboratory
- ii. Computer Network laboratory
- iii. Two Computer Software Application Laboratories

8.3.2.2 LIST OF STAFF

(Head of Department)

Dr. Mrindoko R Nicholaus	Ph.D ICT (OUT), MSc. EEIT (UDSM), B. Eng (DIT), FTC (MIST)
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Lecturers

Dr. Mrindoko R Nicholaus	Ph.D ICT (OUT), MSc. EEIT (UDSM), B. Eng (DIT), FTC (MIST)
Dr. Stanley Leonard	Ph.D ISE (MUST), MSc. TE (UDOM), BSc Comp. Eng. (DIT)
Dr. Sadiki L. Kusyama	PhD in ICSE (NM-AIST), MSc.ICSE (NM-AIST), B.Eng (DIT)

Assistant Lecturers

Mr. Godfrey Kayombo	MSc. TE (UDOM), BSc Comp. Eng. (DIT)
Mr. Aziz Singa	MSc TE (UDOM), BSc Comp. Eng. (SJUIT)
Mr. Bestone Lufyagila	MSc Communication Science and Engineering (NM-AIST, Tanzania), BSc. Eng (UDSM) *

Mr. Ibrahim Frank	M.Eng Comp S.c & Tech (Hubei University of Sc &Tech)
Mr. Bally S. Omary	MSc IT (UDOM), B.Eng (DIT), FTC (DIT) *
Ms. Betty J. Singano	MSc. Comp Sc (Kerala University), B. Tech IT (St Joseph)
Ms. Prisca C. Maro	MSc. ICE (University of Electronics Science & Tech (China)), BSc. IS & Netoworking (St. Joseph University in Tanzania)
Mr. Tony Chaula	MSc. ICE (Daejeon University, South Korea), BCSE (St. Joseph University in Tanzania)

Tutorial Assistants

Mr. Lusungu P. Wangilisasi	BSc.Eng (UDSM)*
Ms. Rahel A Mtali	B. Eng. Computer (MUST)
Mr. Emmanuel Nimrod Malissa	B. Eng. Computer (MUST)
Ms. Namsemba Rabel Mzava	BSc. in Multimedia Technology (UDOM)
Mr. Robert Joseph Mtowe	BSc. in Multimedia Technology (UDOM)
Mr. David Mwakifuna	BSc. in Multimedia Technology (UDOM)

Senior Instructors

Mr. Noel Y. Chintelele	MSc. TE (UDOM), B. Eng (DIT)*
Mr. Pascal J. Yamakil	MSc. EEIT (UDSM), PGDSC (UDSM), Advanced Diploma in IT (IAA)
Mr. Shadrack D. Njugunya	MSc. Comp (UDOM), B. Eng (DIT), FTC (DIT)

Instructors

Mr. Liberatus M. Sago	B.Sc. Eng (UDSM) *
Mr. Enlai N. Watson	B. Eng (DIT), FTC (DIT)
Mr. Riziki Pangahela	BSc IT (OUT)

Technician

Mr. George R. Kitula	B.Eng (MUST)*
Mr. Anthony L. Chaula	Diploma. ICT (MUST)

**On study leave*

8.3.2.3 PROGRAMME COURSES

DIPLOMA IN COMPUTER SCIENCE

A. Diploma in Computer Science (1st year)

Semester I

Code	Name	Credit
Core Courses		
HS 6117	Basic Communication Skills	07
MS 6121	Algebra	07
CS 6134	Computer Application	12
CS 6117	Computer Maintenance and Repair	12
IT 6118	Computer Networks	11
IT 6124	Introduction to Database	11
TOTAL		60

Semester II

Core Courses		
Code	Name	Credit
BM 6116	Introduction to Entrepreneurship	08
MS 6122	Basics of Calculus	08
HS 6116	Elements of Development Studies	08
IT 6123	Computer Networks Design and Management	12
CS 6146	Operating System	12
CS 6135	Structured Programming	12
TOTAL		60

B. Diploma in Computer Science (2nd year)

Semester I

Code	Name	Credit
Core Courses		
CS 6258	Computer Architecture	08
CS 6263	Industrial Practical Training I	10
MS 6221	Calculus	07
ET 6201	Digital Electronics	08
CS 6202	Object Oriented Programming I	09
IT 6217	Database Systems Design and Management	09
IT 6216	Systems Analysis and Design	09
TOTAL		60

Semester II

Core Courses		
Code	Name	Credit
CS 6264	E Commerce	09
MS 6223	Discrete Mathematics	07
CS 6256	Web Technology	09
CS 6257	Object Oriented Programming II	10
CS 6258	Software Engineering	09
CS 6210	Data Structure and Algorithms	09
BM 6205	Basics of Research Methodology	07
TOTAL		60

C. Diploma in Computer Science (3rd Year)**Semester I**

Code	Name	Credit
Core Courses		
CS 6380	Open Source Administration	10
CS 6384	Industrial Practical Training II	10
MS 6321	Probability and Statistics	08
CS 6385	Mobile Application Development	11
CS 6382	Human Computer Interaction	09
CS 6376	Project I	12
TOTAL		60

Semester II

Code	Name	Credit
Core Courses		
CS 6386	Artificial Intelligence	10
CS 6311	Innovation and Creativity	10
IF 6308	Multimedia Application and Production	09
IT 6316	Cyber Security	09
CS 6310	Distributed Systems	10
CS 6381	Project II	12
TOTAL		60

DIPLOMA IN COMPUTER ENGINEERING**A. Diploma in Computer Engineering (1st Year)****Semester 1**

Code	Name	Credit
MS 6121	Algebra	06
CS 6116	Ethics in Computer Engineering	06
NS 6139	Applied Physics 1	06
HS 6117	Communication Skills	06
EE 6116	Fundamentals of Electrical Engineering	06
CS 6119	Electronic Fabrication	06
CS 6117	Computer Systems Maintenance and Repair	06
CS 6118	Computer Application Software	06
IT 6118	Computer Networks	06
ET 6116	Basic Electronics	06
TOTAL		60

Semester II

Code	Name	Credit
MS 6122	Basics of Calculus	06
EE 6120	Fundamentals of Electrical Technology	06
ME 6116	Engineering Drawing 1	08
CS 6123	Field Practical Training I	10
IT 6123	Computer Networks Design and Management	06
CS 6126	Computer Peripherals Maintenance and Repair	08
IT 6124	Database systems	06
BM 6122	Entrepreneurship	05
CS 6135	Computer Programming	06
TOTAL		61

B. Diploma in Computer Engineering (2nd Year)**Semester I**

Code	Name	Credit
MS 6221	Calculus	06
CS 6252	Operating Systems	09
DEE 631	Measurement and Instrumentation	06
CS 6202	Object Oriented Programming	09
ETE 6204	Data Communication	06
CS 6204	Basic Electronics	06
CS 6206	Systems Analysis and Design	06
IT 6217	Database Systems Design and Management	06
CS 6208	Software Engineering	06
CS 6122	Mobile computing	06
TOTAL		66

Semester II

Code	Name	Credit
Core Courses		
MS 6223	Discrete Mathematics	06
CS 6209	Field Practical Training II	10
CS 6210	Data Structure and Algorithms	09
CS 6211	Basics of Telecommunication	06
CS 6212	Website Design and Hosting	09
CS 6213	Sequential Circuits	06
IT 6223	Microprocessor Technology	06
CS 6215	Information Management Systems	06
CS 6216	Embedded Systems	06
CS 6258	Computer Architecture	06
CS 6205	Digital Electronics	06
TOTAL		64

C. Diploma in Computer Engineering (3rd Year)**Semester I**

Code	Name	Credit
Core Courses		
Code	Name	Credit
CS 6301	Fiber Optics Technology	09
CS 6302	Computer Engineering Project I	12
CS 6303	Automation and Control Systems	09

IF 6308	Multimedia Application and Production	09
CS 6305	Signal and Data Processing Circuits	09
IT 6316	Information and Cyber Security	09
TOTAL		57

Semester II

Core Courses		
Code	Name	Credit
ST 6321	Probability and Statistics	06
CS 6307	Image, Video and Speech Processing	09
CS 6308	Computer Engineering Project II	12
CS 6309	Digital Forensic	09
CS 6310	Distributed Systems	09
CS 6311	Innovation and Creativity	09
TOTAL		54

BACHELOR OF COMPUTER ENGINEERING AND TECHNOLOGY**A. Bachelor of Computer Engineering and Technology (1st Year)****Semester 1**

Code	Name	Credits
CS 8114	Basic Electronics	10
MS 8121	Linear Algebra and Calculus	06
HS 8141	Development Studies	06
HS 8142	Communication Skills	06
EP 8104	Basic of Electrical Engineering	09
ME 8101	Engineering Drawing	09
CS 8106	Computer Maintenance and Repair	10
CS 8138	Programming Concepts in C	10
TOTAL		60

Semester II

Code	Name	Credits
CS 8115	Data Communication	10
ET 8113	Digital Electronics	07
CS 8116	Computer Aided Design	10
CS 8117	Computer Peripherals Maintenance	08
IT 8110	Computer Networks	09
IT 8111	Operating Systems	08
CS 8148	Web application development and Hosting	08
TOTAL		60

A. Bachelor of Computer Engineering and Technology (2nd Year)**Semester I**

Core Courses		
Code	Name	Credits
CS 8220	Communication Systems	09
CS 8221	Embedded Systems Design	10
ME 8270	Engineering Mechanics	07
ET 8203	Microcontrollers and Microprocessors	07
IT 8206	System Analysis and Design	07
IF 8201	Object Oriented Programming	08
MS 8226	Applied probability and statistics	08
CS 8118	Industrial Practical Training I	10
TOTAL		66

Semester II

Core Courses		
Code	Name	Credits
ET 8316	Optical Communication Systems	07
CS 8222	Computer Organization and Architecture	08
CS 8240	Cloud Computing	07
CS 8318	Electronic Fabrication	07
CS 8223	Industrial Automation	07
CS 8208	Data structures and Algorithms	09
CS 8241	Computer Network Design and Administration	10
CS 8211	Python Programming	08
TOTAL		63

C. Bachelor of Computer Engineering and Technology (3rd Year)**Semester I**

Core Courses		
Code	Name	Credits
CS 8304	Mobile Application Development	8
CS 8319	Artificial Intelligence	7
IT 8301	Cybersecurity and Ethical Hacking	9
IT 8108	Database design and Implementation	7
CS 8201	Research Methodology	6
MS 8221	Differential Equations	6
IF 8301	Human Computer Interaction	7
CS 8224	Industrial Practical Training (IPT) II	10
CS 8253	Parallel and Distributed Computing (Elective)	6
IT 8315	Digital Forensics (Elective)	
TOTAL		66

Semester II

Core Courses		
Code	Name	Credits
CS 8322	Multimedia Application and Production	07
CS 8323	Computer Vision and Image Processing	08
CS 8324	Quantum Computing	07
CS 8325	Expert Systems	09
CS 8326	Internet of Things (IoT)	08
ET 8213	Signal and Systems	07
CS 8430	Applied Machine Learning	08
CS 8362	Big Data Management (Elective)	06
CS 8327	Interactive Multimedia (Elective)	
TOTAL		60

D. Bachelor of Computer Engineering and Technology (4th Year)**Semester I**

Code	Name	Credits
CS 8401	Systems Administration in Linux	07
CS 8402	Blockchain Technology and Cryptocurrency	07
CS 8403	Autonomous Systems	09
CS 8404	Real Time System Design	09
CS 8405	Final Year Project 1	15
CS 8328	Industrial Practical Training (IPT) III	10
CS 8406	Renewable Energy Technologies (Elective)	06
CS 8407	Radar and Navigation Aids Systems (Elective)	
ET 8402	Electronic Waste Management (Elective)	
TOTAL		63

Semester II

Code	Name	
CS 8408	Tele-traffic Engineering	12
CS 8409	Open-Source Technologies	10
BM 8441	Entrepreneurship	7
ET 8211	Wireless Sensor Networks	9
CS 8410	Final Year Project 2	15
CS 8411	Smart Home and Security Systems (Elective)	7
CS 8412	Contemporary Technology (Elective)	
TOTAL		60

BACHELOR OF COMPUTER SCIENCE**A. Bachelor of Computer Science (1st Year)****Semester I**

Code	Name	Credits
Core Courses		
MS 8121	Linear Algebra and Calculus	06
HS 8101	Communication Skills	06
CS 8101	Theory of Computation	10
CS 8140	Operating Systems	10
CS 8138	Programming Concepts in C	10
CS 8102	Basics in Digital Circuit	09
CS 8103	Electrical Fundamentals	09
TOTAL		60

Semester II

Code	Name	Credits
Fundamental Courses		
CS 8104	Computer Maintenance and Repair	12
CS 8155	Human Computer Interaction	06
CS 8105	Analytical Methods of Computing	06
CS 8106	Object Oriented Programming	09
CS 8107	Computer Systems Architecture	06
IT 8110	Computer Networks	10
CS 8108	Computer Systems Design	09
CS 8109	Geographical Information SystemsI	08
TOTAL		66

B. Bachelor of Computer Science (2nd Year)**Semester I**

Core Courses		
Code	Name	Credits
BM 8108	Entrepreneurship	06
CS 8201	Research Methodology	06
DS 8101	Development Studies	06
IT 8206	System Analysis and Design	09
CS 8202	Organisation and Project Management	06
CS 8203	Distributed Systems	06
CS 8204	Expert Systems	06
CS 8205	Website Development and Hosting	06
CS 8206	Industrial Practical Training I	12
TOTAL		63

Semester II

Core Courses		
Code	Name	Credits
CS 8207	Internet of Things (IoT)	9
MS 8223	Mathematical Logic and Formal Semantics	6
CS 8208	Data Structure and Algorithms	9
CS 8209	Microprocessor Technology	8
CS 8210	Database Design Concepts	8
CS 8211	Python Programming	6
CS 8212	Computer Algorithms and Modelling	6
CS 8213	Software Engineering	8
CS 8270	Linux System Administration (Elective)	6
CS 8271	Cloud Computing (Elective)	
TOTAL		66

C. Bachelor of Computer Science (3rd Year)**Semester I**

Core Courses		
Code	Name	
CS 8301	Artificial Intelligence	6
ST 8122	Statistics and Numerical Analysis.	6
IT 8301	Cyber Security and Digital Forensic	8
CS 8302	Network Design and Administration	8
CS 8303	Software Development and Management	10
CS 8304	Application Development for Mobile Devices.	9
CS 8305	Final Year Computer Science Project 1	10
CS 8306	Industrial Practical Training II	12
TOTAL		69

Semester II

Core Courses		
Code	Name	Credits
CS 8438	Machine Learning	06
CS 8307	E-Commerce	06
CS 8308	Visual Application Development	09
CS 8309	Management Information System	10
CS 8310	Final Year Computer Science Project 2	10
CS 8311	Professional Issues in Computer Science and Technology Trend	06
CS 8312	Multimedia and Graphics Design	09

	Specialized Platform development (Elective)	06
	Data Mining and Warehousing (Elective)	
TOTAL		96

BACHELOR OF ENGINEERING IN DATA SCIENCE

A. Bachelor of Engineering in Data Science (1st Year)

Semester I

	Core Courses	
Code	Name	Credits
HS 8142	Communication Skills	09
CS 8138	Programming Concepts in C	09
MS 8108	Discrete Mathematics	08
MS 8104	Linear Algebra	08
HS 8141	Development Studies	06
CS 8124	Introduction to Computer and Artificial Intelligence	12
ST 8221	Applied Probability and Statistics	8
TOTAL		60

Semester II

	Core Courses	
Code	Name	Credits
IF 8201	Object Oriented Programming	11
CS 8123	Security and Privacy	09
MS 8103	Mathematical Analysis I	08
IT 8108	Database design and Implementation	09
IT 8110	Computer Networks	09
CS 8126	Introduction to Software Engineering	09
CS 8127	Introduction to Machine Learning	08
TOTAL		63

B. Bachelor of Engineering in Data Science (2nd Year)

Semester I

	Core Courses	
Code	Name	Credits
CS 8231	Industrial Practical Training I	10
MS 8122	Applied Calculus	09
ST 8301	Statistical Inferences	08
IT 8206	System Analysis and Design	07
CS 8237	Network Analysis	09
CS 8233	Computer Organization and Architecture	09
CS 8234	Internet Programming and Application	08
TOTAL		61

Semester II

	Core Courses	
Code	Name	Credits
IF 8106	Operating Systems	09
CS 8211	Python Programming	09
CS 8240	Cloud Computing	09
ST 8224	Regression Analysis and Forecasting	09
CS 8235	Database Management Systems	08
CS 8236	Project Planning Monitoring and Evaluations	12
CS 8208	Data Structures and Algorithms	09
TOTAL		65

C. Bachelor of Engineering in Data Science (3rd Year)**Semester I**

	Core Courses	
Code	Name	Credits
CS 8333	Industrial Practical Training II	10
ST 8322	Multivariate Analysis and Stochastic Process	11
CS 8334	Big Data Programming	08
ST 8323	Categorical Data Analysis and Statistical Packages	08
CS 8335	System Integration Programming using Python	09
CS 8336	Data Science in Research, Business and Society	09
	One Elective Course	07
TOTAL		62
Electives		

CS 8326	Parallel Computing (Elective)	07
CS 8327	Marketing Analytics and Big Data (Elective)	07
ST 82251	Elements of Data Science (Elective)	07

Semester II

Core Courses		
Code	Name	Credits
ST 8322	Regression Analysis	09
CS 8340	Data Security	09
CS 8341	Data Science Research Methods	08
CS 8342	Data Warehousing Design and Implementation	09
CS 8343	Web Data Compression and Search	09
IT 8310	Business Intelligence and Analytic Elective	09
	One Elective Course	09
TOTAL		62
Electives		
CS 8344	Knowledge Representation and Reasoning	09
CS 8345	R Programming	09
CS 8346	Big Data Management	09

C. Bachelor of Engineering in Data Science (4th Year)**Semester I**

Core Courses		
Code	Name	Credits
CS 8418	Industrial Practical Training III	07
CS 8419	Professional Ethics and Conduct	12
CS 8420	Data Science & Engineering Project I	09
CS 8421	Data Mining Design and Implementation	09
CS 8422	Law and Data Science	09
CS 8423	Cognitive Science	08
	One Elective Course	09
TOTAL		63
Electives		
CS 8424	Bioinformatics	09
CS 8425	Applied Deep Learning	09

Semester II

Core Courses		
Code	Name	Credits
CS 8406	Data Visualization and Data Driven Decision Making	09
CS 8407	Data Science and Engineering Project II	12
CS 8408	Applied Machine Learning	08
BM 8108	Entrepreneurship	09
CS 8409	Advanced Artificial Intelligence	09
DS 4226	Data Challenge	09
	Elective	08
TOTAL		64
Electives		
CS 8413	Actuarial Data and Analysis	08
CS 8414	Information Retrieval and Web Search	08

8.3.3 DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

Programmes

The Department offers Three (3) Programmes:

- a) Diploma in Electronics and Telecommunication Engineering
- b) Bachelor of Science in Telecommunications Engineering
- c) Bachelor of Science in Electronics and Automation Engineering

8.3.3.1 LABORATORIES AND WORKSHOPS

- i. Measurements Laboratory
- ii. Electronics Laboratory
- iii. Electrical Installation workshop

8.3.3.2 LIST OF STAFF

(Head of Department)

Dr. Joseph S.Salawa

PhD in Electrical Engineering (Telecommunication Option) (PAUSTI– KENYA), MSc. Information Communication Science and Engineering (Electronics and Telecommunications Engineering) (NM-AIST), BSc. Telecommunication Engineering (UDSM)

Professors

Prof. Aloys Mvuma

PhD. in Systems Engineering (Hiroshima University, Japan), MSc. in Information Science (Shimane University, Japan), BSc.in Electrical Engineering (UDSM)

Senior Lecturers

Dr. Juma S. Ally

PhD. in Information and Communication Engineering (University of Science and Technology of China), MSc. in Communication and Information Systems (Huazhong University of Science and Technology) B.Eng. in Telecommunication Engineering (Huazhong University of Science and Technology – CHINA)

Lecturers

Dr. Charles O. Nyatega

PhD in Information and Communication Engineering – Research based in Medical (Brain) Image Processing, Tianjin University, Tianjin, China June, 2024). ME. Signal and Info. Processing (TUTE– CHINA). B.Eng in Telecommunication Engineering (Huazhong University of Science and Technology - CHINA).

Assistant Lecturers

Mr. Justine G. Mbilinyi*

MSc. Electronics Eng. & IT (UDSM), BSc. Electrical Eng. (UDSM)

Mr. Emmanuel S. Mahenge

MSc. Telecom Eng. (UDOM), B.Eng. Electronics and Telecom (DIT)

Mr. Daniel A. Sinkonde

MSc. ICSE (NM-AIST, TZ). B.Eng. ECE (St. JCET); FTC in Mech. Eng. (MTC)

Mr. Geofrey Katema*

ME Signal & Info. Processing (TUTE– CHINA), B. Eng. ECE (St. JCET)

Mr. Zacharia B. Mzurikwao

ME Signal & Info. Processing (TUTE– CHINA), B. Eng. EEE (St. JCET)

Ms. Lilian Kawala*

ME Signal & Info. Processing (TUTE– CHINA), BSc in Electrical and Electronics (MUST), Dip in Electrical and Electronics (MIST)

Mr. Exaud Tarimo*

MSc. Electronics & Comm. (Beijing Jiaotong Univ - CHINA) BSc. Telecommunication Engineering (UDSM)

Mr. Cuthbert John Karawa*

ME. Information and Communication Engineering (Huazhong University of Science and Technology – CHINA), BSc. Telecommunication Engineering (UDOM)

Mr. Emmanuel Anania Mwangosi

ME. Information and Communication Engineering (Harbin Engineering University-CHINA), BSc. Computer Science (Ruaha Catholic University).

Ms. Catherine Protas*

MSc. Electronics Eng. & IT (UDSM) B.Eng. Electronics and Communication (SJCET)

Ms. Candida Mwisomba

BSc. Electronics and Communication Engineering (St. Joseph University in Tanzania)

Tutorial assistants

Mr. Avitus Uranus Rwehumbiza*

BSc. Telecommunication Engineering (UDSM)

Phocus Sebastian

BEng. in Telecommunication Systems (MUST)

Erick Temba

BSc. Electronics Engineering (UDSM)

Instructors I

Mr. Monte S. Kayoka

MSc Comp & Communication (Waseda – Japan) B.Eng.
Electrical Engineering (DIT), FTC Electrical (MTC)

Ms. Suzan M Misholi*

MSc. Information and Communication Science and
Engineering (NM-AIST), B.Eng. Electronics and Telecom
(DIT)

Instructor II

Mr. Godwin B. Tunze*

M.Electronic Engineering (KIT–Korea), BSc.
Telecommunication Engineering (UDSM)

Ms. Susan Mboje*

MSc. Oil & Natural Gas Eng. (China Univ. of Geosciences).
B.Eng. Electronics and Communication (SJCET)

Laboratory Technicians

Gofrey Msengi

Diploma in Electronics and Telecommunication (Arusha
Technical College)

**On study leave*

8.3.3.3 PROGRAMME COURSES

DIPLOMA IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING

A. Diploma in Electronics and Telecommunication Engineering (1st Year)

Semester I

Course Code	Course Name	Credits
EE 6116	Basics of Electrical Engineering	6
EE 6119	Fundamentals of Electrical Materials	7
EE 6120	Electrical Workshop Technology I	8
ET 6116	Basic Electronics	7
NS 6139	Physical Science I	6
EE 6127	Electrical and Electronics Measurements	7
EE 6121	Technical Drawing I	6
MS 6121	Algebra	6
HS 6116	Elements of Development Studies	5
CS 6118	Computer Application Software	6
TOTAL		64

Semester II

Course Code	Course Name	Credits
EE 6122	Basic Electrical Engineering II	6
ET 6117	Analogy Electronics	8
ET 6119	Basics of Telecommunication	8
EE 6125	Electrical Workshop Technology II	8
MS 6122	Basics of Calculus	6
HS 6117	Communication Skills	5
BM 6122	Introduction to Entrepreneurship	5
CS 6135	Computer Programming	6
ET 6118	Television Engineering	7
NS 6140	Physical Science II	6
TOTAL		65

B. Diploma in Electronics and Telecommunication Engineering (2nd Year)**Semester I**

Course Code	Course Name	Credits
ET 6201	Digital Electronics I	6
ET 6202	Power Amplifiers and Oscillators	6
ET 6203	Analogy Communication Systems	7
ME 6201	Computer Aided Design I	8
EE 6205	Introduction to Engineering Software	6
ET 6204	Data Communication	6
CS 6202	Object Oriented programming	7
MS 6221	Calculus	6
ET 6205	Analogy Electronics Lab	7
ET 6206	Industrial Practical Training I	10

Semester II

Course Code	Course Name	Credits
ET 6207	Digital Electronics II	8
ET 6208	Digital Communication Systems	8
ET 6209	Cellular and Mobile Communications	8
CS 6258	Computer Architecture	6
ET 6211	Instrumentation	7
EE 6214	Electric Machines	7
ME 6209	Computer Aided Design II	8
ET 6210	Professional Practice	8
TOTAL		60

C. Diploma in Electronics and Telecommunication Engineering (3rd Year)**Semester I**

Course Code	Course Name	Credits
ET 6301	Optical Fiber Communication	8
ET 6302	Microprocessor and Microcontrollers	8
ET 6303	Electronic Equipment Maintenance	8
EE 6316	Fundamentals of Control Systems	7
ET 6304	Electronics and Telecommunications Project I	8
ET 6305	Industrial electronics	7
IT 6324	Database Fundamentals	7
ET 6306	Industrial Practical Training II	10
TOTAL		63

Semester II

Course Code	Course Name	Credits
ET 6307	Wireless Communication Technologies	6
ET 6308	Telecommunication Switching Principles	7
EE 6313	Programmable Logic Controllers	7
ET 6309	Satellite and Microwave Communication	8
ET 6310	Antenna and Radar	8
ET 6311	Transmission Lines and Wave Guides	8
ET 6312	Computer Networking	8
ET 6313	Electronics and Telecom. Project II	10
TOTAL		62

BACHELOR OF SCIENCE IN TELECOMMUNICATIONS ENGINEERING**A. Bachelor of Science in Telecommunications Engineering (1st Year)****Semester I**

Course Code	Course Name	Credits
HS 8101	Communication Skills	6
MS 8121	Linear Algebra and Calculus	7
ET 8101	Introduction to Telecommunication Engineering	9
CS 8106	Computer Maintenance and Repair	9
ME 8176	Fundamental of Technical Drawing I	8
CS 8138	Programming Concept in C	7
EP 8103	Basic of Electrical Engineering	8
DS 8101	Development Studies	6
TOTAL		60

Semester II

Course Code	Course Name	Credits
MS 8122	Applied calculus	6
ET 8111	Measurements and Instrumentation	8
IT 8110	Computer Networks	7
ET 8112	Circuit Theory	7
ET 8113	Engineering Software	9
ET 8114	Analogue Electronics I	7
ET 8115	Digital Electronics I	9
ET 8116	Electronics Workshop I	7
TOTAL		60

B. Bachelor of Science in Telecommunications Engineering (2nd Year)**Semester I**

Course Code	Course Name	Credits
MS 8226	Applied probability and Statistics	7
ET 8201	Engineering Electromagnetics I	7
ET 8202	Analogy Electronics II	7
IT 8201	Computer System Administration and Network Management	7
ET 8203	Microcontrollers and Microprocessor	7
ME 8201	Computer Aided Drafting I	7
IF 8201	Object Oriented Programming	8
ET 8210	Industrial Practical Training I	10
TOTAL		60

Semester II

Course Code	Course Name	Credits
ET 8211	Wireless Sensor Networks	9
ET 8212	Digital Electronics II	7
CS 8208	Data Structure and Algorithms	7
ET 8213	Network Switching and Routing	8
CS 8211	Python Programming	7
ET 8214	Signals and systems	7
ET 8215	Engineering Electromagnetics II	7
ET 8216	Electronics Workshop II	8
TOTAL		60

C. Bachelor of Science in Telecommunications Engineering (3rd Year)

Semester I

Course Code	Course Name	Credits
CS 8301	Artificial Intelligence	7
ET 8301	Telecommunication Switching and Transmissions	8
ET 8302	Mobile Communication System	7
ET 8303	Antenna and Radar	7
ET 8304	Analogue Telecommunications	7
ET 8305	Embedded Systems	8
CS 8304	Mobile Application Development	6
IF 8301	Human Computer Interaction (HCI)	
ET 8310	Industrial Practical Training II	10
TOTAL		60

Semester II

Course Code	Course Name	Credits
ET 8311	Research Methodology and Intellectual Property Rights	7
ET 8312	Tele-traffic engineering	7
ET 8313	Digital Telecommunications	7
ET 8314	Control System Engineering	8
ET 8315	Microwave Engineering	7
ET 8316	Digital signal processing	8
ET 8317	Optical communication Systems	9
CS 8346	Big Data Management	7
ET 8318	Very Large-Scale Integrated Circuits	
TOTAL		60

D. Bachelor of Science in Telecommunications Engineering (4th Year)

Semester I

Course Code	Course Name	Credits
IT 8301	Cyber Security and Ethical Hacking	7
ET 8401	Satellite communications system	7
ET 8402	Electronics Waste Management	7
ET 8403	Information theory and coding	6
ME 8410	Professional ethics and conduct	7
IT 8315	Digital Forensics	
ET 8404	Television Engineering	6
ET 8405	Telemedicine systems and Biomedical Devices	
ET 8409	Final Year Project I	12
ET 8410	Industrial Practical Training III	10
TOTAL		62

Semester II

Course Code	Course Name	Credits
BM 8441	Entrepreneurship	7
ET 8411	Telecommunication Network Planning and Optimization	9
ME 8211	Engineering Project Management	9
IT 8108	Data Modelling for Database	7
CE 8312	Contract Planning and Administration	8
ET 8412	Legal aspects of Telecommunication systems	8
EP 8306	Programmable logic controller	
ET 8420	Final Year Project II	12
TOTAL		60

BACHELOR OF SCIENCE IN ELECTRONICS AND AUTOMATION ENGINEERING

A. Bachelor of Science in Electronics and Automation Engineering (1st Year)

Semester I		
Course Code	Course Name	Credits
CS 8106	Computer Maintenance and Repair	9
EP 8103	Basic of Electrical Engineering	6
DS 8101	Development Studies	6
ET 8121	Fundamentals of Robotics and Automation	9
HS 8101	Communication Skills	6
CS 8138	Programming Concept in C	7
ME 8102	Engineering Materials	6
ME 8176	Fundamentals of Technical Drawing	5
MS 8121	Linear Algebra and Calculus	6
TOTAL		60

Semester II		
Course Code	Course Title	Credits
ET 8131	Data Communication and Networks	6
ET 8114	Analogue Electronics I	7
ET 8132	Electronics and Automation Workshop I	7
EP 8109	Basics of Control Engineering	6
ET 8112	Circuit theory	9
ET 8111	Measurements and Instrumentation	6
ET 8113	Engineering Software	9
ET 8115	Digital Electronics I	6
MS 8122	Applied Calculus	6
TOTAL		62

B. Bachelor of Science in Electronics and Automation Engineering (2nd Year)

Semester I

Course Code	Course Title	Credits
CS 8220	Introduction to Machine Learning	7
ET 8221	Electronics and Automation Workshop II	7
ET 8202	Analogue Electronics II	7
IF 8201	Object Oriented Programming	8
ME 8201	Computer Aided Drafting I	9
ET 8230	Industrial Practical Training I	10
ET 8201	Engineering Electromagnetics I	7
ET 8203	Microcontrollers and Microprocessor	7
TOTAL		61

Semester II

Course Code	Course Title	Credits
CS 8221	Operating Systems	8
ET 8214	Signals and Systems	7
ET 8212	Digital Electronics II	7
ET 8215	Engineering Electromagnetics II	7
ET 8231	PLC and Data Acquisition Systems	7
ME 8207	Computer Aided Drafting II	9
MS 8222	Statistics and Numerical Method	6
ET 8211	Wireless Sensor Networks	9
TOTAL		59

C. Bachelor of Science in Electronics and Automation Engineering (3rd Year)

Semester I

Course Code	Course Title	Credits
IF 8336	Mixed Reality in Automation	7
EP 8303	Control Systems Engineering I	7
EP 8302	Basics of Power Electronics	7
ET 8330	Industrial Practical Training II	10
ET 8304	Analogue Telecommunications	7
ET 8321	Electronics Circuit Diagnosis and Repair	7
ET 8305	Embedded Systems	9
ME 8304	Industrial Energy Management	6
IF 8301	Human Computer Interaction (HCI)	
TOTAL		60

Semester II

Course Code	Course Title	Credits
ET 8316	Digital Signal Processing	8
EP 8311	Control System Engineering II	7
ET 8313	Digital Telecommunication	9
ET 8331	IC Design and Fabrication	7
ET 8332	Embedded Systems Workshop	7
ET 8333	Robotics and Machine Elements Design	7
ET 8311	Research Methodology and Intellectual Property Rights	7
ET 8340	Final Year Project I	10
TOTAL		62

D. Bachelor of Science in Electronics and Automation Engineering (4th Year)

Semester I

Course Code	Course Title	Credits
ET 8421	Optimization Techniques	7
ET 8422	Professional Practices	7
ET 8426	Industrial Practical Training III	10
ET 8423	Safety and Maintenance	6
ET 8424	Optoelectronics	8
ET 8430	Final Year Project II	10
ET 8425	Autonomous Systems	7
ME 8402	Power Plants	6
ME 8403	Material Handling Design	
TOTAL		63

Semester II

Course Code	Course Title	Credits
ME 8211	Engineering Project Management	7
BM 8441	Entrepreneurship	7
ET 8431	Electronics waste Management	6
ET 8432	Real time systems	7
ET 8433	Nano Electronics	6
ET 8434	Electromagnetic Interference and Compatibility	6
ET 8435	Magnetic Imaging	
ET 8440	Final Year Project III	10
ME 8410	Engineering Ethics and Professional Conduct	6
TOTAL		55

8.3.4 DEPARTMENT OF INFORMATICS

Programmes

The Department is in the process of developing the curricula for Diploma and Bachelor degree programmes.

The Department offers three (3) programmes:

- a) Diploma in Business Information Systems and Technology
- b) Bachelor of Applied Informatics in Industrial Automation
- c) Bachelor of Applied Informatics in Marketing

8.3.4.1 LIST OF STAFF

(Head of Department)

Dr. Sadiki Lameck Kusyama	PhD in Information and Communication Science and Engineering (Nelson Mandela African Institution of Science and Engineering) MSc in Information and Communication Science and Engineering (Nelson Mandela African Institution of Science and Engineering), B.Eng. in Computer Engineering (Dar es Salaam Institute of Technology)
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Lecturers

Dr. Sospeter S. Joseph	PhD in Electrical Engineering (Telecommunication Option) (PAUSTI– KENYA), MSc. Information Communication Science and Engineering (Electronics and Telecommunications Engineering) (NM-AIST), BSc. Telecommunication Engineering (UDSM)*
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Assistant Lecturers

Mr. Ayubu H. Mbagu	ME Signal & Infor. Processing (TUTE– CHINA), B. Eng. ECE (St. JCET)
Ms. Neema Rajabu	MSc. Software Engineering (Kampala International University-Uganda), Bsc. In Computer Science (Kampala International University-Tanzania)

Mr. Peter J. Madembwe

MSc. In Information Technology (MUST) and B.Sc Computer Science (St. Joseph)

Mr. Aman Sanga

MSc. In Information Technology (UDOM), B. Eng. (DIT)

Tutorial assistant

Amani Anthony Rukojo

BSc. in Information and Communication Technology (OUT)

Julias R. Temu

Bsc in Business Information Systems (UDOM)

Senior Instructor I

Mr. Godphrey G. Kyambile*

MSc. Comp (NM-AIST), BSc Computer Science (St. Joseph)

Mr. Ally S. Sikoro

MSc. Comp (UDOM), B. Eng. (DIT), FTC (DIT)

Instructor II

Mr. Ipyana Issa Mwaisekwa

BSc. Information Technology and Systems (Mzumbe University)

Study leave*8.4.1.2 PROGRAMME COURSES****DIPLOMA IN BUSINESS INFORMATION SYSTEMS AND TECHNOLOGY****A. Diploma in Business Information Systems and Technology (1st Year)**

Semester I		
Fundamental Courses		
Course Code	Course Name	Credits
HS 6142	Communication Skills	6
IT 6117	Fundamental of ICT	6
ET 6116	Basic Electronics	6
CS 6252	Operating System	9
CS 6135	Computer Programming	9
MIS 6125	Business Mathematics	6
IT 6118	Computer Networks	9
CS 6117	Computer Systems Maintenance and Repair	9
TOTAL		210
Semester II		
Fundamental Courses		
Course Code	Course Name	Credits

BM 6118	Basics of Financial Accounting	6
CS6212	Web Design and Hosting	9
CS 6126	Computer Peripherals maintenance and Repair	8
BM 6141	Entrepreneurship	6
IT 6122	Management Information Systems	6
IT 6124	Fundamental of Database	10
BM 6117	Basics of Management Principles	6
IT 6125	Computerized Accounting	6
MIS 6126	Advance Business Mathematics	6
TOTAL		63

E. Diploma in Business Information Systems and Technology (2nd Year)

Semester III		
Fundamental Courses		
Course Code	Course Name	Credits
IF 6212	Industrial Practical Training	10
IT 6216	Systems Analysis and Design	6
IF 6222	Introduction to financial management	6
CS 6202	Object Oriented Programming Basics	9
IT 6217	Database Systems Design and Management	9
IF 6217	Introduction to Business Information System	10
IF 6221	Big Data Technologies	10
HS 6141	Elements of Development Studies	6
TOTAL		66
Semester IV		
Fundamental Courses		
Course Code	Course Name	Credits
IT 6218	Software Engineering	9
IT 6319	Cloud Computing	10
BM 6205	Basics of Research Methodology	7
CS6210	Data Structure and Algorithm	9
CS 6138	Web Application	9
IT 6130	Basics of Block chain Technology	7
IF 6220	Business Process Automation	9
TOTAL		60

F. Diploma in Business Information Systems and Technology (3rd Year)

Semester V		
Fundamental Courses		
Course Code	Course Name	Credits
IT 6312	Mobile Application Development	9
IF 6302	Fundamentals of E-business	9
IF 6305	Industrial Practical Training	10
IF 6306	Mini project	12
IT 6313	IT Project Management	8
IT 6316	Cyber Security	9
IF 6318	Fundamentals of Internet of Things	9
TOTAL		66
Semester VI		
Fundamental Courses		
Course Code	Course Name	Credits
IT 6320	Principles of Artificial Intelligence	9
IT 6323	Ethics and Laws of IT	7
IT 6318	Human Computer Interactions	9
IF 6314	Final Project	10
IF 6316	Fundamentals of Business intelligence	9
IF 6311	Enterprise systems	9
IF 6307	Business laws and Corporate Governance	7
TOTAL		60

BACHELOR OF APPLIED INFORMATICS IN INDUSTRIAL AUTOMATION**A. Bachelor of Applied Informatics in Industrial Automation (1st Year)**

Semester I		
Fundamental Courses		
Course Code	Course Name	Credits
HS 8101	Communication Skills	6
MS 8121	Linear Algebra and Calculus	6
IF 8101	Programming Concept	10
DS 8108	Development Studies	6

CS 8105	Basics in Digital Circuit	9
IT 8101	IT Fundamentals	10
ET 8104	Fundamental of Electrical Engineering	6
IF 8122	Data Acquisition and Analysis	8
IF 8124	Basic PLC Programming and Applications	8
TOTAL		69
Semester II		
Fundamental Courses		
Course Code	Course name	Credits
MS 8225	Discrete Mathematics	8
ET 8107	Fundamental of Electronics	9
IF 8126	Industrial Safety and Regulations	7
IF 8121	Industrial Measurement and Instrumentation	7
IF 8143	Industrial Automation I	7
IF 8123	Industrial Networking and Communication Protocols	7
IT 8108	Database design and Implementation	7
CS 8338	Control System Design	7
IF 8106	Introduction to Modern Operating Systems	7
TOTAL		69

B. Bachelor of Applied Informatics in Industrial Automation (2nd Year)

Semester III		
Fundamental Courses		
Course Code	Course Name	Credits
CS 8336	Electronic Fabrication	7
CS 8202	Software Engineering	8
CS 8237	Electronic Devices	7
IT 8206	System Analysis and Design	9
IF 8231	Embedded Systems Design	10
IF 8234	Fundamental of Industrial Robotic systems	9
IF 8232	Industrial Practical Training	10
		61

Semester IV		
Fundamental Courses		
Course Code	Course Name	Credits
IF 8346	Industry 4.0	9
IF 8236	Process Control and Automation	8
CS 8214	Computer Algorithms and modelling	6
IF 8235	Data Analytics	8
IF 8238	Sensors and Actuators	8
CS 8345	Industrial Automation II	10
IF 8237	Robotics and Automation Systems	9
IF 8207	Informatics Research Methodology	10
		68

C. Bachelor of Applied Informatics in Industrial Automation (3rd Year)

Semester V		
Fundamental Courses		
Course Code	Course Name	Credits
IF 8336	Mixed Reality in Automation	8
IT 8301	Cybersecurity	9
IF 8338	Industrial Practical Training	10
IT 8211	IT Project Management	6
IF 8301	Human Computer Interaction	9
IF 8317	Artificial Intelligence	9
IF 8340	Industrial Informatics Quality Control and Assurance	8
IF 8341	Final Year Project I	10
TOTAL		69
Semester VI		
Fundamental Courses		
Course Code	Course Name	Credits
BM 8340	Entrepreneurship and Management	6
IF 8342	Industrial Internet of Things	9
IF 8343	Industrial Systems Organization and Preventive Maintenance	9
IF 8344	Industrial Ethics and Professional Development	9
IF 8345	Innovation and Technology Management	9
IF 8312	Information Systems Management	6
IF 8347	Final Year Project II	12
TOTAL		60

BACHELOR OF APPLIED INFORMATICS IN MARKETING**A. Bachelor of Applied Informatics in Marketing (1st Year)**

Semester I		
Fundamental Courses		
Course Code	Course Name	Credit
HS 8101	Introduction to Communication Skills	9
MS 8123	Business Mathematics	6
DS 8101	Development Studies	9
IF 8150	Fundamentals of ICT	9
IF 8102	Multimedia Technologies	10
BM 8105	Principle of Marketing	10
IF 8101	Programming Fundamentals	10
TOTAL		63
Semester II		
Fundamental Courses		
Course Code	Course Name	Credit
BM 8109	Introduction to Business laws	9
BM 8107	Principles of Accounting	9
IT 8108	Database Design and Implementation	9
IF 8151	Computer Systems Architecture	9
IT 8110	Computer Networks	9
IF 8106	Operating Systems	9
BM 8140	Entrepreneurship	6
TOTAL		60

B. Bachelor of Applied Informatics in Marketing (2nd Year)

Semester III		
Fundamental Courses		
Course Code	Course Name	Credit
BM 8209	Sales Management	9
BM 8202	E-Procurement and Supply Management	9
IF 8202	Interactive Multimedia	9
IF 8256	E-Commerce	9
IF 8253	Digital Script Writing and Storyboarding	9
IT 8206	System Analysis and Design	10
IF 8254	Industrial Practical Training (IPT) I	10
TOTAL		65

Semester IV		
Fundamental Courses		
Course Code	Course Name	Credit
BM 8226	E-Marketing	9
BM 8229	Service Marketing	9
BM 8224	Research Methodology	9
IF 8206	IoT designing	10
IF 8255	Programming in Python	9
CS 8148	Web design and Hosting	9
IF 8252	Java Programming	9
TOTAL		64

C. Bachelor of Applied Informatics in Marketing (3rd Year)

Semester V		
Fundamental Courses		
Course Code	Course Name	Credit
IF 8364	Digital Media Design	9
IF 8365	Advanced Database Management Systems	9
IT 8301	Cyber Security	10
IF 8317	Artificial Intelligence	6
IF 8366	Data Mining and Analytics	10
IF 8367	Industrial Practical Training (IPT) II	10
IF 8368	Final Year Project I	12
TOTAL		66
Semester VI		
Fundamental Courses		
Course Code	Course Name	Credit
IF 8369	Data Science for Marketing	9
IF 8370	Business Intelligent and Analytics	10
IF 8371	Digital Marketing and Sustainable Business practices	9
IF 8301	Human Computer Interaction	8
IF 8372	Final Year Project II	12
IF 8355	Blockchain Technology (Elective)	9
CS 8106	Computer maintenance and repair (Elective)	10
TOTAL		67

8.4 COLLEGE OF SCIENCE AND TECHNICAL EDUCATION (CoSTE)

8.4.1 THE DEPARTMENT OF APPLIED SCIENCES

Programmes

The Department offers four (4) programmes:

- a) Diploma in Laboratory Science and Technology
- b) Diploma in Biotechnology
- c) Bachelor of Science in Laboratory Science and Technology
- d) Bachelor of Science in Biotechnology

8.4.1.1 LABORATORIES

- i. Microbiology Laboratory
- ii. Biochemistry Laboratory
- iii. Molecular Biology Laboratory

8.4.1.2 LIST OF STAFF

(Head of Department)

Dr. Hezron Mwakabona	PhD. Chemical Engineering (KU Leuven, Belgium); MSc. Environmental Science and Engineering (NM-AIST); BSc. Edu. Chemistry/Biology (UDSM)
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Professors

Prof. Godliving Mtui	PhD (Kanazawa), MSc (Kanazawa), BSc. Hons (UDSM)
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Lecturers

Dr. Gaspary Mwanyika	PhD Molecular Biol. (SUA), MSc. Life Sci (Health & Biomedical Sciences (NM-AIST), BSc. Biotech & Lab Sci. (SUA)
Dr. Bernadether Rugumisa	PhD Molecular Sciences (UDSM), MSc. Life Sci (Health & Biomedical Sciences (NM-AIST), BSc. Biotech & Lab Sci. (SUA)
Dr. Tumikia Sanga	PhD Biology (Copperbelt University, Zambia), MSc biochemistry (SUA), BSc with Education (SUA)

Assistant Lecturers

Ms. Paskalina Badi*	MSc. Biochemistry (SUA), BSc. Biotech & Lab Sci (SUA)*
Mr. Baraka Ngingo	MSc One Health Molecular Biology (SUA), BSc Biotechnology & Lab Sciences (SUA)
Ms. Felista Magesa	MSc Life Sci (Health & Biomedical Sciences (NM-AIST), BSc Biotechnology & Lab Sciences (SUA)
Mr. Victor Sanga	MSc Environment & Ecotoxicology (UDSM), BSc Sci with Education (SUA)

Tutorial Assistants

Mr. Musa Mbotoni*	BSc. Technology in Laboratory Science (DIT), Diploma in Lab Sci & Technology (MUST)
Mr. Ramadhani Shebughe	BSc. Medical Laboratory (MUHAS)
Mr. Obed Pella Paul	Bachelor of Medicine (MUHAS)
Ms. Erca William	Bachelor of Pharmacy (MUHAS)

Instructors

Mr. Kalugula Junja	MSc. Agricultural Biotechnology (Szent Istav University, Hungary), BSc. Biotechnology. (SUA)
Mr. Nicolaus Mbugi	MSc. Life Sciences (Health and Biomedical Science) (NM-AIST), BSc. Biotech (SUA)
Mr. Frank Mahiki	BSc. Molecular Biology & Biotechnology (UDSM), Diploma in Laboratory Science & Technology (ATC),
Ms. Grace Paul Rugalema	MSc. One Health and Molecular Biology (SUA), BSc. Biotechnology and Laboratory Science (SUA)

Laboratory Technologists

Ms Imelda Ndetewale	Bachelor of Laboratory Science and Technology, (MUST), Ordinary Diploma in Lab Science and Tech. (MUST)
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Laboratory Technicians

Mr. Peter Barageti	BSc. Biotechnology (SUA), Diploma in Science and Lab. (DIT)
Mr. Joseph Kayange	BSc. Lab Tech. (SUA), Diploma in Science and Lab. (DIT)
Mr. Charles Chekecha	BSc. Lab Tech. (SUA), FTC Science and Lab. (DIT)
Ms. Kokusima Kalugendo	Ordinary Diploma in Lab Science and Tech. (MUST)

Mr. Costantine Kuyela

Ordinary Diploma in Biotechnology (DIT)

Study leaves*8.4.1.3 PROGRAMME COURSES****DIPLOMA IN LABORATORY SCIENCE AND TECHNOLOGY****A. Diploma in Laboratory Science and Technology (1st Year)****Semester I**

Code	Name	Credits
HS 6106	Elements of Development Studies	6
HS 6117	Basic Communication Skills	5
IF 6128	Basics of Computer Application	5
AS 6101	Basics of Cell Biology	10
AS 6102	Atomic Structure and Radioactivity	9
AS 6103	Mechanics	10
AS 6104	Physical Chemistry I	10
AS 6105	Laboratory Solutions and Bench Reagents	10
TOTAL		66

Semester II

Code	Name	Credits
MS 6122	Basics of Calculus	6
BM 6141	Introduction to Entrepreneurship	5
AS 6106	Biological Reagents and Stains	9
AS 6107	Classification of Living Organism	9
AS 6108	Mechanics of Materials	9
AS 6109	Experimental Chemistry I	8
AS 6110	Experimental Physics I	8
AS 6111	Experimental Biology I	8
TOTAL		62

B. Diploma in Laboratory Science and Technology (2nd Year)**Semester I**

Code	Name	Credits
IT 6225	Computer Application	6
AS 6201	Instrument Calibration and Maintenance	8
AS 6202	Laboratory Samples and Specimens	8
AS 6203	Physical Chemistry II	8
AS 6204	Essentials of Physiology	8
AS 6205	Heat and Thermodynamics	6
AS 6206	Laboratory Safety and Design	6
AS 6207	Laboratory Stores Management	6
AS 6208	Industrial Practical Training I	12
TOTAL		68

Semester II

Code	Name	Credits
AS 6209	Electricity and Electromagnetism	7
AS 6210	Laboratory Separation Techniques	8
AS 6211	Introduction to Parasitology	8
AS 6212	Inorganic Chemistry	7
AS 6213	Fundamentals of Biochemistry	6
AS 6214	Research Techniques	6
AS 6215	Experimental Biology II	8
AS 6216	Experimental Chemistry II	8
AS 6217	Experimental Physics II	8
TOTAL		68

C. Diploma in Laboratory Science and Technology (3rd Year)**Semester 1**

Code	Name	Credits
ST 6321	Probability and Statistics	6
AS 6301	Fundamentals of Microbiology	6
AS 6302	Waves and Light	8
AS 6303	Environmental Management	6
AS 6304	Method Validation and Quality Assurance	7
AS 6305	Instrumental Methods in Chemical Analysis	9
AS 6306	Organic Chemistry	8
AS 6307	Classification of living organism II	7
AS 6308	Industrial Practical Training II	12
TOTAL		69

Semester II

Code	Name	Credits
AS 6309	Electronics and Electronic Devices	10
AS 6310	Basics of Genetics and Biotechnology	10
AS 6311	Industrial Chemistry	10
AS 6312	Experimental Chemistry III	9
AS 6313	Experimental Biology III	9
AS 6314	Experimental Physics III	9
AS 6315	Research Project	10
TOTAL		67

DIPLOMA IN BIOTECHNOLOGY**A. Diploma in Biotechnology (1st Year)****Semester I**

Code	Name	Credits
CS 6118	Fundamentals of Computer Application	8
HS 6117	Communication Skills	10
AS 6128	Molecular biology and Biotechnology	12
AS 6129	Cell Biology and Genetics	9
AS 6130	Basic Laboratory Instrumentation	9
AS 6131	Human Anatomy and Physiology	12
AS 6132	Introduction to Biochemistry	9
TOTAL		69

Semester II

Code	Name	Credits
AS 6111	Laboratory Animal Science	9
AS 6112	Hematology and blood transfusion	9
AS 6138	Human Pathology	10
AS 6114	Pharmacology	12
AS 6115	Analytical Chemistry	12
AS 6116	Mushroom cultivation techniques	10
TOTAL		62

B. Diploma in Biotechnology (2nd Year)**Semester I**

Code	Name	Credits
AS 6233	Cell and Tissue Culture Techniques	9
AS 6234	Fundamentals of Microbiology	12
AS 6235	Introduction to Parasitology and Entomology	12
AS 6236	Plant Physiology	9
MS 6223	Applied Statistics	10
AS 6213	Industrial Practical Training	12
TOTAL		64

Semester II

Code	Name	Credits
AS 6216	Immunology and Vaccines	12
AS 6217	Development Perspectives	8
AS 6218	Research Methodology	10
AS 6219	Diagnostic Parasitology and Entomology	12
AS 6220	Fundamentals of Nutrition	9
AS 6221	Biorisk and Biosafety	9
TOTAL		60

C. Diploma in Biotechnology (3rd Year)**Semester I**

Code	Name	Credits
AS 6315	Histology	12
AS 6316	Research Project I	12
AS 6317	Food Microbiology	9
AS 6318	Plant Pathology	9
AS 6319	Medical Ethics	8
AS 6320	Industrial Practical Training	12
TOTAL		60

Semester II

Code	Name	Credits
BM 6122	Entrepreneurship	9
AS 6322	Plant Breeding	12
AS 6323	Enzymology and fermentation technology	9
AS 6324	Animal Breeding	12
AS 6325	Basic laboratory quality Management	9
AS 6326	Research Project II	12
TOTAL		63

BACHELOR OF SCIENCE IN BIOTECHNOLOGY**A. Bachelor of Science in Biotechnology (1st Year)****Semester I**

Code	Name	Credits
CS 7116	Computer Skills	8
HS 7117	Communication Skills I	9
AS 8111	Fundamentals of Biotechnology	8
AS 8112	Cell Biology and Genetics	8
AS 8113	Laboratory Equipment and Management	6
AS 8114	Principles of Analytical Chemistry	8
AS 8115	Introduction to Biochemistry	8
AS 8116	Plant Physiology	8
AS 8125	Animal Physiology	8
TOTAL		63

Semester II

Code	Name	Credits
AS 8117	Cell and Tissue Techniques	9
AS 8118	Fundamentals of Microbiology	10
AS 8119	Parasitology and Entomology	10
AS 8120	Introduction to Virology	8
AS 8121	Microbial Genetics	6
AS 8122	Practical Training	12
AS 8123	Plant Pathology	8
AS 8124	Human Pathology	8
TOTAL		63

B. Bachelor of Science in Biotechnology (2nd Year)**Semester I**

Code	Name	Credits
AS 8220	Diagnostic Microbiology	8
AS 8221	Applied Biochemistry	8
AS 8222	Diagnostic Parasitology	8
AS 8223	Introduction to Virology	8
AS 8224	Practical Training	12
AS 8225	Industrial microbiology	10

AS 8226	Food Microbiology	8
AS 8227	Experimental laboratory Animal Science	7
TOTAL		61

Semester II

Code	Name	Credits
AS 8228	Immunology and vaccinology	12
AS 8229	Research Methodology	12
AS 8230	Laboratory Quality Management	9
AS 8234	Fundamentals of Bioinformatics	9
AS 8235	Biophysics and computational biology	12
AS 8232	Biorisk management and Bioethics	9
TOTAL CORE COURSES		63
Elective Courses		
Code	Name	Credits
AS 8233	Forensic Science	9
AS 8231	Environmental Biotechnology	9
TOTAL ELECTIVE COURSES		18

C. Bachelor of Science in Biotechnology (3rd Year)**Semester 1**

Code	Name	Credits
AS 8316	Practical Training	12
AS 8317	Post-Harvesting Technology	9
AS 8318	Gene Technology	12
TOTAL		33

Specialization Course in Semester I**Medical specialization**

AS 8319	Public Health and Risk Assessment	9
AS 8320	Biomedical Technology	12
AS 8321	Cytological and histological Techniques	9
TOTAL		30

Industrial/Agricultural specialization

AS 8323	Biocontrol of Crop Diseases	9
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AS 8324	Plant Breeding	9
AS 8325	Bio Fertilizer Technology	12
TOTAL		30

Semester II

Code	Name	Credits
AS 8325	Research Project	12
BM 8108	Entrepreneurship and Innovation	9
AS 8327	Bioprocess Engineering and Design	9
AS 8328	Pharmacology and Pharmacovigilance	9
TOTAL		39

Specialization Course in Semester II**Medical specialization**

AS 8329	Epidemiology	12
AS 8330	Medical ethics	6
AS 8331	Natural product Biotechnology	12
TOTAL		30

Industrial/Agricultural specialization

AS 8332	Food Biotechnology	10
AS 8333	Animal Biotechnology	10
AS 8334	Mushroom Farming technology	10
TOTAL		30

BACHELOR OF SCIENCE IN LABORATORY SCIENCE AND TECHNOLOGY

A. Bachelor of Science in Laboratory Science and Technology (1st Year)

Semester I

Core Courses		
Code	Name	Credits
IF 8112	Computer Application	6
HS 8101	Communication Skills	8
AS 8116	Molecular Biology and Biotechnology	10
AS 8117	Cell Biology and Genetics	8
AS 8118	Laboratory Instrumentation and Management	8
AS 8119	Principles of Analytical Chemistry	8
AS 8120	Biochemistry	8
TOTAL		56

Elective Courses		
AS 8121	Plant Physiology	8
AS 8122	Animal Physiology	10
MT 8103	Human Physiology*	12
MT 8102	Gross Human Anatomy*	12

Semester II

Core Courses		
Code	Name	Credits
AS 8123	Cell and Tissue Culture Techniques	9
AS 8124	Microbiology	10
AS 8125	Parasitology and Entomology	10
AS 8126	Haematology and blood transfusion	12
MT 8117	Biostatistics for Life Sciences	8
DS 08102	Development Studies	9
TOTAL		58
Elective Courses		
Code	Name	Credits
AS 8127	Plant Pathology	9
AS 8128	Human Pathology	9
TOTAL		18

B. Bachelor of Science in Laboratory Science and Technology (2nd Year)**Semester I**

Core Courses		
Code	Name	Credits
BM 8212	Development Studies	6
AS 8201	Organic Chemistry	9
AS 8202	Separation Methods	8
AS 8203	Chemistry Practical I	6
AS 8204	Molecular Biology	8
AS 8205	Electronics and Biosensors	8
AS 8206	Environmental Impact and Risk Assessments	8
AS 8207	Industrial Practical Training I	12
TOTAL		65

Elective Courses		
Code	Name	Credits
AS 8209	Natural Products	8
AS 8210	Thermal and Condensed Matter Physics	8
ST 8212	Biostatistics	8
TOTAL		24

Semester II

Core Courses		
Code	Name	Credits
AS 8221	Applied Probability and Statistics	8
AS 8211	Research methods	8
AS 8212	Biochemistry	9
AS 8213	Applied Electromagnetism	8
AS 8214	Chemistry Practical II	6
AS 8215	Experimental Biology II	6
AS 8216	Experimental Physics II	6
AS 8217	Physical chemistry II	9
TOTAL		60

Elective Courses		
Code	Name	Credits
AS 8218	Environmental Chemistry	8
AS 8219	Digital Electronics	8
CS 8228	Computer Programming	6
TOTAL		22

C. Bachelor of Science in Laboratory Science and Technology (3rd Year)

Semester I

Core Courses		
Code	Name	Credits
AS 8301	Descriptive Inorganic Chemistry	8
AS 8307	Research Project I	12
AS 8308	Industrial Practical Training II	12
AS 8316	Organic Spectroscopy	9
AS 8303	Vertebrates Anatomy and Physiology	8
AS 8304	Principles of Ecology	6
AS 8305	Applied Thermodynamics	8
TOTAL		63
Elective Course		
Code	Name	Credits
AS 8302	Metal Technology	8
AS 8306	Laboratory Animal Science	6
TOTAL		14

Semester II

Core Courses		
Code	Name	Credits
AS 8309	Quality Assurance and Good Laboratory Practice	8
AS 8310	Polymer Properties	9
AS 8311	Industrial Chemistry	9
AS 8312	Environment and Climate Change	8
AS 8313	Industrial microbiology	8
AS 8314	Introductory Forensic Science	8
AS 8315	Research Project II	12
BM 8341	Entrepreneurship and Management	8
TOTAL		70

8.4.2 THE DEPARTMENT OF NATURAL SCIENCES

Programmes

The Department offers four (4) Programmes:

- i. Bachelor of Science with Education in the following combinations
 - o Chemistry and Biology
 - o Chemistry and Mathematics
 - o Chemistry and Physics
 - o Physics and Mathematics
 - o Chemistry and Computer
 - o Biology and Computer
 - o Physics and Computer
 - o Mathematics and Computer
- ii. Bachelor of Science in Chemistry
- iii. Bachelor of Applied Nuclear Sciences
- iv. Bachelor of Aquatic Science and Aquaculture Technologies

8.4.2.1 LABORATORIES AND UNITS

- i. Chemistry Laboratory
- ii. Biology Laboratory
- iii. Physics Laboratory

8.4.2.2 LIST OF STAFF

(Head of Department)

Dr. Tumikia Raphael Sanga	PhD Biology (Copperbelt University, Zambia), MSc Biochemistry (SUA), BSc with Education (SUA)
Senior Lecturers	
Dr. Regan N. Kavishe	PhD. Aquaculture Science (Ningbo University, China); MSc. Aquaculture Science (Ningbo University, China); BSc. Aquaculture (SUA)
Lecturers	
Dr. Eliezer B. Mwakalapa	PhD. Veterinary Sciences (Norwegian University of Life Sciences, Norway); MSc. Marine Sciences (UDSM); BSc. Aquaculture (SUA)
Dr. Khamis N. Ally	PhD. Chemistry (Zonguldak Bulent Ecevit University, Turkey); MSc. Chemistry (Sakarya University, Turkey); Bachelor of Chemistry (Sakarya University, Turkey)

Dr. Colletha Y Mengo	PhD. Applied Zoology (UDSM); MSc. Zoology (UDSM); BSc. Ed. (UDSM); Dipl. Edu. Chemistry/Biology (Kleruu Teachers College)
Dr. Melkizedeck H. Tsere	PhD. Material Science and Engineering (NM-AIST), MSc. Material Science and Engineering (NM-AIST), BSc Ed Chemistry and Biology (St. John University of Tanzania).
Assistant Lecturers	
Mr. Salum S.M. Hassan	MSc. Natural Product and Value Addition (SUA); BSc. Ed. Chemistry and Biology (SUA); Dip. ED. Chemistry and Biology (Monduli Teachers College) *
Mr. Omega A. Vicent	MSc. Marine Sciences (UDSM); BSc. Aquatic Environmental Science and Conservation (UDSM)*
Dr. Kombo A. Kombo	PhD. Physics (Universitas GadjahMad, Indonesia), MSc. Physics (Gadjah Mada University, Indonesia); BSc. Ed. Physics & Maths (Muslim University) *
Mr. Bugumba J. Majondo	MSc. Nuclear Physics (UDSM); BSc. Ed. Physics & Maths (UDSM)
Mr. Amosi Makoye S	MSc. Material Science and Engineering (NM AIST); BSc. Chemistry (UDOM)*
Mr. Charles Johnstone	MSc. Physics (UDOM); BSc. Ed (UDSM) *
Mr. Phares M.D. Petro	MSc. Chemistry –(UDSM), BSc. Education (SUA)*
Mr. Almachius R. Rweyemamu	MPhil. Chemistry (Kwame Nkrumah University, Ghana), BSc. Education. (UDSM)*
Dr. John Peter. Kachira	PhD. Physics (University of Nairobi, Kenya), MSc. Physics (UDSM); BSc. Ed. (UDSM)
Mr. Bahati Kyando	MSc. Chemistry (UDSM); BSc. Edu Chemistry/Biology (SUA)*
Mr. Paul Mariba	MSc. Chemistry (UDSM); BSc. Education (UDSM)*
Ms. Joyce Ndinadyo Ndalijane	MSc. Edu. Biology (UDSM); BSc. Edu Chemistry/Biology (UDSM); Dipl. Edu. Chemistry/Biology (Kleruu Teachers College) *
Mr. Abel Mwakuna	MSc. Physics (UDOM); BSc. Physics (UDOM)*
Mr. Privatus Pius	MSc. Physics (UDOM); BSc. Education Physics/Mathematics (UDOM)*
Mr. Annasi Ayubu Said	MSc Physics (China University of Geosciences – WUHAN, China); BSc Edu Physics/Mathematics (Abdulrahman Al-Sumait University – Tanzania)

Mr. Antoni M. Bairo	MSc. Chemistry, BSc. Chemistry (UDOM)
Mr. Mussa B Mbegeze	MSc. Biochemistry (UDSM); BSc. Ed Chemistry and Biology (UDSM)
Tutorial Assistant	
Mr. Ayub Mwera	BSc. Ed. Physics & Maths (UDSM)*
Mr. Festo Kapinga	BSc. Ed. Physics & Maths (UDSM-MUCE)
Mr. Charles Kadala	BED Sc. Physics (UDSM-DUCE) *
Ms. Rehema Thoiba	BED Sc. Chemistry (UDSM)*
Mr. Sylvester R. Mnyawi	BSc. Ed. Chemistry and Biology (UDOM) Mr. Aleni Rudovick Felix BSc. Physics (UDOM)
Dr. Adili Assa Mbembela	Bachelor of Veterinary Medicine (SUA)*
Mr. Emmanuel Meshack Gwambaye	BSc. Ed. Chemistry and Biology (UDSM-MUCE)
Mr. Kennedy Hassan	BSc. Physics (UDOM)*

Laboratory Technicians

Ms. Eva Mwachese	Dip. Laboratory Sciences and Technology (MUST) * Ms. Syambutwa Magambo Dip. Laboratory Sciences and Technology (MUST) *
Mr. John Chagu	MSc. Chemistry (University of Szeged, Hungary); Bachelor of Technology in Laboratory Sciences (DIT); Dip. Laboratory Sciences and Technology (MUST)*
Mr. Emmanuel F. Mauris	Dip. Laboratory Sciences and Technology (MUST)
Ms. Paulina J. Mwita	BSc. Biotechnology and Laboratory Sciences (SUA); Dip. Laboratory Sciences and Technology (MUST)

*On study leave

8.4.2.3 PROGRAMME COURSES**BACHELOR OF SCIENCE WITH EDUCATION****A. UQF Level 8 Bachelor (Physics Courses)****Semester I**

Code	Name	Credits
NS 8101	Classical Mechanics	8
NS 8102	Vibrations, Waves and Optics	8
NS 8103	the Earth Atmosphere System	6
TOTAL		22

Semester II Year I

Code	Name	Credits
NS 8113	Physics Practical I	8

NS 8114	Electricity and Magnetism	8
TOTAL		16

Semester III Year 2

Code	Name	Credits
NSPH2105	Earth Atmosphere System	12
NSPH2106	Experimental Methods of Physics II	8
NSPH2107	Mathematical Methods of Physics	12
NSPH2108*	Advanced Mechanics*	8
TOTAL		40

Semester IV Year 2

Code	Name	Credits
NSPH2209	Quantum Physics	12
NSPH2210*	Fundamentals of Material Science*	8
NSPH2211	Fundamentals of Electrodynamics	8
TOTAL		28

Semester V Year 3

Code	Name	Credits
NSPH3112	Electronics	8
NSPH3113	Fundamentals of Atmospheric Physics	8
NSPH3114*	Elementary Particles*	8
NSPH3115*	Energy in the Environment*	8
TOTAL		32

Semester VI Year 3

Code	Name	Credits
NSPH3216	Physics of the Atom	8
NSPH3317	Solid State Physics	8
NSPH3218*	Physics Project*	12
NSPH3219*	Astrophysics*	8
NSPH3220*	The Basics of NMR Spectroscopy*	8
TOTAL		44

* Elective Course

B. UQF Level 8 Bachelor (Chemistry Courses)**Semester I Year 1**

Code	Name	Credits
NS 8104	Basic Analytical and Physical Chemistry	8

NS 8105	Atomic structure and Bonding	8
		16

Semester II Year 1

Code	Name	Credits
NS 8109	Chemistry Practical I	8
NS 8110	Organic Chemistry I	8
NS 8111	Basic Inorganic Chemistry	6
TOTAL		22

Semester III Year 2

Code	Name	Credits
NSCH2107	Chemical Thermodynamics	8
NSCH2108	Chemistry Practical III	8
NSCH2109	Instrumental Methods in Analytical Chemistry	8
NSCH2110*	Organic Structures, Reactions and Mechanisms*	12
TOTAL		36

Semester IV Year 2

Code	Name	Credits
NSCH2211	Organic Chemistry II	12
NSCH2212	Transition Element and Coordination Chemistry	12
NSCH2213	Chemical Kinetics and Catalysis	10
NSCH2214	Chemistry Practical IV	8
NSCH2215*	Environmental Analytical Chemistry*	8
TOTAL		50

Semester V Year 3

Code	Name	Credits
NSCH3116*	Chemistry Project*	12
NSCH3117	Chemistry Practical V	8
NSCH3118	Electrochemistry and Corrosion Protection	8
NSCH3119*	Polymer Chemistry*	8
TOTAL		36

Semester VI Year 3

Code	Name	Credits
NSCH3220	Organic Spectroscopy	8
NSCH3221*	Spectroscopy in Coordination Chemistry*	8

NSCH3222*	Chemistry of Natural Products*	8
TOTAL		24

* Elective Course

C. UQF Level 8 Bachelor (Biology Courses)

Semester I Year

Code	Name	Credits
NS 8106	Introduction to Cell Biology and Genetics	8
NS 8107	Invertebrate Zoology	8
NS 8108	Introductory Botany	6
TOTAL		22

Semester II Year 1

Code	Name	Credits
NS 8117	Chordate Zoology	8
NS 8118	Developmental Biology	8
TOTAL		16

Semester III Year 2

Code	Name	Credits
NSBL 2109	Vertebrate Anatomy and Physiology I	8
NSBL 2110	Introduction to Parasitology and Entomology	8
NSBL 2111*	Fundamentals of Soil Science*	8
TOTAL		24

Semester IV Year 2

Code	Name	Credits
NSBL 2212*	Biochemistry*	10
NSBL 2213	Vertebrate Anatomy and Physiology II	10
NSBL 2214	Fundamentals of Microbiology II	8
TOTAL		28

Semester V Year 3

Code	Name	Credits
NSBL 3115*	Molecular Genetics*	8
NSBL 3116	Evolution	8
NSBL 3117	Taxonomy of Higher Plants	8
NSBL 3118*	Plant Pathology*	8
TOTAL		32

Semester VI Year 3

Code	Name	Credits
NSBL 3219	Introduction to Biodiversity	10
NSBL 3220	Anatomy of Angiosperm	10
NSBL 3221*	Physiology of Nutrition*	8
TOTAL		28

* Elective Course

D. UQF Level 8 Bachelor (Mathematics Courses)**Semester I Year 1**

Code	Name	Credits
MS 8104	Foundation of mathematical Analysis	10
MS 8110	Linear Algebra	8
TOTAL		18

Semester II Year 1

Code	Name	Credits
MS 8107	Ordinary Differential Equations	8
MS 8108	Discrete Mathematics	8
TOTAL		16

Semester III Year 2

Code	Name	Credits
NSMT2110	Mathematical Analysis II	8
NSMT2111	Numerical Analysis I	8
NSMT2112*	Data Structures and Algorithm*	8
TOTAL		24

Semester IV Year 2

Code	Name	Credits
NSMT2213	Basics of Functional Analysis	8
NSMT2214	Probability Theory	8
NSMT2215	Introduction to Number Theory	8
NSMT2216*	Partial Differential Equations*	8
TOTAL		32

Semester V Year 3

Code	Name	Credits
NSMT3117	Abstract Algebra	8
NSMT3118	Introduction to Real Analysis	8
NSMT3119*	Database Design*	8
TOTAL		24

Semester VI Year 3

Code	Name	Credits
NSMT3220	Complex Variable Analysis	8
NSMT3221*	Mathematics Project*	12
NSMT3222	Statistical Inference	8
TOTAL		28

* Elective Course

E. UQF Level 8 Bachelor (Education Courses)**Semester I Year 1**

Code	Name	Credits
TE 8101	Philosophy of Education	8
TE 8102	Educational Psychology	8
TOTAL		16

Semester II Year 1

Code	Name	Credits
TE 8103	Inclusive Education	6
TE 8104	Sociology of Education	7
TOTAL		13

Semester III Year 2

Code	Name	Credits
NSED 2106	Guidance and Counselling in Education	8
NSED 2107	Education Measurement and Evaluation	8
TOTAL		16

Semester IV Year 2

Code	Name	Credits
NSED 2108	Principles of Curriculum Development	10
NSED 2209	Teaching Practice for Second Year	12
TOTAL		22

Semester V Year 3

Code	Name	Credits
NSED 3110	Education Management and School Administration	8
TOTAL		8

Semester VI Year 3

Code	Name	Credits
NSED 3211	Professionalism and Ethics in Education	8
TOTAL		8

F. Cross Cutting Courses**Semester I Year 1**

Code	Name	Credits
IT 8116	Computer Applications	8
TOTAL		8

Semester II Year 1

Code	Name	Credits
BM 8108	Entrepreneurship and Innovation	8
TOTAL		8

BACHELOR OF SCIENCE IN CHEMISTRY**A. Bachelor of Science in Chemistry (1st Year)****Semester I**

Code	Name	Credits
NS 8120	Basic Analytical Chemistry	10
NS 8121	Fundamentals of Nuclear Chemistry	8
HS 8101	Communication Skills	8
NS 8122	Inorganic Chemistry	8
IT 8116	Information and Communication Technology	8
BM 8108	Entrepreneurship and Innovation	9
NS 8123	Basics of Organic Chemistry	8
MS 8127	Limits of Functions and Calculus	6
TOTAL		65

Semester II

Code	Name	Credits
NS 8124	Chemistry Practical I	10
NS 8125	Chemistry of Transition Elements	10
NS 8126	Water treatment and waste water management	8
NS 8127	Quality Control and Assurance	8
NS 8128	Methods for Chemical Separation	8
NS 8129	Instrumental Methods in Analytical Chemistry	10
DS 8102	Development Studies	9
TOTAL		63

B. Bachelor of Science in Chemistry (2nd Year)**Semester I**

Code	Name	Credits
CH 8288	Chemical Thermodynamics	8
CH 8289	Electrochemistry	8
CH 8290	Chemistry of Natural Products	12
CH 8291	Industrial Chemistry	12
CH 8292	Chemistry Practical II	8
CH 8293	Industrial Practical Training I	12
CH 8294	Solid State Chemistry	8

AS 8306	Food Chemistry and Analysis (Elective)	8
MS 8129	Application of Calculus (Elective)	8
CH 8295	Metal Technology (Elective)	8
TOTAL		92

Semester II

Code	Name	Credits
CH 8296	Chemistry of Transition Elements	8
CH 8297	Stereochemistry and Aromaticity	12
CH 8298	Organic Reactions and Mechanisms	8
CH 8299	Research Methods	12
CH 82100	Environmental Analytical Chemistry	8
CH 82101	Chemistry practical III	8
CH 82102	Renewable energy technology	8
CH 82103	Organometallic and Catalysis Chemistry (Elective)	8
TOTAL		72

C. Bachelor of Science in Chemistry (3rd Year)
Semester I

Code	Name	Credits
CH 8388	Chemistry Practical IV	8
CH 8389	Forensic Chemistry	9
CH 8390	Polymer Chemistry	8
CH 8391	Bio inorganics	8
CH 8392	Chemical Kinetics and Catalysis	8
CH 8393	Chemistry Project	12
CH 8394	Industrial Practical Training II	12
CH 8395	Surface and Colloid Chemistry	8
TOTAL		73

Semester II

Code	Name	Credits
CH 8396	Chemistry Practical V	8
CH 8397	Spectroscopic Methods in Organic Chemistry	10
CH 8398	Basics of Biotechnology	8
CH 8399	Chemical Speciation Analysis	8
CH 3100	Quality Control and Assurance	8
CH 3101	Quantum Chemistry	8
CH 3102	Organic Synthesis	10
MS 8225	Statistical Inference (Elective)	8
CH 83103	Nanotechnology and Sensors (Elective)	8
TOTAL		76

BACHELOR OF APPLIED NUCLEAR SCIENCES**A. Bachelor of Applied Nuclear Sciences (1st Year)****Semester I**

Code	Name	Credits
NS 8131	Nuclear and Radiation Physics	12
HS 8142	Communication skills	6
NS 8132	Introduction to the nuclear fuel cycle	10
NS 8133	Radiochemistry	12
NS 8134	Societal aspects of Nuclear Technology	10
NS 8135	Radioecology	10
IT 8215	Fundamental of Computer Applications	8
TOTAL		68

Semester II

Code	Name	Credits
DS 08102	Development studies	9
NS 8136	Quantum Physics	10
NS 8137	Computational Physics	8
NS 8138	Experimental Methods in Nuclear Sciences I	10
NS 8139	Mathematical Methods for Nuclear Sciences	8
NS 8140	Nuclear Radiation Detection and Instrumentation	10
NS 8141	Industrial Practical Training	12
TOTAL		67

B. Bachelor of Applied Nuclear Sciences (2nd Year)**Semester I**

Code	Name	Credits
BM 8211	Principles of Human Resource management	10
NS 8238	Introduction to Materials science	10
NS 8239	Radiophysics	12
NS 8240	Experimental Methods in Nuclear Sciences II	10
NS 8241	Research Methodology	8
NS 8242	Accelerators and Radioisotopes in Medicine	10
BM 8108	Entrepreneurship and Innovation	9
TOTAL		69

Semester II

Code	Name	Credits
NS 8243	Materials Physics and Characterization	10
NS 8244	X-Rays and Diagnostic Radiology	8
NS 8245	Radiation Processing in Food and Medicine	10
NS 8246	Nuclear power	10
NS 8247	Radiation Dosimetry	8
NS 8248	Advanced Radiation Detection and Measurement	10
NS 8249	Industrial Practical Training	12
TOTAL		68

C. Bachelor of Applied Nuclear Sciences (3rd Year)**Semester I**

Code	Name	Credits
NS 8333	Nuclear Science Project	12
NS 8334	Nuclear Medicine	8
NS 8335	Computational Modelling	10
NS 8336	Radiation Protection	8
NS 8337	Radiographic Testing and Technology	10
NS 8338	NMR Spectroscopy and Imaging	10
NS 8339	Technical Visits and Case Studies	6
TOTAL		64

Semester II

Code	Name	Credits
NS 8340	Introduction to Health physics	10
NS 8341	Practical in Radiation Dosimetry	10
NS 8342	Nuclear law and legislation	8
NS 8343	Neutronic Analysis	10
NS 8344	Radiotherapy	10
NS 8345	Radiobiology	10
NS 8346	Hydrology and Soil Science	10
TOTAL		68

BACHELOR OF SCIENCE IN AQUATIC AND AQUACULTURE TECHNOLOGIES**A. Bachelor of Science in Aquatic and Aquaculture Technologies (1st Year)****Semester I**

Code	Name	Credits
NS 8144	Introduction to Aquaculture and Aquatic Sciences	8
NS 8145	Ichthyology	8
NS 8146	Chemistry for Life Sciences	8
NS 8106	Introduction to Cell Biology and Genetics	8
NS 8155	Watershed Management	6
NS 8148	Introduction of Ecology and Ecosystem	8
DS 08102	Development Studies	9
HS 8101	Communication Skills	9
TOTAL		64

Semester II

Code	Name	Credits
NS 8149	Limnology	8
NS 8150	Zoology of Aquatic Organisms	8
ST 8222	Biostatistics	8
NS 8151	General Microbiology	8
IT 8116	Information and Communication Technology	8
NS 8152	Biochemistry	8
NS 8153	Finance and Human Resource Management	8
NS 8154	Developmental Biology	8
TOTAL		64

B. Bachelor of Science in Aquatic and Aquaculture Technologies (2nd Year)**Semester I**

Code	Name	Credits
NS 8252	Genetic and Breeding Technologies in Aquaculture	8
NS 8253	Aquaculture Engineering	9
NS 8254	Mariculture	9
NS 8255	Principles of Fish Farming	8
NS 8256	Conservation of Wetlands (Elective)	6
NS 8257	Water Safety and Swimming Techniques	9
NS 8258	Food Microbiology (Elective)	6
NS 8259	Aquatic Biodiversity	8
NS 8260	Aquaculture Production Systems and Technologies	8
TOTAL		65

Semester II

Code	Name	Credits
NS 8261	Research Methods	8
NS 8262	Remote Sensing and GIS	8
NS 8263	Management of Aquatic Ecosystems	8
NS 8264	Algal Biotechnology (Elective)	8
NS 8265	Aquaculture Nutrition and Feed Technology	8
NS 8266	Economics and Marketing in Aquatic Sciences	8
NS 8267	Extension Programmes Planning and Evaluation	8
NS 8268	Sensory Evaluation of Foods and Product Development	8
NS 8269	Climate Change for Aquatic Resources (Elective)	6
TOTAL		64

C. Bachelor of Applied Nuclear Sciences (3rd Year)**Semester I**

Code	Name	Credits
NS 8349	Research Project I	9
NS 8350	Diseases and Health Management in Aquatic Organisms	8
NS 8351	Integrated Aquaculture Technologies	8
NS 8352	Marine and Freshwater Fisheries Technology	8
NS 8353	Field Practical Training	12
NS 8354	Aqua-business and entrepreneurship	8
NS 8355	Aquaculture Reproduction Technology	8
TOTAL		64

Semester II

Code	Name	Credits
NS 8358	Research Project II	9
NS 8359	Aquatic Products Processing and Quality Assurance	8
NS 8360	Integrated Coastal Zone Management	8
NS 8361	Aquaculture and the Environment	8
NS 8362	Aquatic Pollution and Toxicology	8
NS 8363	Fisheries Management	8
NS 8364	Aquatic Ecological Restoration (Elective)	6
NS 8365	Governance in Aquaculture and Fisheries	8
NS 8366	Environmental Impact Assessment (Elective)	6
TOTAL		63

8.4.3 THE DEPARTMENT OF MEDICAL SCIENCES AND TECHNOLOGY

Programmes

The Department offers Two (2) Programmes:

- i. Diploma in Biomedical Equipment Engineering
- ii. Bachelor of Science in Health Information Science

8.4.3.1 LABORATORIES

- i. Biomedical Laboratory
- ii. Biomedical workshop
- iii. Computer Laboratory

8.4.3.2 LIST OF STAFF

Head of Department

Dr. Bernadether T. Rugumisa PhD Molecular Sciences (UDSM), MSc. Life Sci & Bioengineering
(Health & Biomedical Sciences (NM-AIST), BSc. Biotech & Lab Sci.
(SUA)

Assistant Lecturers

Mr. Shukurani B. Philip*	MSc. Clinical Microbiology and Molecular Biology (CUHAS), BSc. Medical Laboratory Sciences (CUHAS), Advanced Diploma in Medical Laboratory Sciences (MUHAS)
Mr. Revocatus J. Mang'ara	MSc. Tropical Diseases control (MUHAS), BSc. in Environmental Health with Information Technology (Ruaha Catholic University)
Mr. Optatus Mwalongo*	MSc. Life Sciences & Bioengineering (Health and Biomedical Sciences) Nelson Mandela, BSc. with Education (UDSM)
Mr. Hamisi A. Maonezi*	MSc. Biotechnology (Medical specialization), BSc. Molecular Biology and Biotechnology (UDSM), Msc. in Biotechnology Wageningen University – Netherlands.
Mr. Jotham Kimondo *	Master of Biomedical Engineering (Uazhong University of Science and Technology - China and Biotechnology (SUA), BSc. Electronics and Telecommunication (St. Joseph Tazania)

Mr. Omar R. Kombo*	MSc Biomedical Engineering Wuhan University of Technology-China, BSc Biomedical Engineering Oran University of Sciences and Technology, Mohamed Boudiaf -Algeria
Mr. Heribert Kaijage	Master of Science in Natural Resources Assessment and Management (UDSM), Bachelor of Science in Environmental Health Science (UDSM)
Ms. Irene Y. Edward	Master of Science in Epidemiology (The University of Zambia), Bachelor of Science in Environmental Health Science (MUHAS)
Mr. Jackson G. Rusanyu	Master of Science in Biomedical Engineering (Universiti Teknologi Malaysia), Bachelor Of Electrical And Electronics Engineering (MUST), Diploma in Biomedical equipment Engineering (DIT)

Tutorial Assistants

Ms. Christina L. Mwabeza*	MSc.in Electronics Engineering and Information Technology (UDSM), Bachelor of Science in Computer Engineering (DIT)
Mr. Stivin Mwesiga Assed	Bachelor of Science in Health Information Systems (UDOM)
Ms. Faraja Nzenga Mbwiga	Bachelor of Science in Health Information Systems (UDOM)
Ms. Elizabeth Sifael Manase*	Bachelor of Science in Optometry (KCMC)
Ms. Theresia Norbert Masanja*	Bachelor of Science in Optometry (KCMC)
Mr. Wilfred J. Mzamo	Bachelor of Science in Radiation Therapy Technology (MUHAS)
Dr. Jacob Jacob Mlelwa	Doctor of Medicine (UDOM)
Dr. Mary Nicholaus Suke*	Doctor of Medicine (KCMC)
Dr. Malonja Yona Magaluda*	Doctor of Medicine (MUHAS),
Dr. Novatus Adriano Ngaga*	Doctor of Medicine (MUHAS),
Mr. Jackson Charles Babu	Bachelor in Biomedical Engineering (MUHAS)
Mr. Rebson Johakim Sanga	Bachelor in Electrical and Biomedical Engineering (ATC)
Mr. Oscar Punguti*	Bachelor of Science in Environmental Health Science (MUHAS)

Instructor II

Mr. Kadoke M. Kadoke*	MSc. Telecommunication Engineering (UDOM), BSc. Electronics and Telecommunication (St. Joseph-Tanzania)
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Technicians

Mr. John Mwilenga*	Diploma in Biomedical Equipment Engineering (MUST)
Mr. Erick Kanyiki	Diploma in Biomedical Equipment Engineering (MUST)

Mr. Issa Abdul Ramadhan

Diploma in Biomedical Equipment Engineering (MUST)

On Study leave*8.4.3.3 PROGRAMME COURSES****DIPLOMA IN BIOMEDICAL EQUIPMENT ENGINEERING****A. Diploma in Biomedical Equipment Engineering (1st Year)****Semester I**

Course Code	Course Name	Credits
HS 6117	Communication Skills	6
MS 6121	Algebra	7
MT 6117	Introduction to Computer Applications	5
MT 6118	Mechanical Physics	7
MT 6119	Basics of Electrical and Mechanical Workshop	7
MT 6120	Principles of DC Networks	8
MT 6121	Analog Electronics	8
MT 6122	Analog Electronics Lab	5
MT 6123	Human Anatomy and Physiology	9
MT 6124	Introduction to Biomedical Field, Hospital Safety and Standards	6
TOTAL		68

Semester II

Course Code	Course Name	Credits
MS 6122	Basics of Calculus	7
MT 6125	Fluid Mechanics and Radioactivity	6
MT 6126	Basic Technical Drawing	6
MT 6127	Introduction to Computer Programming	6
MT 6128	Electrical and Mechanical Machines Workshop	7
MT 6129	Principles of AC Networks	8
MT 6130	Electronic Circuits	8
MT 6131	Strength of Materials & Biomaterials	5
MT 6132	Intensive Care Unit Equipment	9
TOTAL		62

B. Diploma in Biomedical Equipment Engineering (2nd Year)**Semester 1**

Course Code	Course Name	Credits
HS 6116	Elements of Development Studies	6
MS 6221	Calculus	7
MT 6201	Electromagnetism	7
MT 6202	Data Structure and File Handling	5
MT 6203	Computer Aided Design	5
MT 6204	DC Machines	6
MT 6205	Digital Electronics	9
MT 6206	Biomedical Database Management	5
MT 6207	Biomedical Measurements and Instrumentation	9
MT 6208	Field Practical Training I	10
TOTAL		69

Semester II

Course Code	Course Name	Credits
MS 6222	Numerical Methods, Statistics and Probability	7
MT 6209	Heat and Thermodynamics	7
MT 6210	Embedded System Design	5
MT 6211	AC Machines	6
MT 6212	Air Conditioning and Refrigeration	6
MT 6213	Optician and Dentistry Equipment	9
MT 6214	Dialysis and Ultrasound Technology	9
MT 6215	Laboratory Equipment	9
MT 6216	Theatre Equipment	9
TOTAL		67

C. Diploma in Biomedical Equipment Engineering (3rd Year)**Semester I**

Course Code	Course Name	Credits
MT 6301	Microprocessor Technology	9
MT 6302	Communication Systems	9
MT 6303	Control Engineering	6
MT 6304	Biomedical Research Methods	9
MT 6305	Principles of Magnetic Resonance Imaging	9
MT 6306	Fundamentals of X-Ray and CT Scan	9
MT 6307	Biomedical Equipment Project Proposal	7
MT 6308	Field Practical Training II	10
TOTAL		68

Semester II

Course Code	Course Name	Credits
BM 6122	Introduction to Entrepreneurship	5
MT 6309	Work Ethics	6
MT 6310	Biomedical Computer Networks and Data Communications	8
MT 6311	Biomedical Equipment Management	6
MT 6312	Medical Devices Standards and Regulations	6
MT 6313	Radiotherapy and Lithotripter	9
MT 6314	Robotics and Automation	6
MT 6315	Biomedical Equipment Project	10
TOTAL		56

BACHELOR OF SCIENCE IN HEALTH INFORMATION SCIENCES**A. Bachelor of Science in Health Information Sciences (1st Year)****Semester I**

Course Code	Course Name	Credits
MT 8107	Introduction to Health Information Science	8
MT 8102	Gross Human Anatomy	11
MT 8103	Human Physiology	12
MT 8115	Medical Terminology	8
DS 8102	Development Studies	6
HS 8101	Communication Skills	6
IF 8112	Computer Applications	6
IT 8104	Programming Concepts	9
TOTAL		66

Semester II

Course Code	Course Name	Credits
MT 8117	Biostatistics for Health Sciences	8
IT 8113	Object-Oriented Programming	8
CS 8221	Operating Systems	9
IT 8208	Human Computer Interaction	8
CS 8120	Introduction to Database Systems	9
IT 8110	Computer Networks	8
MT 8116	Health Data Standards	8
MT 8212	Epidemiology	8
TOTAL		66
ST 82250	R Programming (Elective)	8

B. Bachelor of Science in Health Information Sciences (2nd Year)**Semester I**

Course Code	Course Name	Credits
CS 8218	Data Structure and Algorithm Analysis	9
CS 8207	Website Development and Hosting	6
CS 8217	System Analysis and Design	7
IT 8304	Java Programming	10
MS 8126	Linear Algebra	9
MT 8213	Regression Models for Health Data	9
MT 8214	Field Practical Training I	12
TOTAL		62

Semester II

Course Code	Course Name	Credits
IT 8204	Software Engineering	8
CS 8245	Database Management Systems	8
MT 8314	Telehealth and Telemedicine Technologies	9
CS 8321	Data Security	9
MT 8204	Geospatial Technology	8
MT 8226	Medical Coding and Billing	9
IT 8107	Python Programming	6
MT 8211	Infection Prevention & Control	9
TOTAL		66
MT 8407	Basic Life support and Emergency Care (Elective)	8

C. Bachelor of Science in Health Information Sciences (3rd Year)**Semester I**

Course Code	Course Name	Credits
MT 8312	Healthcare Systems Management	8
MT 8313	Health Records Management	9
MT 8405	Research Methodology	13
CS 8220	Introduction to Machine Learning	9
IT 8203	Mobile Application Development	9
MT 8332	Field Practical Training II	12
TOTAL		60

Semester II

Course Code	Course Name	Credits
MT 8331	Occupational Health and Safety	8
BM 8108	Entrepreneurship and Innovation	6
MT 8316	Big Data Management	11
MT 8411	Professionalism and Ethics	7
MT 8317	Health Project Monitoring and Evaluation	10
MT 8318	Final Year Project	18
TOTAL		60

8.4.4 DEPARTMENT OF TECHNICAL EDUCATION**Programmes**

The Department offers eight (8) programmes as indicated:

- i. Diploma of Technical Education in Mechanical Engineering;
- ii. Diploma of Technical Education in Civil Engineering;
- iii. Diploma of Technical Education in Electrical and Electronics Engineering;
- iv. Diploma of Technical Education in Architectural Technology;
- v. Bachelor of Technical Education in Mechanical Engineering;
- vi. Bachelor of Technical Education in Civil Engineering;
- vii. Bachelor of Technical Education in Electrical and Electronics Engineering;
- viii. Bachelor of Technical Education in Architectural Technology;
- ix. Bachelor of Technical education in Computer Science; and
- x. Bachelor of Technical Education in Telecommunication engineering

8.4.4.1 LABORATORIES/WORKSHOP

- i. Mechanical Workshop
- ii. Civil workshop
- iii. Architectural Laboratory
- iv. Electrical workshop

8.4.4.2 LIST OF STAFF

Head of Department

Dr. Enerico John Sumbizi
PhD of Education (Administration and Policy Studies), Master of Education, Administration, Planning and Policy studies (OUT) and Bachelor of Arts with Education,

Lecturers

Dr. Adam Joseph Chidyau
PhD in Educational Assessment and Evaluation Mwenge Catholic University; Master of Educational Assessment and Evaluation Mwenge Catholic University

Assistant Lecturers

Ms. Christer Burchard*
MSc. Ed (Education) Aga Khan University, BSc Education UDSM

Ms. Atida Mbingamno*
MED (Sc) Education UDSM, BSc. Education UDSM*

Ms. Frola Kayuki*
MEMP. (Education) St. Augustine University – Mwanza

Mr. Daliko Mhule
Master of Arts in Education (Mzumbe), Bachelor of Education (Counselling Psychology) (TEKU)*

Mr. Chacha. O. Matete*
Master of Education Management and Planning (SAUT), Bachelor in Education (RUCO)

Mr. Majaliwa Jeremiah
Master of Arts in Education (UDOM) Bachelor in Policy Planning and Management (UDOM)

Mr. Saigilu Lootha Mindey
Master of Education in Assessment and Evaluation, MEAE (SAUT), Bachelor of Education in Psychology (UDOM)

Ms. Agnes Kapinga*
Master of Arts in Gender studies (UDSM), Bachelor of Arts with Education (Kampala University) *

Mr. Matata John. Mbegalo
Masters in Education Management and Administration (UDSM-DUCE), Bachelor of Arts with Education (UDSM)

Mr. Castory Wolfram Kayombo*
Master of Education in Curriculum and Instruction (MED-CI) -Jordan University, BA Education (Jordan University)

Mr. Moabu Chandafa*
Master of Science Education Science (Mkwawa), BSc Education (UDSM)

Ms. Miriam Gervas Kaliwa
MSc of Education in Biology (University of Rwanda), BED Science (Biology) UDSM

Mr. Emmanuel Remitus Msangi	Master of Education in Curriculum and Instruction (RUCU); Bachelor of Arts with Education (UDSM - MUCE)
Mr. Lola Selele Kamaghe	Master science in educational mathematics (The Aga Khan Univ); Bachelor of Education in Mathematics and ICT (IU)
Ms. Helen H. Kapinga	Master of Education (UDSM); Bachelor of Arts in Education (UDSM - MUCE)

Instructors

Dr. Leoncia Kibani	PhD (education) (UDSM), Master of Education (Science) (UDSM), Bachelor of Science with Education (UDSM)
Dr. Mussa Ngonyani	PhD. in Education (University of Oslo-Norway), Master of Science in Education (University of Groningen, Netherlands), Bachelor of Education in Arts (UDSM)
Ms. Stella Toto Fulgence*	MA.Ed (Ed)-UDOM; Bed. (Policy Planning Management) UDOM*
Mr. Marcus Mwandangi	Master of Education (TEKU); Bachelor of Education in Mathematics (TEKU)
Ms. Letisia Richard Byanjweli*	Masters of Art in Applied Social Psychology (UDSM), BED Psychology (TEKU)*

**Study Leave*

8.4.4.3 BACHELOR OF TECHNICAL EDUCATION IN MECHANICAL ENGINEERING**Semester I Year 1**

Code	Name	Credits
TE 8101	Foundation and Philosophy of Technical Education	6
TE 8102	Educational Psychology	6
ME 8101	Engineering Drawing, I	7
ME 8102	Engineering Materials	6
ME 8103	Strength of Materials I	6
ME 8104	Machine Tools Technology	8
ME 8105	Automotive Engineering, I	8
IT 8116	Computer Applications	5
ME 8106	Environmental Engineering	6
MS 8121	Linear Algebra and Calculus	6
ME 8108	Welding Technology	10
TOTAL		69

Semester II Year 1

Code	Name	Credits
TE8103	Inclusive Education	6
TE8104	Sociology of Education	6
ME 8109	Engineering Drawing II	9
ME 8110	Machine Elements and Design, I	6
ME 8202	Engineering Mechanics- Dynamics.	6
ME 8112	Automotive Engineering II	10
ME 8113	Engineering Thermodynamics	7
BM 8102	Entrepreneurship	6
ME 8106	Industrial Practical Training (IPT)	10
MS 8122	Applied Calculus	6
TOTAL		62

Semester I Year 2

Code	Name	Credits
TE 8201	Professional Communication for Teachers	6
TE 8204	Assessment and Evaluation	6
ME 8201	Computer Aided Drafting I	8
ME 8111	Engineering Mechanics-Statics	6
ME 8203	Machine Elements and Design II	6
ME 8204	Foundry and Forging Technology	10
ME 8206	Fluid Mechanics	6
ME 8205	Manufacturing Engineering III	8
ME 8207	Industrial Practical Training I	8
MS 8221	Differential Equations	6
EE8240	Fundamentals of Electrical and Electronic Engineering	6
TOTAL		68

Semester II Year 2

Code	Name	Credits
TE 8203	Professionalism and Ethics in Education	6
TE 8204	Classroom Research	6
ME 8208	Computer Aided Drafting II	8
ME 8209	Machine Elements and Design III	6
ME 8210	Mechatronics	6
ME 8211	Engineering Project Management	6
ME 8213	Material Handling Design	6
CS 8200	Computer Programming	7
EE 8241	Electrical Machines	8
MS 8222	Statistics and Numerical analysis	6
TOTAL		65

Semester I Year 3

Code	Name	Credits
TE 8301	Curriculum and Teaching	6
ME 8301	Systems Reliability and Plant Maintenance	6
ME 8302	Engineering Design	6
ME 8304	Industrial Energy Management	6
ME 8305	Metal cutting and Machines Processes	8
ME 8306	Engineering Economics and Financial Management.	6
ME 8307	Engineering Research Methodology	7
ME 8308	Quality Control and Assurance	6
ME 8309	Computer Aided Engineering (CAE)	7
ME 8310	Industrial Practical Training II	8
TOTAL		66

Semester II Year 3

Code	Name	Credits
TE 8302	Instructional Leadership	6
ME 8311	Industrial Automation	7
ME 8312	Control Systems Engineering	6
ME 8313	Computer Aided Manufacturing (CAM)	7
ME 8315	Heat Transfer	6
ME 8316	Refrigeration System	8
ME 8317	Engineering Ethics and Professional Conduct	6
ME 8319	Power Plants	10
ME 8320	Project I	10
TOTAL		68

Semester I Year 4

Code	Name	Credits
TE 8401	Teaching Methods 1	10
ME 8401	Fluid Power and Control	6
ME 8402	Heating, Ventilation, and Air-Conditioning Systems (HVAC)	8
ME 8403	Automation and Robotics	7
ME 8404	Industrial Supervisor Skill and leadership	6
ME 8405	Turbo Machinery	6
ME 8406	Engine Design Technology	6
ME 8207	Project II	10
CS 8406	Object Oriented Programming	7
ME 8408	Industrial Practical Training III	8
TOTAL		68

Semester II Year 4

Code	Name	Credits
TE 8402	Teaching Methods 2	26
ME 8410	Practical Case Study	60
TOTAL		86

BACHELOR OF TECHNICAL EDUCATION IN CIVIL ENGINEERING**Semester I Year 1**

Code	Course Name	Credits
TE 8101	Foundation and Philosophy of Technical Education	6
TE 8102	Educational Psychology	6
MS 8101	Linear Algebra and Calculus	6
CS 8104	Programming Concepts	6
BM 8108	Entrepreneurship Education	6
CE 8101	Engineering Drawing, I	9
CE 8102	Construction Technology I	9
CE 8103	Workshop practice	8
CE 8104	Structural Mechanics I	8
CE 8110	Civil Engineering Materials	6

Total	70
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Semester II Year 1

Code	Course Name	Credits
TE 8103	Inclusive Education	6
TE 8104	Sociology of Education	6
MS 8102	Applied Calculus	6
CS 8110	Advanced C Programming	9
CE 8105	Engineering Drawing II	9
CE 8106	Construction Technology II	7
CE 8107	Building Construction	8
CE 8108	Structures Mechanics II	8
CE 8109	Land Survey	9
Total		68

Semester I Year 2

Code	Course Name	Credits
TE 8201	Professional Communication for Teachers	6
TE 8202	Assessment and Evaluation	6
MS 8221	Differential Equations	6
CE 8201	Soil Mechanics I	6
CE 8102	Civil Engineering Materials, -I	6
CE 8203	Fluid Mechanics	6
CE 8204	Engineering Survey I	9
CE 8205	Road Construction and Maintenance	8
CE 8206	Concrete Technology	6
CE 8207	Structural Analysis I	8
CE 8116	Industrial Practical Training	8
Total		69

Semester II Year 2

Code	Course Name	Credits
TE 8203	Professionalism and Ethics in Education	6
TE 8204	Classroom Research	4
MS 8303	Statistics and Numeric Analysis	6
CE 8208	Engineering Survey II	9
CE 8209	Fluid Mechanics and Hydraulics	9
CE 8210	Engineering Geology	6
CE 8211	Civil Engineering Materials. -II	9
CE 8212	Soil Mechanics II	6
CE 8213	Structural Analysis II	9
CE 8214	Building Planning and Drawing	6
Total		70

Semester I Year 3.

Code	Course Name	Credits
TE 8301	Curriculum and Teaching	6
CE 8301	Quantity Survey I	7
CE 8302	Geometric Design and Traffic Engineering	9
CE 8303	Reinforced Concrete Design and Detailing I	9
CE 8304	Foundation Engineering	9
CE 8305	Highway Engineering Materials	8
CE 8306	Construction Management	8
CE 8307	Engineering Hydrology	6
TE 8204	Industrial Practical Training (IPT) II	8
Total		70

Semester II Year 3

Code	Course Name	Credits
TE 8302	Instructional Leadership	6
CE 8308	Building Services	6
CE 8309	Quantity Surveying II	8
CE 8310	Reinforced Concrete Design and Detailing II	9
CE 8311	Water Supply Engineering	9
CE 8312	Contract Planning and Administration	7
CE 8313	Pavement Design and Construction	9
CE 8314	Research Methodology	7
CE 8315	Construction of Multi-Storey Structures	8
Total		69

Semester I Year 4

Code	Course Name	Credits
TE 8401	Teaching Methods 1	10
CE 8401	Engineering Economics	6
CE 8402	Structural Steel Design	6
CE 8403	Waste Water Management	6
CE 8404	Pavement Maintenance	6
CE 8405	Bridge Design and Construction	8
CE 8406	Pre-Stressed Concrete Design	6
CE 8407	Irrigation Engineering	6
CE 8408	Project I	15
CE 8316	Industrial Practical Training (IPT) III	8
Total		71

Semester II Year 4

Code	Course Name	Credits
TE 8402	Teaching Methods 2	18
CE 8409	Design of Masonry and Retaining Structures	6
CE 8410	Structural Timber Design	6
CE 8411	Solid Waste Management	6
CE 8412	Industrial Building Construction	6
CE 8413	Hydraulic Structures	8
CE 8414	Transportation Planning Engineering	6
CE 8415	Water Resources Management	
CE 8416	Project II	15
Total		72

BACHELOR OF TECHNICAL EDUCATION IN ARCHITECTURAL TECHNOLOGY**Semester 1 Year 1**

Course Code	Course Name	Credits
TE 8101	Foundation of Technical Education and Philosophy	6
TE 8102	Education Psychology	6
MS 8129	Applied Mathematics	6
BM 8108	Entrepreneurship	6
AA 8101	Architectural Draughting, I	12
AA 8102	Construction Technology I	6
AA 8103	Theory of Architecture I	6
AA 8104	History of Architecture I	6
AA 8105	Building Materials I	6
AA 8106	Mini- Industrial Practical Training I	2
CS 8107	Computer Application	6
Total		68

Semester 2 Year 1

Course Code	Course Name	Credits
AA 8107	Structural Mechanics	6
AA 8108	Architectural Draughting II	12
AA 8109	Construction Technology II	6
AA 8110	Theory of Architecture II	6
AA 8111	History of Architecture II	6
AA 8112	Building material II	6
AA 8113	Construction Surveying	6
AA 8115	Construction Detailing I	6
TE 8103	Inclusive Education	6
TE 8104	Sociology of Education	6
Total		66

Semester 1 Year 2

Course Code	Course Name	Credits
AA 8201	Design Studio I	14
AA 8202	Construction Technology III	6
AA 8203	Construction Detailing II	6
AA 8204	Building Physics I	6
AA 8206	Building Services & Installations I	6
AA 8207	Building Structures I	6
AA 8208	Material Science	6
AA 8209	Mini- Industrial Practical Training II	2
AA 8114	Industrial Practical Training (IPT)	8
TE 8201	Professional Communication for Teachers	6
TE 8202	Assessment and Evaluation	6
Total		72

Semester 2 Year 2

Course Code	Course Name	Credits
AA 8210	Design Studio II	14
AA 8211	Urban Design	6
AA 8212	Product Manufacture Technology	7
AA 8213	Building Physics II	6
AA 8214	Building Renovation and Maintenance I	6
AA 8215	Building Services and Installation II	6
AA 8216	Building Structures II	6
AA 8217	Building Information Modelling I	6
AA 8218	Alternative Energy Design	6
TE 8204	Classroom Research	6
Total		69

Semester 1 Year 3

Course Code	Course Name	Credits
AA 8301	Project I	16
AA 8303	Building Information Modelling II	6
AA 8304	Building Simulation I	7
AA 8305	Structural Analysis and Design I	6
AA 8307	Environmental control & sustainability I	6
AA 8308	Building Renovation and Maintenance II	6
AA 8309	Mini- Industrial Practical Training III	2
AA 8218	Industrial Practical Training (IPT) II	8
TE 8203	Professionalism and Ethics in Education	6
TE 8301	Curriculum and Teaching	6
Total		69

Semester 2 Year 3

Course Code	Course Name	Credits
TE 8302	Instructional Leadership	6
AA 8311	Construction Economics I	6
AA 8312	Professional Practice & Management	6
AA 8313	Structural Analysis and Design II	6
AA 8314	Product Manufacture Technology III	6
AA 8315	Building Simulation II	6
AA 8316	Research Methodology	6
AA 8317	Environmental control & sustainability II	6
AA 8319	Landscape technology	6
AA 8320	Conservation technology	
AA 8321	Interior design	
AA 8322	AI Application in Architecture	
Total		66

Semester 1 Year 4

Course Code	Course Name	Credits
TE 8401	Teaching Methods 1	10
AA 8401	Design Studio III	20
AA 8402	Pre-Design Research	24
AA 8403	Architectural Entrepreneurship	8
AA 8318	Industrial Practical Training (IPT) III	8
Total		70

Semester 2 Year 4

Course Code	Course Name	Credits
TE 8402	Teaching Methods 2	26
AA 8407	Comprehensive Design Project	60
Total		86

BACHELOR OF TECHNICAL EDUCATION IN ELECTRICAL AND ELECTRONICS ENGINEERING

Semester I Year 1

Course Code	Course Name	Credits
TE 8101	Foundation and Philosophy of Technical Education	6
TE 8102	Educational Psychology	6
EP 8101	Electrical Workshop Technology and Practice I	9
EP 8102	Fundamentals of Electronics	6
EP 8103	Basics of Electrical Engineering	6
MS 8121	Linear Algebra and Calculus	6
EP 8104	Introduction to Computers and Programming for Engineers	9
EP 8105	Engineering Drawing	9
EP 8113		6
	Total	66

Semester 2 Year 1

Course Code	Course Name	Credits
TE 8103	Inclusive Education	6
TE 8104	Sociology of Education	6
EP 8106	Electrical Workshop Technology and Practice II	9
EP 8107	Electrical measurement and Instrumentation I	6
EP 8108	DC Electrical Machines	9
EP 8109	Basics of Control Engineering	8
EP 8110	Computer Aided electrical Drafting (elective)	8
EP 8111	Safety and occupational health in electrical Engineering Practice	6
EP 8112	Computer programming for Engineers	8
MS 8122	Applied Calculus	6
	Total Credits	64

Semester 1 Year 2

Course Code	Course Name	Credits
TE 8201	Professional Communication for Teachers	6
TE 8202	Assessment and Evaluation	6
EP 8201	Industrial Practical Training I	10
MS 8221	Differential Equations	6
EP 8202	Transformer and induction motor	8
EP 8203	Electrical Power Plant	6
EP 8204	Electrical circuit Analysis I	6
EP 8205	Electrical Measurements and Instrumentation II	6
EP 8206	Basics of Engineering Electromagnetic	6
EP 8207	Engineering Thermodynamics	6
ME 8277	Fundamentals of Engineering Mechanics (ELECTIVE)	6
	Total Credits	66

Semester 2 Year 2

Course Code	Course Name	Credits
TE 8203	Professionalism and Ethics in Education	6
TE 8204	Classroom Research	6
MS 8222	Statistics and Numerical Methods	6
EP 8209	Electrical Circuits Analysis II	8
EP 8208	Digital Electronics I	8
ET 8317	Basics of Analogue Telecommunication	6
EP 8211	Electrical Power Transmission and Distribution	9
EP 8212	Engineering Electromagnetic I	8
EP 8213	Electrical Engineering Materials	7
EP 8210	Microprocessor and micro-controller (elective)	8
	Total Credits	64

Semester 1 Year 3

Course Code	Course Name	Credits
TE 8301	Curriculum and Teaching	6
EP 8301	Industrial Practical Training II	10
EP 8302	Basics of Power Electronics	9
EP 8303	Classical Control Systems Engineering	9
EP 8304	Power Systems Analysis I	9
EP 8305	3-Phase Synchronous AC Machines	8

EP 8306	Programmable Logic Controller	7
EP 8307	Digital Electronics II	8
	Total Credits	66

Semester 2 Year 3

Course Code	Course Name	Credits
TE 8302	Instructional Leadership	6
EP 8308	Research Methodology for Engineers	6
EP 8309	Electrical Power Systems Analysis II	9
EP 8310	Environmental Engineering Management	6
EP 8311	Modern Control Systems Engineering	9
EP 8312	Power Electronics Circuits	9
ET 8313	Basics of Digital Telecommunication	6
EP 8313	Maintenance and reliability in electrical engineering	9
EP 8314	Renewable Energy technologies	6
	Total	66

Semester 1 Year 4

Course Code	Course Name	Credits
TE 8401	Teaching Methods I	10
EP 8401	Industrial Practical Training III	10
EP 8402	Engineering Ethics and Professional Conduct	7
EP 8403	High Voltage Engineering	9
EP 8404	Project Planning and Engineering Management	7
EP 8405	Power Quality and Reliability	9
EP 8407	Project I	12
EP 8406	Applied artificial Intelligence in Electrical Engineering (Elective)	6
	Total	64

Semester 2 Year 4

Course Code	Course Name	Credits
TE 8402	Teaching Methods 2	26
EP 8408	Entrepreneurship for Engineers	8
EP 8409	Energy management and Auditing	9
EP 8410	Electric Vehicle Technology	9
EP 8411	Electrical Power Systems Protection	9
EP 8412	Electrical Drives	9
EP 8413	Project II	16
	Total Credits	86

BACHELOR OF TECHNICAL EDUCATION IN COMPUTER SCIENCE.**Semester I Year 1**

Course Code	Course Name	Credit
TE 8101	Foundation and Philosophy of Education	6
TE 8102	Educational Psychology	6
MS 8121	Linear Algebra and Calculus	6
CS 8101	Theory of Computation	10
CS 8140	Operating Systems	10
CS 8138	Programming Concepts in C	10
CS 8102	Basics in Digital Circuit	9
CS 8103	Electrical Fundamentals	9
Total Credits		66

Semester 2 Year 1

Course Code	Course Name	Credit
TE 8103	Inclusive Education	6
TE 8104	Sociology of Education	6
CS 8104	Computer Maintenance and Repair	10
CS 8105	Analytical Methods of computing	6
CS 8106	Object Oriented Programming	9
CS 8155	Human Computer Interaction	6
CS 8107	Introduction to Computer Systems Architecture	6
CS 8110	Computer Networks	10
CS 8108	Computer Systems Design	9
Total credits		68

Semester 1 Year 2

Course Code	Course Name	Credit
TE 8202	Assessment and Evaluation	6
TE 8205	Curriculum and Teaching	6
TE 8201	Professional Communication for Teachers	6
CS 8209	Research Methodology	6
MS 8223	Mathematical Logic and Formal Semantics	6
IT 8206	System Analysis and Design	9
CS 8203	Distributed Systems	6
CS 8204	Expert Systems	6
CS 8205	Website Development and Hosting	6
CS 8208	Industrial Practical Training	13
Total Credits		69

Semester 2 Year 2

Course Code	Course Name	Credit
TE 8203	Professionalism and Ethics	6
TE 8204	Classroom Research	6
TE 8206	Instructional Leadership	6
CS 8210	Data Structure and Algorithms	8
CS 8209	Microprocessor Technology	7
CS 8210	Database Design Concepts	8
CS 8211	Python Programming	6
CS 8203	Artificial Intelligence	8
CS 8212	Computer Algorithms and Modelling	6
CS 8213	Software Engineering	8
Total Credits		69

Semester 1 Year 3

Course Code	Course Name	Credit
TE 8303	Teaching Method 1	10
ST 8122	Statistics and Numerical Analysis.	6
IT 8301	Cyber Security and Digital Forensic	10
CS 8302	Network Design and Administration	8
CS 8303	Software Development and Management	8
CS 8304	Application Development for Mobile Devices.	8
CS 8305	Final Year Project I	10
CS 8314	Industrial Practical Training II	9
Total Credits		69

Semester 2 Year 3

Course Code	Course Name	Credit
TE8305	Teaching methods 2	26
CS 8301	Artificial Intelligence	8
CS 8438	Machine Learning	6
CS 8307	E-Commerce	6
CS 8308	Visual Application Development	9
CS 8309	Management Information System	10
CS 8310	Final Year Computer Science Project	10
CS 8312	Multimedia and Graphics Design	9
Total Credits		84

BACHELOR OF TECHNICAL EDUCATION IN TELECOMMUNICATION ENGINEERING.

Semester 1 Year 1

Course Code	Course Name	Credit
TE 8101	Foundation and Philosophy of Technical Education	6
TE 8102	Educational Psychology	6
MS 8121	Linear Algebra and Calculus	7
ET 8101	Introduction to Telecommunication Engineering	9
CS 8106	Computer Maintenance and Repair	9
ME 8176	Fundamentals of Technical Drawing	7
CS 8138	Programming Concept in C	7
EP 8104	Basic of Electrical Engineering	7
ET 8102	Measurements and Instrumentation	7
	Total credit	65

Semester 2 Year 1

Course Code	Course Name	Credit
TE 8103	Inclusive Education	6
TE 8104	Sociology of Education	6
MS 8122	Applied calculus	6
IT 8110	Computer Networks	7
EP 8204	Electrical Network Analysis	7
ET 8111	Engineering Software	7
ET 8112	Analogue Electronics I	7
ET 8113	Digital Electronics I	7
ET 8114	Electronics Workshop I	7
	Total Credits	67

Semester 1 Year 2

Course Code	Course Name	Credit
TE 8201	Professional Communication for Teachers	6
TE 8202	Assessment and Evaluation	6
ST 8221	Probability and Statistics	7
ET 8201	Engineering Electromagnetics I	7
ET 8202	Analogy Electronics II	7
CS 8304	Networking Design and Administration	7
ET 8203	Microcontrollers and Microprocessor	7
ME 8201	Computer Aided Drafting I	7
IF 8201	Object Oriented Programming	7
ET 8210	Industrial Practical Training I	8
	Total Credits	69

Semester 2 Year 2

Course Code	Course Name	Credit
TE 8203	Professionalism and Ethics in Education	6
TE 8204	Classroom Research	6
ET 8211	Wireless Sensor Networks	7
ET 8212	Digital Electronics II	7
CS 8210	Data structures and algorithms analysis	7
CS 8214	Artificial Intelligence	7
CS 8270	Linux System Administration	8
ET 8213	Signals and systems	7
ET 8214	Engineering Electromagnetics II	7
ET 8215	Electronics Workshop II	8
	Total Credits	69

Semester 1 Year 3

Course Code	Course Name	Credit
TE 8301	Curriculum and Teaching	6
ET 8301	Embedded Systems	6
ET 8302	Telecommunication Switching and Transmission	7
ET 8303	Mobile Communication System	7
ET 8304	Antenna and Radar	6
ET 8305	Analogue Telecommunications	6
CS 8112	Python Programming	7
ET 8306	Network Switching and Routing	7
CS 8306	Application Development for Mobile Devices	7
IF 8301	Human Computer Interaction (HCI)	
ET 8310	Industrial Practical Training II	10
	Total Credits	68

Semester 2 Year 3

Course Code	Course Name	Credit
TE 8302	Instructional Leadership	6
ET 8311	Research Methodology and Intellectual Property Rights	7
ET 8312	Tele-traffic engineering	7
ET 8313	Digital Telecommunications	7
EP 8318	Control System Engineering	8
ET 8314	Microwave Engineering	7
ET 8315	Digital signal processing	8
ET 8316	Optical communication Systems	7
CS 8362	Big Data Management	7

ET 8317	Very Large-Scale Integrated Circuits	
	Total Credit	64

Semester 1 Year 4

Course Code	Course Name	Credit
TE 8401	Teaching Methods 1	10
IT 8108	Data Modelling for Database	7
ET 8401	Satellite communications system	7
ET 8405	Telemedicine systems and Biomedical Devices	7
ET 8403	Information theory and coding	6
ME 8410	Professional ethics and conduct	7
CS 8109	Digital Forensics	6
ET 8404	Television Engineering	
ET 8402	Electronics Waste Management	
ET 8409	Final Year Project I	10
ET 8410	Industrial Practical Training III	8
	Total Credits	68

Semester 2 Year 4

Course Code	Course Name	Credit
TE 8402	Teaching Methods 2	26
BM 8108	Entrepreneurship and Innovation	7
ET 8411	Telecommunication Network Planning and Optimization	9
ME 8211	Engineering Project Management	7
CS 8301	Cyber Security and Digital Forensic	7
CE 8312	Contract Planning and Administration	8
ET 8412	Legal aspects of Telecommunication systems	8
EP 8410	Programmable logic controller	
ET 8420	Final Year Project II	12
	Total Credits	68

8.4.5 THE DEPARTMENT OF EARTH SCIENCES**Programmes****8.4.5 THE DEPARTMENT OF EARTH SCIENCES****Programmes**

The Department offers two (2) programmes:

- i. Bachelor of Natural Resources Conservation;
- ii. Bachelor of Science in Environmental Science and Technology.

8.4.5.1 LABORATORIES AND UNITS

- i. Biology Laboratory
- ii. Chemistry Laboratory
- iii. Microbiology Laboratory

8.4.5.2 LIST OF STAFF***(Head of Department)***

Dr. Philipina F. Shayo	PhD (Biodiversity and Ecosystem Management) (Nelson Mandela African Institute of Science and Technology); MSc. Environmental Management (Natural Resources Management) (The University of Queensland, Australia); BSc. Forestry (Sokoine University of Agriculture, Morogoro); Diploma. Forestry (FTI, Olmotonyi)
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Senior Lecturer

Dr. Fredrick Ojija	PhD Life Science & Bioengineering (Biodiversity & Ecosystems Management) (NM-AIST), MSc. (Vrije University of Brussels), BSc Wildlife (UDSM)
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Lecturers

Dr. Philipina F. Shayo	PhD (Biodiversity and Ecosystem Management) (Nelson Mandela African Institute of Science and Technology); MSc. Environmental Management (Natural Resources Management) (The University of Queensland, Australia); BSc. Forestry (Sokoine University of Agriculture, Morogoro); Diploma in Forestry (FTI, Olmotonyi)
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Dr. Hezron Mwakabona	PhD. Chemical Engineering (KU Leuven, Belgium); MSc. Environmental Science and Engineering (NM-AIST); BSc. Edu. Chemistry/Biology (UDSM)
Dr. Matungwa William	PhD in Civil Engineering (Water Quality Management) MUST, MSc. Agric. (Environmental Quality Sciences) (The Hebrew University of Jerusalem, Israel-HUJI), BSc. in Environmental Sciences and Management (SUA)
Dr. Gisandu K. Malunguja	PhD in Eco-physiology and Ecosystem Dynamics- Tezpur University, India; MSc. Biodiversity Conservation (UDOM), BSc. Ed Biology (UDOM)
Dr. Azaria L. Stephano	PhD in Environmental Sciences-Hungary University; MSc. Agric. (Environmental Quality Sciences) (Hebrew University of Jerusalem, Israel); BSc. Chemistry (UDOM)
Dr. Christopher A. Mgimba	PhD (Biodiversity and Ecosystem Management) (Nelson Mandela African Institute of Science and Technology); MIEM (UDSM), BSc. Ed (UDSM), Certificate in Biogas Hygiene Technology and Facilities in Developing Countries (BIOMA in PRC)
Assistant Lecturers	
*Mr. Mubashiru A. Kakurwa	Master in Integrated Environmental Management -MIEM (UDSM); BSc. Chemistry & Zoology (Islamic University in Uganda)
Mr. Phenson Justine	MSc. Agric. (Environmental Quality Sciences) (Hebrew University of Jerusalem, Israel); BSc. Chemistry (UDOM)
*Mr. Ndaki M. Manyanza	MSc. Biodiversity Conservation (UDOM); BSc. Biology (UDOM)
Mr. Emmanuel Supuku	M.A Natural Resource Assessment and Management (OUT); B.A. Education (OUT)
Ms. Everlyn Swai	MSc. Environmental and Natural Resource Economics (SUA); BSc. Wildlife Management and Conservation (SUA)
*Ms. Farida Mayowela	MSc. Ecosystem Services and Management (SUA); BSc. Wildlife Management (SUA); Diploma. Aquaculture (Mbegan Fisheries Development Center)
*Ms. Hildegard R. Kasambala	MSc. Environmental Science, BSc. Education (UDSM-DUCE)
*Ms. Julieth Joseph Balilemwa	MSc. Land and Water Management (Kenyata University, Kenya); BSc. Environmental Science and Management (SUA)

Mr. Amani Jaraifu Simbeye

MSc. Natural Resource Assessment and Management (UDSM); B.A. Education –
Geography (UDSM)**Tutorial Assistants**

Ms. Suniva S. Aligonza

BSc. in Botanical Sciences (UDSM)

Mr. Edward Swai

BSc. in Wildlife Management and Conservation (SUA)

On study leave*BACHELOR OF NATURAL RESOURCES CONSERVATION****A. Bachelor of Natural Resources Conservation (1st Year)****Semester I**

	<i>Core Courses</i>	
Course Code	Name	Credits
ES 8101	Invertebrate Zoology	8
ES 8102	Introductory Botany	8
ES 8103	Natural Resource Management	8
ES 8104	Introduction to Genetics	6
ES 8105	Plant Ecology and Phytogeography	6
ES 8106	Mammalian Biology	8
HS 8101	Communication Skills	6
DS 8108	Development Studies	6
IF 8112	Computer Application	6
Total		62
	<i>Elective Courses</i>	
Course Code	Name	Credits
ES 8107	Beekeeping	6
ES 8108	Non-Timber Forest Products	6
Total		12

Semester II

<i>Core courses</i>		
Course Code	Name	Credits
ES 8109	Chordate Zoology	8
ES 8110	Ecology	8
ES 8111	Introductory Botany	8
ES 8112	Wildlife Disease	10
ES 8113	Biodiversity Conservation	8
ES 8114	Tourism and Recreation Management	6
ES 8115	Herpetology	8
NS 8145	Ichthyology	8
Total		64

B. Bachelor of Natural Resources Conservation (2nd Year)*Semester I year 2*

<i>Core courses</i>		
Course Code	Name	Credits
ES 8201	Vertebrate Anatomy & Physiology	8
ES 8202	Forest Resource Assessment	7
ES 8203	Wildlife Nutrition	8
ES 8204	Limnology	8
ES 8205	Entomology	8
ES 8206	Ornithology	8
MS 8225	Biostatistics	8
Total		63
<i>Elective courses</i>		
Course Code	Name	Credits
ES 8207	Management of Wildlife in Captivity	6
ES 8209	Utilization of Natural Resources	6
Total		12

Semester II

<i>Core courses</i>		
Course Code	Course name	Credits
ES 8209	Range and Fire Ecology	8
ES 8210	Animal Behaviour	8
ES 8211	Remote Sensing and GIS	8
ES 8212	Coastal and Marine Ecosystems	8
ES 8213	Climate Change	8
ES 8214	Silviculture	8
ES 8215	Principles of land Use Planning	6
ES 8216	Environmental Impact Assessment and Audit	6
ES 8217	Research Methodology	6
Total		66

C. Bachelor of Natural Resources Conservation (3rd Year)*Semester I year 3*

<i>Core course</i>		
Course Code	Name	Credits
ES 8301	Mini Field Practical	8
ES 8302	Environmental Science	8
ES 8303	Governance in Natural Resources Conservation	6
ES 8304	Criminology and Wildlife Law Enforcement	8
ES 8305	Principles of management and Administration	6
ES 8306	Research Project I	8
ES 8307	Community-based Conservation and Extension	6
ES 8316	Environmental Pollution and Management	
Total		56

<i>Elective Courses</i>		
Course Code	Name	Credits
ES 8308	Tourism Marketing	6
ES 8221	Sustainable Agriculture and Soil Management	6
Total		12

Semester II

<i>Core Courses</i>		
Course Code	Course name	Credits
ES 8309	Environmental and Natural Resource Economics	8
ES 8310	Research Project II	8
ES 8311	Ecological Modelling	8
ES 8312	Soil Science	8
ES 8313	Biogeography	8
AS 8233	Forensic Science	9
ES 8315	Field Practical Training	12
BM 8341	Entrepreneurship and Innovation	6
Total		67

BACHELOR OF SCIENCE IN ENVIRONMENTAL SCIENCE AND TECHNOLOGY

A. Bachelor of Science in Environmental Science and Technology (1st Year)

Semester I

<i>Core Courses</i>		
Course Code	Name	Credits
ES 8115	Environmental Science	8
IF 8112	Computer Applications	6
ES 8110	Chemical Laboratory Techniques	8
ES 8105	Plant Ecology & Phytogeography	8
HS 8101	Communication Skills	6
ES 8114	Quality control & Assurance	6
BM 8341	Entrepreneurship and Innovation	6
DS 8101	Development Studies	6
ES 8103	Natural Resources Management	6
Total		60

Semester II

<i>Core courses</i>		
Course Code	Name	Credits
ES 8113	Biodiversity Conservation	8
ES 8115	Oceanography and Limnology	8
MT 8331	Occupational Health and Safety	8
ES 8116	Environmental Physics	8
ES 8117	Environmental Chemistry	8
ES 8118	Entrepreneurship Skills for Environmental Technologists I	10
NS 8332	Nanotechnology	8
ES 8120	Atmospheric chemistry	6
Total		64

B. Bachelor of Science in Environmental Science and Technology (2nd Year)

Semester I

<i>Core courses</i>		
Course Code	Name	Credits
ES 8218	Environmental Policies, Laws & Regulations	8
ES 8222	Environmental Toxicology	8
ES 8220	Solid waste Management Technologies	8
ES 8221	Environmental Monitoring and Evaluation	8
ES 8225	Environmental Biotechnology	8
ES 8223	Water Treatment and Wastewater Management	8
ES 8224	Environmental sampling and analysis	8
NS 8231	Instrumental methods in analytical Chemistry	8
Total		64

Semester II

<i>Core courses</i>		
Course Code	Course name	Credits
ES 8225	Climate change and Variability	6
ES 8215	Principles of Land Use Planning	8
ES 8216	Environmental Impact Assessment and Audit	8
MS 8225	Biostatistics	6
ES 8211	Remote Sensing and GIS	6
ES 8217	Research Methodology	6
ES 8226	Entrepreneurship skills for Environmental Technologists II	8
IT 82120	Atmospheric Chemistry	6
NS 82121	Remote Sensing and GIS	6
NS 82122	Entrepreneurship Skills for Environmental Technologists II	8
Total		68
<i>Elective Courses</i>		
Course Code	Name	Credits
ES 8227	Sustainable Agriculture and Soil Management	6
ES 8108	Non-Timber Forest Products	6
Total		12

C. Bachelor of Science in Environmental Science and Technology (3rd Year)

Semester I

<i>Core courses</i>		
Course Code	Name	Credits
ES 8311	Environmental restoration & remediation technologies	6
ES 8312	Natural Disaster Management	8
ES 8313	Project Planning and Management	6
ES 8314	Industrial Practical Training I	12
ES 8315	Industrial Waste Management Technologies	8
ES 8316	Environmental Pollution and Management	6
ES 8317	Hazardous Waste Management Technologies	8
ES 8318	Research Project I	8
Total		62

Semester II

<i>Core courses</i>		
Course Code	Name	Credits
ES 8312	Soil Science	8
ES 8310	Environmental and Natural Resources Economics	8
ES 8319	Research Project II	8
ES 8320	Industrial Practical Training II	12
ES 8321	Environmental Planning	8
ES 8322	E-Waste Management	8
ES 8323	Environmental microbiology	8
ES 8324	Urban Water Sanitation and Hygiene	8
Total		68

8.4.6 THE DEPARTMENT OF MATHEMATICS AND STATISTICS**Programmes**

The Department offers one (1) programme:

- i. Diploma in Applied Statistics

8.4.5.1 LIST OF STAFF

(Head of Department)

PROGRAMMES COURSES**DIPOMA IN APPLIED STATISTICS****A. Diploma in Applied Statistics (1st Year)****Semester I**

Code	Name	Credits
HS 6117	Communication Skills	8
MS 6101	Fundamentals of Statistics	12
MS 6102	Functions and Inequalities	10
MS 6103	Probability Theory	12
MS 6104	Basic Linear Algebra	10
IT 6125	Computer Application	9
TOTAL		61

Semester II

Code	Name	Credits
MS 6105	Applied Social - Economic Statistics	10
IT 6124	Database Management Systems	8
MS 6106	Discrete Mathematics	10
HS 6116	Elements of Development Studies	10
MS 6107	Data Processing with CSPro	12
MS 6108	Sampling Techniques	10
TOTAL		60

B. Diploma in Applied Statistics (2nd Year)**Semester I**

Code	Name	Credits
MS 6202	Data collection Techniques	10
MS 6203	Probability Distributions	10
MS 6221	Calculus	6
MS 6201	Demography	10
MS 6204	Regression Analysis	10
BM 6226	Economics	8
MS 6205	Parametric Statistical Inference	10
	TOTAL	64

Semester II

Code	Name	Credits
MS 6211	Data Analysis with Spreadsheets	10
MS 6207	Data Analysis with SPSS	10
MS 6206	Official Statistics	10
MS 6208	Statistical Case Study	10
MS 6209	Field Work Supervision	10
MS 6210	Non-Parametric Statistics	10
	TOTAL	60

C. Diploma in Applied Statistics (3rd Year)**Semester I**

Code	Name	Credits
MS 6305	Data Analysis with R	10
MS 6301	Basics of Operations Research	10
MS 6302	Survival Analysis	10
MS 6303	Research Methodology	10
MS 6206	Field Practical Training	10
MS 6301	Basic Biostatistics	10
	TOTAL	60

Semester II

Code	Name	Credits
MS 6307	Basics of Time Series	12
MS 6308	Actuarial Statistics	10
MS 6309	Statistical Quality Control	10
BM 6302	Basics of Financial Management	6
MS 6310	Data Analysis with STATA	10
MS 6311	Field Research Project	12
	TOTAL	60

8.5 COLLEGE OF HUMANITIES AND BUSINESS STUDIES (CoHBS)

8.5.1 DEPARTMENT OF BUSINESS MANAGEMENT

Programmes

The Department offers Seven (6) programmes:

- i. Diploma in Business Administration
- ii. Diploma in Marketing and Entrepreneurship
- iii. Diploma in Accounting and Finance
- iv. Diploma of Agribusiness
- v. Bachelor of Agribusiness Management
- vi. Bachelor of Business Administration with the following specializations:
 - Accounting and Finance
 - Procurement and Supply Chain Management
 - Marketing and Entrepreneurship
 - Human Resources Management

8.5.1.1 LIST OF STAFF

LIST OF STAFF

Head of Department

Dr. Lazaro E. Kagata	PhD (SUA), MSc (Development Policy) (Mzumbe), BSc (Environmental Sciences and Management) (SUA), BSc (Education) (UDSM)
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Senior Lecturers

Dr. Vicent Kipene	PhD (SUA); MBA (SUA), BSc. Agr. Ed (SUA), Dip Ed. (Monduli)
Dr. Emmanuel Tonya	PhD (OUT), MBA –Marketing (OUT), B. Com-Marketing (OUT)
Dr. Hadija M. Matimbwa	PhD in Human Resources Management (Mzumbe University), MBA in Human Resources Management (Ruaha Catholic University), Bachelor of Home Economics and Human Nutrition (SUA)

Lecturers

Dr. Yohana J. Sesabo	PhD in Innovation Management (Mzumbe), MSc. Entrepreneurship (Mzumbe); BBA (Marketing) (Mzumbe)
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Dr. Lulu Lufenge	PhD (PJ TSAU); MA (Rural Development) (SUA); BSc (Home Economics and Human Nutrition) (SUA)
Dr. Ibrahim Kadigi	PhD in Agricultural Economics (SUA), MSc Agricultural Economics (SUA), BSc in Information and Communication Technology (Mzumbe University)
Dr. Ukende Kingu	PhD in Management (UDOM), MBA (UDSM), BSc. Food Science & Tech (SUA).
Dr. Said M. Msangi	PhD in Human Resources Management (OUT) MBA (UDSM), BA (UDSM)
Mr. Abbas Y. Sanga	MARD (SUA); Bed (UDSM); Accounting technician certificate (DSA)
Ms. Herieth J. Rogath	MSc (Industrial Logistics) (Molde, Norway); MSc International Trade (UDSM); BSc (Urban and Regional Planning) (UCLAS)
Assistant Lecturers	
Mr. Phillipo A. Magembe	MBA-Corporate Management (Mzumbe); Advanced Diploma in Accountancy (TIA)
Mr. Galus A. Kitapankwa	MEED (UDSM), BEd. Sc (UDSM)
*Ms. Albentina Leonard	MBA (Finance & Banking) Mzumbe, BA.Ed (UDSM)
Mr. Evans J. Lupenza	MBA (OUT), B. Com (UDSM), DACA, (Moshi Coop. College).
Mr. John F. Mogha	MBA-Corporate Management (Mzumbe); BSc (Agricultural Education and Extension) (SUA), Diploma in Education (Physics and Mathematics)
Mr. Ibrahim Mwasyeba	MBA-Corporate Management (Mzumbe); Advanced Diploma in Accountancy (IAA)
*Mr. Stephano Matiku	Master Degree in Business Management (Moshi Co-operative University), BBA (MUST)
*Mr. Justus S. Massawe	MSc.PSCM (Mzumbe), CPSP (T), 2014, BA (Procurement and Supply Management) (MUCCoBS)
*Mr. Emmanuel Sanga	MBA (HRM) (TEKU), Bachelor of Public Administration (HRM) (Mzumbe)
Ms. Fatuma M. Mwinyange	MBA (UDOM), Bachelor of Education with Mathematics (Tumaini University)
*Mr. Nickson S. Kahigi	MSc. Agricultural Economics (SUA), BSc Agricultural Economics and Agribusiness (SUA)
Ms. Helen Samwel Sese	MSc. Agricultural and Applied Economics (SUA, Pretoria University of South Africa), BSc. Agricultural Economics and Agribusiness (SUA).
Mr. Brown Claus Mwasyeba	MBA (Accounting and Finance) Ruaha Catholic University; BBA (Accounting and Finance) Tumaini University-Iringa
CPA Evetha D. Kisanga	CPA (NBAA), MBA (Finance) SAUT-Mwanza; Advanced Diploma in Accountancy (SAUT);

CPA Naomi R. Nyambo	CPA (NBAA), MBA (Accounting and Finance (Mzumbe), BAF (Mzumbe)
Ms Shukuru Sanga	MBA in Marketing (Mzumbe), BBA (Marketing and Entrepreneurship) (MUST), Diploma in Business Administration (MUST)
*Ms. Adventina Wigenge	Masters in Human Resources Management (OUT), Bachelor of Human Resources Management (OUT)
Mr. Willy Innocent	Masters in Human Resources Management (OUT), Bachelor of Human Resource Management (OUT)
Mr. Frank Kichanja	Master of Procurement and Supply Management (IAA), Bachelor of Procurement and Supply Management (SAUT)
Ms. Salome Chambo	Master of Procurement and Supply Management (CBE), Bachelor of Procurement and Supply Management (CBE)
Tutorial Assistant	
*Mr. Ezekia M. Laiton	BBA with Education (Arusha University)
Mr. Allen Temba	Bachelor of Procurement and Logiistic Management (TIA)
CPA Beatrice Samagwa	CPA (NBAA), Bachelor of Accounting and Finance (Mzumbe University)
Mr. Ally Y. S. Kasuwi	Bachelor of Accounting and Finance
Mr. Bahati M. Manoni	Bachelor of Procurement and Logistics Management (TIA)
Ms. Devota Gerad	BSc. Agricultural Economics and Agribusiness (SUA).
Ms. Jesca Ambrosi	Bachelor of Human Resources Management (Mzumbe University)
Ms. Esther Lufingo	Bachelor of Procurement and Supply Chain Management (SAUT)
Instructor	
Grace J. Moshia	MBA (TEKU), PGD (Regional Planning) (IRDP), Advanced Diploma (Business Administration) (CBE)

*Note: * On study leave*

PROGRAMME

DIPLOMA OF BUSINESS ADMINISTRATION IN ACCOUNTING AND FINANCE

A. Diploma of Business Administration in Accounting and Finance (1st Year)

Semester I

Core Courses		
Code	Name	Credits
BM 6101	Introduction to Business	12
HS 6116	Elements of Development studies	10
BM 6103	Introduction to Marketing	12
HS 6114	Basics of Business Communication	12
MS 6125	Fundamental Business Mathematics	6
IT 6128	Basics of Computer Skills	9

TOTAL		61

Semester II

Core Courses		
Code	Name	Credits
BM 6104	Principles of Management	12
BM 6105	Financial Accounting I	12
BM 6106	Principles of Procurement	12
BM 6102	Principles of Economics	12
IT 6125	Computer Application	9
MS 6127	Business Statistics	6
TOTAL		63

A. DIPLOMA OF BUSINESS ADMINISTRATION IN ACCOUNTING AND FINANCE – TWO YEARS PROGRAMME

DIPLOMA OF BUSINESS ADMINISTRATION IN ACCOUNTING AND FINANCE (Second year)

Semester I

Core Courses		
Code	Name	Credits
BM 6201	Freight Clearing and forwarding	9
BM 6207	Basics of Public Sector Accounting	10
BM 6205	Basics of Research Methodology	10
BM 6204	Basics of Financial Management	10
BM 6208	Elementary Money and Banking	10
BM 6203	Field Practical Training	10
BM 6209	Computerized Accounting Systems	9
TOTAL		68

Semester II

Core Courses		
Code	Name	Credits
Code	Name	Credits
BM 6221	Principles of Insurance	10
BM 6214	Basics of Taxation and Public Finance	10
BM 6222	Basics of Cost Accounting and Procurement	10
BM 6213	Business Environment	10
BM 6223	Basics of Micro Finance	10
BM 6217	Research Project	10
TOTAL		60

B. DIPLOMA OF BUSINESS ADMINISTRATION IN MARKETING AND ENTREPRENEURSHIP – THREE YEARS PROGRAMME

DIPLOMA OF BUSINESS ADMINISTRATION IN MARKETING AND ENTREPRENEURSHIP (First year)

Semester I

Core Courses		
Code	Name	Credits
BM 6101	Introduction to Business	12
BM 6102	Introduction to Marketing	12
HS 6114	Basic Business Communication	12
HS 6116	Elements of Development Studies	10
MS 6125	Fundamental Business Mathematics	6
IT 6128	Basic Computer Skills	9
TOTAL		63

Semester II

Core Courses		
Code	Name	Credits
BM 6103	Principles of Economics	12
BM 6104	Principles of Management	12
BM 6105	Financial Accounting I	12
BM 6106	Principles of Procurement	12
IT 6125	Computer Application	9
MS 6127	Business Statistics	6
TOTAL		63

C. DIPLOMA OF BUSINESS ADMINISTRATION IN MARKETING AND ENTREPRENEURSHIP – TWO YEARS PROGRAMME

DIPLOMA OF BUSINESS ADMINISTRATION IN MARKETING AND ENTREPRENEURSHIP (Second year)

Semester I

Core Courses		
Code	Name	Credits
BM 6210	Small Business Management	9
BM 6203	Field practice	10
BM 6204	Basics of Financial Management	10
BM 6205	Basics of Research Methodology	10
BM 6206	Basics of Logistics and Transportation Management	12
BM 6211	Principles of Marketing Management	10
TOTAL		61

Semester II

Core Courses		
Code	Name	Credits
BM 6216	Basics of Human Resources Management	10
BM 6213	Business Environment	10
BM 6224	Basics of international marketing	10
BM 6225	Market Research	10
BM 6215	Sales Management	9
BM 6212	Customer Care and Public Relations	10
BM 6226	Basics of Organization Behaviour	10
BM 6219	Basics of supervisory skills	10
TOTAL		69

D. DIPLOMA OF BUSINESS ADMINISTRATION – TWO YEARS PROGRAMME**DIPLOMA OF BUSINESS ADMINISTRATION (First year)****Semester I**

Core Courses		
Code	Name	Credits
IT 6125	Computer Application	9
HS 6116	Elements of Development studies	10
BM 6201	Principles of Human Resource Management	10
BM 6202	Introduction to Sustainable Business Practices	10
BM 6203	Entrepreneurship and Innovation	10
BM 6205	Principles of Insurance	9
BM 6214	Sales Management	10
TOTAL		68

Semester II

Core Courses		
Code	Name	Credits
BM 6104	Principles of Management	10
BM 6217	Financial Services and Microfinance	10
BM 6218	Freight clearing and forwarding	10
BM 6219	Business analytics	10
BM 6219	Business Law	9
BM 6105	Financial Accounting I	10
BM 6106	Principles of Procurement	10
TOTAL		69

DIPLOMA OF BUSINESS ADMINISTRATION – TWO YEARS PROGRAMME**DIPLOMA OF BUSINESS ADMINISTRATION (Second year)****Semester I**

Core Courses		
Code	Name	Credits
BM 6201	Freight Clearing and Forwarding	9
BM 6202	Principles of Marketing	9
BM 6203	Field Practical Training	10
BM 6204	Basics of Financial Management	10
BM 6205	Basics of Research Methodology	10
BM 6206	Basics of Logistics and Transportation Management	12
TOTAL		62

Semester II

Core Courses		
Code	Name	Credits
BM 6212	Customer Care and Public Relations	10
BM 6213	Business Environment	10
BM 6214	Basics of Taxation and Public Finance	10
BM 6215	Sales Management	9
BM 6216	Basics of Human Resources Management	10
BM 6217	Research Project	10
	Options	
BM 6218	International Finance	10
BM 6219	Basics of Supervisory Skills	10
TOTAL		69

E. DIPLOMA OF AGRIBUSINESS – THREE YEARS PROGRAMME**DIPLOMA OF AGRIBUSINESS (First year)****Semester I**

Core Courses		
Code	Name	Credits
MS 6125	Fundamental Business Mathematics	6
BM 6112	Introduction to Agribusiness	12
BM 6113	Introduction to Agricultural Economics	12
IT 6128	Basics computer Skills	9
HS 6114	Basics of Business Communication	9
HS 6116	Elements of Development Studies	10
		58

Semester II

Core Courses		
Code	Name	Credits
BM 6111	Introduction to Production Economics	12
BM 6114	Crop Post-Harvest Handling and Management Technologies	12
BM 6116	Bee Production and Product Processing Technologies	12
BM 6117	Livestock Production Technology	12
IT 6125	Computer Applications in Agribusiness	9
FS 6107	Principles of Food Preservation	9
TOTAL		66

F. DIPLOMA OF AGRIBUSINESS WITH TECHNOLOGY (DAGT) – TWO YEARS PROGRAMME**DIPLOMA OF AGRIBUSINESS WITH TECHNOLOGY (DAGT) (Second year)****Semester I**

Core Courses		
Code	Name	Credits
BM 6205	Research Methodology	10
BM 6204	Basics of Financial Management	12
AG 6201	Agribusiness Project Management	9
AG 6202	Creativity and Innovation in Business	10
AG 6203	Field Practical Training	12
AG 6204	Agribusiness Ethics and Formalization	10
TOTAL		63

Semester II

Core Courses		
Code	Name	Credits
AG 6205	Research Project	25
AG 6206	Internship	15
AG 6207	Final Research Project II	25
TOTAL		65

G. BACHELOR OF BUSINESS ADMINISTRATION (First year)**Semester I**

Core Courses		
Code	Name	Credits
HS 8156	Business Communication Skills	10
DS 8102	Development Studies	9
BM 8101	Principles of Procurement Management	10
BM 8102	Principles of Management	10
MS 8123	Business Mathematics	6
BM 8103	Microeconomics	10
BM 8104	Principles of Accounting	10
TOTAL		65

Semester II

Core Courses		
Code	Name	Credits
IF 8112	Computer Application	6
BM 8105	Macroeconomics	9
BM 8106	Principles of Marketing	10
BM 8107	Cost Accounting	9
HS 8157	Business Laws	9
BM 8108	Entrepreneurship and Innovation	9
BM 8109	Project Management	8
BM 8110	Introduction to Finance	9
TOTAL		69

**BACHELOR OF BUSINESS ADMINISTRATION (BBA) - PROCUREMENT AND SUPPLY CHAIN MANAGEMENT
(SECOND YEAR)**

Semester I

Core Courses		
Code	Name	Credits
BM 8201	Procurement and Supply	9
BM 8202	E-Procurement and Supply Management	9
BM 8203	Principles of Warehousing Management	10
BM 8204	Field Practical Training I	8
BM 8205	Organizational Behaviour	9
BM 8206	Quantitative Techniques	9
BM 8207	Consultancy Service Management	9
TOAL		63

Semester II

Core Courses		
Code	Name	Credits
BM 8219	Public Procurement	10
BM 8220	Inventory Control and Management	10
BM 8221	Strategic Procurement	10
BM 8222	Principles of Stores Administration	9
BM 8223	Money and Banking	9
BM 8224	Research Methodology	9
BM 8225	Managerial Economics	9
TOTAL		66

BACHELOR OF BUSINESS ADMINISTRATION (BBA) – MARKETING AND ENTREPRENEURSHIP (SECOND YEAR)

Semester I

Core Courses		
Code	Name	Credits
BM 8208	Small Business Management	9
BM 8209	Sales Management	9
BM 8202	E-Procurement and Supply Management	9
BM 8204	Field Practical Training I	8
BM 8204	Organization Behavior	9
BM 8207	Consultancy Services Management	9
BM 8206	Quantitative Techniques	8
TOTAL		63

Semester II

Core Courses		
Code	Name	Credits
BM 8226	E-Marketing	9
BM 8227	Creativity and Innovation In Business	9
BM 8228	Production Management	9
BM 8224	Research Methodology	9
BM 8225	Managerial Economics	9
BM 8223	Money and Banking	8
BM 8229	Service Marketing	9
TOTAL		62

BACHELOR OF BUSINESS ADMINISTRATION (BBA) – HUMAN RESOURCE MANAGEMENT (SECOND YEAR)

Semester I

Core Courses		
Code	Name	Credits
BM 8210	Principles of Human Resources Management	10
BM 8211	Human Resources Planning	9
BM 8212	Human Resources Staffing	9
BM 8204	Field Practical Training I	8
BM 8204	Organization Behavior	9
BM 8207	Consultancy Services Management	9
BM 8206	Quantitative Techniques	9
TOTAL		64

Semester II

Core Courses		
Code	Name	Credits
BM 8230	Human Resources Training and Development	8
BM 8231	Leadership in Human Resources	9
BM 8232	Career Management	9
BM 8228	Production Management	9
BM 8233	Employment and Labor Relations	8
BM 8224	Research Methodology	9
BM 8225	Managerial Economics	9
TOTAL		61

BACHELOR OF BUSINESS ADMINISTRATION (BBA) – ACCOUNTING AND FINANCE (A&F) (SECOND YEAR)

Semester I

Core Courses		
Code	Name	Credits
BM 8213	Auditing and Assurance Services	8
BM 8214	Contemporary Issues in Accounting	9
BM 8215	Intermediate Financial Accounting	9
BM 8216	Public Finance and Taxation	8
BM 8217	Financial Management	9
BM 8218	Advanced Cost Accounting	9
BM 8204	Field Practical Training I	8
BM 8206	Quantitative Techniques	9
TOTAL		69

Semester II

Core Courses		
Code	Name	Credits
BM 8234	Advanced Accounting I	9
BM 8235	Corporate Finance	8
BM 8236	Advanced Public Finance and Taxation	8
BM 8237	Public Sector Accounting	9
BM 8224	Research Methodology	9
BM 8225	Managerial Economics	9
BM 8223	Money And Banking	9
TOTAL		61

**BACHELOR OF BUSINESS ADMINISTRATION (BBA) - PROCUREMENT AND SUPPLY CHAIN MANAGEMENT
(THIRD YEAR)**

Semester I

Core Courses		
Code	Name	Credits
BMB 08116	Research Project I	15
BMB 08118	Internship	15
BMB 08115	Research Project II	30
TOTAL		60

Semester II

Core Courses		
Code	Name	Credits
PSB 08209	Strategic Supply Chain Management	9
PSB 08210	International Procurement	8
PSB 08211	Procurement and Supply Audit	9
PSB 08212	Procurement Contract Management	9
PSB 08213	Legal Aspect of Procurement	9
PSB 08214	Principles of clearing and forwarding	9
FAB 08218	Management Accounting	9
BMB 08217	Risk Management	9
		71

BACHELOR OF BUSINESS ADMINISTRATION (BBA) – MARKETING AND ENTREPRENEURSHIP (THIRD YEAR)

Semester I

Core Courses		
Code	Name	Credits
BMB 08116	Research Project I	15
BMB 08118	Internship	15
BMB 08115	Research Project II	30
		60

Semester II

Core Courses		
Code	Name	Credits
MKB 08207	Service Marketing	9
MKB 08208	Consumer Behaviour	9
MKB 08209	Marketing Research	9
MKB 08210	International Business Management	9
MKB 08211	Strategic Marketing	9
MKB 08212	Consumer Marketing and Brand Management	9
FAB 08218	Management Accounting	9
BMB 08217	Risk Management	9
TOTAL		72

BACHELOR OF BUSINESS ADMINISTRATION (BBA) – HUMAN RESOURCE MANAGEMENT (THIRD YEAR)

Semester I

Core Courses		
Code	Name	Credits
BMB 08116	Research Project I	15
BMB 08118	Internship	15
BMB 08115	Research Project II	30
		60

Semester II

Core Courses		
Code	Name	Credits
HRB 08210	Occupation Health and Safety	8
HRB 08211	Employment and labour laws	9
HRB 08212	Human resources information system	9
HRB 08213	Compensation and Performance Management	8
BMB 08215	Strategic Management	10
FAB 08218	Management Accounting	9
BMB 08217	Risk Management	9
TOTAL		62

BACHELOR OF BUSINESS ADMINISTRATION (BBA) – ACCOUNTING AND FINANCE (A&F) (THIRD YEAR)**Semester I**

Core Courses		
Code	Name	Credits
BMB 08116	Research Project I	15
BMB 08118	Internship	15
BMB 08115	Research Project II	30
TOTAL		60

Semester II

Core Courses		
Code	Name	Credits
FAB 08215	Accounting and Software Accounting	9
FAB 08216	Advanced Accounting II	9
FAB 08217	Micro Finance Management	9
FAB 08218	Management Accounting	9
FAB 08219	International Finance	9
FAB 08220	Auditing and Assurance Services	9
BMB 08215	Strategic Management	10
MKB 08210	International Business Management	9
BMB 08217	Risk Management	9
TOTAL		64

H. BACHELOR OF AGRIBUSINESS MANAGEMENT (BAM) (FIRST YEAR)**Semester I**

Core Courses		
Code	Name	Credits
HS 8156	Business Communication Skills	10
DS 8102	Development Studies	9
AG 8101	Principles of Agricultural Economics	9
MS 8123	Business Mathematics	6
AG 8102	Introduction to Agribusiness	7
BM 8101	Principles of Procurement Management	9
BM 8104	Principles of Accounting	10
BM 8103	Microeconomics	10
TOTAL		70

Semester II

Core Courses		
Code	Name	Credits
IT 8112	Computer Application	6
BM 8109	Project Management	8
BM 8108	Cost Accounting	9
BM 8110	Introduction to Finance	9
BM 8108	Entrepreneurship and Innovation	9
AS 8109	Food and Nutrition Security	8
HS 8157	Business Laws	9
BM 8104	Macroeconomics	9
TOTAL		67

BACHELOR OF AGRIBUSINESS MANAGEMENT WITH TECHNOLOGY (BAMT) (SECOND YEAR)

Semester I

Core Courses		
Code	Name	Credits
AS 8109	Food and Nutrition Security	9
BM 8205	Organizational Behavior	9
AG 8201	Contemporary Agriculture	9
ST 8223	Quantitative Techniques	9
AG 8202	Field Practical Training I	10
BM 8217	Financial Management	9
AG 8203	Agricultural Environment and Community Development	9
TOTAL		62

Semester II

Core Courses		
Code	Name	Credits
AG 8204	Crop Production and Marketing Technology	9
AG 8205	Horticulture Production and Marketing Technology	10.5
AG 8206	Agricultural Finance and Credit Management	9
AG 8207	Fisheries Production and Marketing Technology	10.5
AG 8208	Extension Methods	9
AG 8209	Agricultural Food Marketing	9
BM 8224	Research Methodology	9
TOTAL		66

BACHELOR OF AGRIBUSINESS MANAGEMENT WITH TECHNOLOGY (BAMT) (THIRD YEAR)**Semester I**

Core Courses		
Code	Name	Credits
AG 8301	Research Project I	15
AG 8302	Research Project II	15
AG 8303	Field Practical Training II	30
TOAL		60

Semester II

Core Courses		
Code	Name	Credits
BMB 08217	Risk Management	9
AG 8308	Agricultural Price Analysis	10
AG 8307	Livestock Products Processing and Marketing Technologies	10
AG 8304	Agro-Post Harvest Technologies	10
AG 8305	Contract Farming Management	7
AG 8306	International Agricultural Trade Management	7
BMB 08214	Strategic Management	7
		60

8.5.2 DEPARTMENT OF HUMANITIES

8.5.2.1 LIST OF STAFF

(Head of Department)

Dr. Said M. Msangi PhD in Human Resources Management (OUT) MBA (UDSM), BA (UDSM)

Assistant Lecturers

Ms. Patricia Fela Muraguri MA-Linguistics-UDSM, BED-English and Literature-KU

*Mr. Peter C. Majura MA-Linguistics (UDOM), BAED-English and Geography (UoA), Diploma-Education (Butimba TTC)

*Ms. Neema Kibona MA-Linguistics (TEKU), BEL-English and Kiswahili (TEKU), Diploma-Education (Morogoro TTC)

Mr. Stephen Nsyengula MA-Linguistics (UDOM), BAED-Linguistics and Literature (UDSM), Diploma-Education (Mkwawa TTC)

*Mr. Noel Richard Mwegoha MA-Linguistics (RUCO), BAED-English and Kiswahili (RUCO), Certificate-Education (Tandala TTC)

Mr. Joel Wang'uba PGD-Education (UDOM), BA-English (UDOM)

Mr. Emmanuel Haule Master of Arts-Linguistics (SAUT), BED- English (MMU)

Ms. Anna Yassin Master of Public Relations and Media Management (Canvedish University), Bachelor of Mass Communication (KIU)

Tutorial Assistant

*Mr. Raytoni Songa BAED-Language and Literature (UDSM)

**On Studies*

8.6 MUST RUKWA CAMPUS COLLEGE (MRCC)

8.6.1 DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING

Programmes

The department offers two (2) programmes;

- i. Diploma in Mechanical Engineering
- ii. Bachelor of Mechanical Engineering

8.6.1.1 LABORATORIES AND WORKSHOPS

- i. Machine Shop
- ii. Automotive Workshop
- iii. Welding Workshop
- iv. Computer Laboratory

8.6.1.2 LIST OF STAFF

(Head of Department)

Dr. Joachim J. Mwambeleko PhD in Electrical Engineering (SUT – Thailand), M.Eng. in Electrical Engineering (SUT- Thailand), B.Sc. in Electrical Engineering

Lecturers

Dr. Joachim J. Mwambeleko PhD in Electrical Engineering (SUT – Thailand), M. Eng (SUT- Thailand), B.Sc in Electrical Engineering (SAUT-Mwanza)

Assistant Lecturers

Mr. Joram L. Ngilangwa* MSc. Prod. Eng. (UDSM), BSc. Mech. Eng. (UDSM), FTC Mech. Eng. (MTC).

Mr. Nyanda M. Malashi* MSc. Material Science and Eng. (NM-AIST).B. Eng. Mech. (MUST),

Mr. Alex S. Mwalyego* M.Sc. in Mathematical Modelling (UDSM), B.Sc Maths & Statistics (UDSM)

Mr. Widson K.Mwasenga M. Tech. in Alternate Hydro Energy Systems (IITR - India), B.Eng. in Mech. (MUST), FTC. Mech. Eng. (MTC)

Tutorial Assistants

Mr. Joseph B. Matwani B.Eng. in Electrical Engineering (MUST), FTC Electrical Eng. (MTC)

Mr. Peter C. Leiya* B.Sc. in Geomatics ((UDSM (UCLAS))

Mr. Mathew M. Mbaule PGDE Mech.Eng. (UDSM), ADE Mech. Eng (MIST), FTC Mech. Eng. (MTC)

Mr. Nyamwaga M. Kaare* B.Sc. in Computer Science (St. Joseph University in Tanzania)

Mr. Emmanuel G. Lema B.Eng. in Mech. Eng (MUST)

Mr, Emmanuel J. Ndunguru B.Eng. in Mech. Eng (MUST)

Mr. Hussein A. Mlonja*

B.Eng. in Mech. Eng (DIT)

Mr. Sabatho D. Ghibaka

BEd. in Mathematics (TUMa)

Instructors

Mr. Baraka F. Kilave

Dip. Mech. Eng (NIT)

Technicians

Mr. Mosses D. Mazengo*

B.Eng. in Civil Engineering (MUST), FTC Civil. Eng. (ATC).

Mr. Fredrick Y. Maula

Dip. Mech Eng (MIST)

**On study leave*

8.6.1.3 PROGRAMME COURSES**DIPOMA IN MECHANICAL ENGINEERING****A. Diploma in Mechanical Engineering (1st Year)****Semester I**

Code	Name	Credit
ME 6116	Engineering Drawing I	8
ME 6117	Engineering Materials I	7
ME 6118	Automotive Technology I	8
ME 6119	Manufacturing Engineering I	9
IT 6117	Fundamental Computer Application	6
HS 6116	Elements of Development Studies	6
HS 6117	Communication Skills I	6
NS 6139	Applied Physics I	6
MS 6123	Applied Mathematics I	6
TOTAL		62

Semester II

Code	Name	Credit
ME 6120	Engineering Drawing II	9
ME 6121	Engineering Materials II	7
ME 6122	Automotive Technology II	9
ME 6123	Manufacturing Engineering II	9
ME 6124	Mechanical Engineering Science I	6
CS 6124	Computer programming	6
BM 6122	Entrepreneurship	6
NS 6144	Applied Physics II	6
MS 6124	Applied Mathematics II	6
TOTAL		64

B. Diploma in Mechanical Engineering (2nd Year)**Semester 1**

Code	Name	Credit
ME 6201	Computer Aided Drafting I	8
ME 6202	Strength of Materials	6
ME 6203	Automotive Technology III	9
ME 6204	Manufacturing Engineering III	9
ME 6205	Thermodynamics	6
ME 6206	Mechanical Engineering Science II	6
ME 6207	Engineering Measurement and Control	6
MS 6222	Applied Mathematics III	6

ME 6208	Industrial Practical Training I	10
	TOTAL	66

Semester II

Code	Name	Credit
ME 6209	Computer Aided Drafting II	9
ME 6210	Auto Electrical Systems	9
ME 6211	Manufacturing Engineering IV	9
ME 6212	Machine Elements and Design I	6
ME 6213	Fluids Mechanics	6
ME 6214	Fundamental of Programmable Logic Controllers	7
EE 6270	Electrical Engineering Science	6
EE 6271	Basic Electronics	6
MS 6223	Applied Mathematics IV	6
TOTAL		64

C. Diploma in Mechanical Engineering (3rd Year)**Semester I**

Code	Name	Credit
ME 6301	Machine Elements and Design II	6
ME 6302	Power plant I	6
ME 6303	Refrigeration	9
ME 6304	Environment Management	6
ME 6305	Mechatronics Technology	7
ME 6306	Fundamental of Research Methodology	6
MS 6322	Boolean Algebra and Statistics	6
ME 6307	Mechanical Project I	10
ME 6308	Industrial Practical Training II	10
TOTAL		66

Semester II

Code	Name	Credit
ME 6309	Machine Elements and Design III	6
ME 6310	Power plant II	6
ME 6311	Air Conditioning	9
ME 6312	Computer Based Manufacturing	9
ME 6313	Workshop Management	6
ME 6314	Industrial Safety and Maintenance	6
ME 6315	Hydraulic and Pneumatic systems	7
ME 6316	Quality Control and Costing Management	7
ME 6317	Mechanical Project II	10

TOTAL	66
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BACHELOR OF MECHANICAL ENGINEERING

A. Bachelor of Mechanical Engineering (1st Year)

Semester 1

Code	Name	Credits
ME8101	Engineering Drawing I	7
ME8102	Engineering Materials	6
ME 8103	Strength of Materials I	6
ME8104	Manufacturing Engineering I	8
ME 8105	Automotive Engineering I	8
BM 8108	Entrepreneurship	6
IT 8116	Computer Applications	7
MS 8117	Engineering Mathematics I	6
HS 8101	Communication Skills	6
DS 8101	Development Studies	6
TOTAL		66

Semester II

Code	Name	Credits
ME8107	Engineering Drawing II	9
ME8108	Machine Elements and Design I	6
ME8109	Manufacturing Engineering II	10
ME8110	Strength of Materials II	6
ME 8111	Automotive Engineering II	10
ME 8112	Power Production	6
DS 8108	Development Perspectives	6
ME 8106	Environmental Engineering	6
MS 8102	Engineering Mathematics II	6
TOTAL		65

B. Bachelor of Mechanical Engineering (2nd Year)

Semester 1

Code	Name	Credits
ME8201	Computer Aided Drafting I	9
ME8202	Mechanics of Machines	6
ME8203	Engineering Thermodynamics	7
ME8204	Machine Elements and Design II	6
ME 8209	Strength of Materials III	6
ME8205	Manufacturing Engineering III	10

EE 8240	Fundamental of Electrical Engineering	6
MS8203	Engineering Mathematics III	6
ME8206	Industrial Practical Training I	10
TOTAL		66

Semester II

Code	Name	Credits
ME 8207	Computer Aided Drafting II	9
ME 8208	Machine Elements and Design III	6
ME 8210	Materials Technology	7
ME 8211	Fluid Mechanics	6
ME 8212	Mechatronics	6
ME 8213	Industrial Management	6
EE 8241	Electrical Machines I	7
CS 8200	Computer Programming	7
IT 8217	Computer Networking	6
MS 8217	Statistics and Numerical analysis	6
TOTAL		66

C. Bachelor of Mechanical Engineering (3rd Year)**Semester I**

Code	Name	Credits
ME 8301	Systems Reliability and Plant Maintenance	6
ME 8302	Dynamics of Mechanical Structures	6
ME 8303	Engineering Design	6
ME 8304	Industrial Energy Management	6
ME 8305	Metal cutting and Machines Processes	8
ME 8306	Research Methodology	7
EE 8340	Electrical Machines II	7
ME 8307	Mini Project I	10
ME 8308	Industrial Practical Training II	10
TOTAL		66

Semester II

Code	Name	Credits
ME 8309	Renewable Energy Technologies	6
ME 8310	Industrial Automation	7
ME 8311	Engineering Economics	8
ME 8312	Control Systems Engineering	6

ME 8313	Computer Aided Engineering (CAE)	8
ME 8314	Engineering Operations Management	6
ME 8315	Heat Transfer	6
CS 8315	Data Structure and Algorithms	6
ME 8316	Mini Project II	10
TOTAL		63

D. Bachelor of Mechanical Engineering (4th Year)**Semester 1**

Code	Name	Credits
ME 8401	Fluid Power and Control	6
ME 8402	Power Plants	6
ME 8403	Material Handling Design	6
ME 8404	Turbo Machinery	6
ME 8405	Production Engineering	7
ME 8406	Refrigeration System	8
CS 8406	Object Oriented Programming	7
ME 8407	Senior Project I	10
ME 8408	Industrial Practical Training III	10
TOTAL		66

Semester II

Code	Name	Credits
ME 8409	Quality Assurance and Control	6
ME 8410	Engineering Ethics and Professional Conduct	6
ME 8411	Automation and Robotics	7
ME 8412	Engine Design Technology	6
ME 8413	Foundry Technology	9
ME 8414	Air Conditioning System	8
ME 8415	Computer Aided Manufacturing (CAM)	7
ME 8416	Industrial Supervisor Skill and leadership	6
ME 8417	Senior Project II	10
TOTAL		65

8.6.2 DEPARTMENT OF BUSINESS MANAGEMENT

Programmes

The Department offers five (5) programmes:

- i. Certificate in Business Administration
- ii. Diploma in Business Administration
- iii. Diploma in Marketing Technology
- iv. Diploma in Health System Administration and Management
- v. Bachelor of Business Administration with the following specializations:
 - Accounting and Finance
 - Procurement and Supply Chain Management
 - Marketing and Entrepreneurship
 - Human Resources Management

8.6.2.1 LIST OF STAFF

(Head of Department)

Mr. Jacob S. Lupia	MBA (Tumaini University), BSc.Ed (UDSM)
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Associate Professor

Prof, Asheri M. Mwidege	PhD (SUA); MA Econ.Bsc.Ed.(UDSM), Dip. In Ed. (Mkwawa
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Assistant Lecturers

Mr. Jacob S. Lupia	MBA (Tumaini University), BSc.Ed (UDSM)
*Mr. Gallen P. Mlengi	MA in Economics (UDOM), B.Sc in Economics (Mzumbe University)
Ms. Frida S. Mugarula	MSc. in Marketing Management (Mzumbe University) BBA in Marketing Management
*Mr. Gasper A. Chuwa	MBA in Finance (SAUT- Mwanza), BBA in Finance (OUT), BED in Commerce- Accounting and Economics (UDSM)

Ms. Neema J. Issyangya

MAF. (Institute of Accountancy of Arusha), BBA in
Accounting (Tumaini University Makumira)**Tutorial Assistants**

*Ms. Zulfa J. Hussein

BSc. of Business Administration in Procurement and
Logistics Management (Mzumbe University)

*Mr. Noel C. Mfinanga

BBA (Tanzania Institute of Accountancy-TIA)

Mr. Richard E. Sichilima

BBA in Human Resources Management (MUST)

On study leave*8.6.2.2****PROGRAMME COURSES****CERTIFICATE IN BUSINESS ADMINISTRATION****A. Certificate in Business Administration****Semester I**

		CREDITS
MS 6125	Fundamental Business Mathematics	6
BM 6101	Records Management	10
BM 6102	Elementary economics	10
HS 6101	Basic Communication Skills	10
IT 6128	Basic Computer skills	9
BM 6103	Basic procurement and supply	10
BM 6104	Basics of Customer Care and Public Relations	10
TOTAL		65

Semester II

		CREDITS
BM 6105	Basics of Entrepreneurship	10
BM 6106	Basics of Service Marketing	10
BM 6107	Elements of Commerce	10
BM 6108	Principles of Salesmanship	10
BM 6109	Basic Book keeping	10
BM 6110	Basics of Customer care and Public Relations	10
BM 6111	Field Practical Training	8
TOTAL		68

DIPLOMA IN BUSINESS ADMINISTRATION**A. Diploma in Business Administration (1st Year)****Semester I**

		CREDITS
IT 6125	Computer Application	9
HS 6116	Elements of Development studies	10
BM 6201	Principles of Human Resource Management	10
BM 6202	Introduction to Sustainable Business Practices	10
BM 6203	Entrepreneurship and Innovation	9
BM 6205	Principles of Insurance	9
BM 6214	Sales Management	10
TOTAL		67

Semester II

		CREDITS
BM 6104	Principles of Management	10
BM 6217	Financial Services and Microfinance	10
BM 6218	Freight clearing and forwarding	10
BM 6219	Business analytics	10
BM 6219	Business Law	9
BM 6105	Financial Accounting I	10
BM 6106	Principles of Procurement	10
TOTAL		69

B. Diploma in Business Administration (2nd Year)**Semester I**

		CREDITS
BM 6201	Freight Clearing and forwarding	9
BM 6202	Principles of Marketing	9
BM 6203	Field Practical	12
BM 6204	Customer care and public relation	10
BM 6205	Basics of Research Methodology	10
BM 6206	Basics of Logistics and Transportation Management	12
TOTAL		62

Semester II

Option Courses		
Code	Title	Credits
BM 6213	International finance	10
BM 6214	Basics of supervisory skills	10
TOTAL		
		CREDITS
BM 6207	Basics of Financial Management	10
BM 6208	Business Environment	10
BM 6209	Basics of Taxation	10
BM 6210	Sales Management	9
BM 6211	Basics of Human Resources Management	10
BM 6212	Research Project	12
TOTAL		61

DIPLOMA OF MARKETING TECHNOLOGY

First year, Semester I

		CREDIT
BM 6117	Basics of Management Principles	9
MS 6123	Basic Mathematics and Statistical skills	6
DS 6117	Elements of Development Studies	10
IT 6118	Information and Computer Technology	10
BM 6118	Principles of Financial Accounting	10
BM 6157	Introduction to Marketing Technology	9
BM 6150	Human Resources Management	9
TOTAL		63

Year 1, Semester II

		CREDIT
BM 6126	Elementary economics	10
BM 6158	Fundamentals of digital marketing	10
BM 6159	Online reputation management	6
HS 6117	Business communication	9
BM 6160	Event planning and management	8
BM 6124	Business law and ethics	10
BM 6122	Entrepreneurship	10
TOTAL		63

DIPLOMA IN HEALTH SYSTEMS ADMINISTRATION AND MANAGEMENT**Year 1, Semester I**

		CREDIT
BM 6151	Elements of Public Administration	6
IT 6118	Information and Computer Technology	10
HS 6116	Elements of Development Studies	10
BM 6118	Principles of Financial Accounting	10
MS 6123	Fundamentals of business mathematics	6
BM 6117	Basics of Management principles	9
BM 6152	Introduction to Healthcare Systems	9
BM 6150	Human Resource Management	9
TOTAL		69

Year 1, Semester II

		CREDIT
BM 6126	Elementary Economics	9
BM 6153	Office and Health Records Management	9
BM 6122	Entrepreneurship	10
BM 6154	Healthcare Ethics, Law and Compliance	10
BM 6155	Healthcare Operations Management	10
BM 6156	Epidemiology and Biostatistics	11
HS 6117	Business Communication	10
TOTAL		69

BACHELOR OF BUSINESS ADMINISTRATION**Year 1, Semester I**

Core Courses		
Course Code	Course Name	Credits
HS 8156	Business Communication Skills	10
DS 8102	Development Studies	9
BM 8101	Principles of Procurement Management	10
BM 8102	Principles of Management	10
MS 8123	Business Mathematics	6
BM 8103	Microeconomics	10
BM 8104	Principles of Accounting	10
Total		65

Year 1, Semester II

Core Courses		
Course Code	Course Name	Credits
IT 8112	Computer Application	6
BM 8105	Macroeconomics	9
BM 8106	Principles of Marketing	10
BM 8107	Cost Accounting	9
HS 8157	Business Laws	9
BM 8108	Entrepreneurship and Innovation	9
BM 8109	Project Management	8
Bm 8110	Introduction to Finance	9
	Total	69

BACHELOR OF BUSINESS ADMINISTRATION (2nd Year)

A. Bachelor of Business Administration (Procurement and Supply Chain Management) (2nd Year)

Semester I

		Credits
BM 8201	Procurement and Supply	9
BM 8202	E-Procurement and Supply Management	9
BM 8203	Principles of Warehousing Management	10
BM 8204	Field Practical Training I	8
BM 8205	Organizational Behaviour	9
BM 8206	Quantitative Techniques	9
BM 8207	Consultancy Service Management	9
	Total	63

Year 2, Semester II

		Credits
BM 8219	Public Procurement	10
BM 8220	Inventory Control and Management	10
BM 8221	Strategic Procurement	10
BM 8222	Principles of Stores Administration	9
BM 8223	Money and Banking	9
BM 8224	Research Methodology	9
BM 8225	Managerial Economics	9
	Total	66

B. Bachelor of Business Administration (Marketing and Entrepreneurship) (2nd Year)**Semester I**

		Credits
BM 8208	Small Business Management	9
BM 8209	Sales Management	9
BM 8202	E-Procurement and Supply Management	9
BM 8204	Field Practical Training I	8
BM 8205	Organization Behaviour	9
BM 8207	Consultancy Services Management	9
BM 8206	Quantitative Techniques	8
Total		63

Year 2, Semester II

Course Code	Course Name	Credits
BM 8226	E-Marketing	9
BM 8227	Creativity and Innovation In Business	9
BM 8228	Production Management	9
BM 8224	Research Methodology	9
BM 8225	Managerial Economics	9
BM 8223	Money and Banking	9
BM 8229	Service Marketing	8
Total		62

C. Bachelor of Business Administration (Human Resources Management) (2nd Year)**Year 2, Semester I**

		Credits
BM 8210	Principles of Human Resources Management	10
BM 8211	Human Resources Planning	9
BM 8212	Human Resources Staffing	9
BM 8204	Field Practical Training I	8
BM 8205	Organization Behavior	9
BM 8207	Consultancy Services Management	9
BM 8206	Quantitative Techniques	9
Total		64

Year 2, Semester II

		Credits
BM 8230	Human Resources Training and Development	8
BM 8231	Leadership in Human Resources	9
BM 8232	Career Management	9
BM 8228	Production Management	9
BM 8233	Employment and Labor Relations	8
BM 8224	Research Methodology	9
BM 8225	Managerial Economics	9
Total		61

D. Bachelor of Business Administration (Accounting and Finance) (2nd Year)

Semester I

		Credits
BM 8213	Auditing and Assurance Services	8
BM 8214	Contemporary Issues in Accounting	9
BM 8215	Intermediate Financial Accounting	9
BM 8216	Public Finance and Taxation	8
BM 8217	Financial Management	9
BM 8218	Advanced Cost Accounting	9
BM 8204	Field Practical Training I	8
BM 8206	Quantitative Techniques	9
Total		69

Semester II

		Credits
BM 8234	Advanced Accounting I	9
BM 8235	Corporate Finance	8
BM 8236	Advanced Public Finance and Taxation	8
BM 8237	Public Sector Accounting	9
BM 8224	Research Methodology	9
BM 8225	Managerial Economics	9
BM 8223	Money And Banking	9
Total		61

BACHELOR OF BUSINESS ADMINISTRATION (3rd Year)

A. Bachelor of Business Administration (Accounting and Finance) (3rd Year)**Semester I**

		Credits
BMB 08116	Research Project I	15
BMB 08115	Research Project II	30
BMB 08118	Internship	15
TOTAL		60

Semester II

		Credits
FAB 08215	Accounting and Software Accounting	9
FAB 08216	Advanced Accounting II	9
FAB 08217	Micro Finance Management	9
FAB 08218	Management Accounting	9
FAB 08219	International Finance	9
FAB 08220	Auditing and Assurance Services	9
BMB 08215	Strategic Management	9
MKB 08210	International Business Management	10
TOTAL		64

B. Bachelor of Business Administration (Procurement and Supply Chain Management) (3rd Year)**Semester I**

		Credits
BMB 08116	Research Project I	15
BMB 08118	Internship	15
BMB 08115	Research Project II	30
TOTAL		60

Semester II

		Credits
PSB 08209	Strategic Supply Chain Management	9
PSB 08210	International Procurement	8
PSB 08211	Procurement and Supply Audit	9
PSB 08212	Procurement Contract Management	9
PSB 08213	Legal Aspect of Procurement	9
PSB 08214	Principles of clearing and forwarding	10
FAB 08218	Management Accounting	9
BMB 08217	Risk Management	9
TOTAL		72

C. Bachelor of Business Administration (Marketing and Entrepreneurship) (3rd year)**Semester I**

		Credits
BMB 08116	Research Project I	15
BMB 08118	Internship	15
BMB 08115	Research Project II	30
TOTAL		60

Semester II

		Credits
MKB 08207	Service Marketing	9
MKB 08208	Consumer Behaviour	9
MKB 08209	Marketing Research	9
MKB 08212	Consumer Marketing and Brand Management	9
MKB 08211	Strategic Marketing	9
MKB 08210	International Business Management	9
BMB 08217	Risk Management	9
FAB 08218	Management Accounting	9
TOTAL		72

Bachelor of Business Administration (Human Resource Management) (3rd Year)**Semester I**

BMB 08116	Research Project I	15
BMB 08118	Internship	15
BMB 08115	Research Project II	30
TOTAL		60

Semester II

		Credits
HRB 08210	Occupation Health and Safety	8
HRB 08211	Employment and labour laws	9
HRB 08212	Human resources information system	9
HRB 08213	Compensation and Performance Management	8
BMB 08215	Strategic Management	10
FAB 08218	Management Accounting	9
BMB 08217	Risk Management	9
TOTAL		62

8.7 COLLEGE OF AGRICULTURAL SCIENCES AND TECHNOLOGY (CoAST)

8.7.1 THE DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

Programmes

The Department offers two (2) programmes:

- a) Diploma in Food Science and Technology
- b) Bachelor of Food Science and Technology

8.7.1.1 LABORATORIES

- i. Food Chemistry Laboratory
- ii. Microbiology Laboratory
- iii. Food Science Laboratory
- iv. Molecular Biology Laboratory
- v. Milk Pilot Plant

8.7.2.2 LABORATORIES AND WORKSHOPS

- i. Food Laboratory
- ii. Milk Pilot Plant

8.7.1.2 LIST OF STAFF

(Head of Department)

Dr. Joseph M. Runyogote

PhD Life Sciences (Food & Nutritional Science) (NM-AIST),
MSc. Food Quality and Safety Assurance (SUA), BSc. Food
Science and Technology (SUA)

Senior Lecturer

Dr. Joseph M. Runyogote

PhD Life Sciences (Food & Nutritional Science) (NM-AIST),
MSc. Food Quality and Safety Assurance (SUA), BSc. Food
Science and Technology (SUA)

Lecturers

Dr. Diana Nicodemus

PhD Human Nutrition (OUT), MSc. Human Nutrition,
(SUA), BSc. Home Economics & Human Nutrition (SUA)

Dr. Angela Aluko	PhD Life Sciences (Food & Nutritional Science) (NM-AIST), MSc. Food Science (Jomo Kenyatta Univ.), MBA (UDOM), BSc. Food Science and Technology (SUA)
Dr. Chacha Nyangi	PhD Public Health (Food Safety) (SUA), MSc. Food Science (SUA), BSc. Food Science and Technology (SUA)
Dr. Fred Mwabulili	PhD Food Quality Management (China), MSc. Food Quality Management (Wageningen University), BSc. Food Science and Technology (SUA) *
Dr. Fabian Mihafu	PhD Food Science and Nutrition (Jomo Kenyatta Univ.) MSc. Food Science (TUSEGE), BSc. Agricultural Education (SUA)
Assistant Lecturer	
Ms. Eliwanzita. N. Sospeter	MSc. Food Technology (Gent and KU Leven Universities), BSc. Food Science and Technology (SUA) *
Mr. Joel A. Mhanga	MSc. Food Quality and Safety Assurance SUA), BSc. Food Science and Technology (SUA)
Ms. Buzo H. Maige	MSc. Food Science (Makerere Univ.), BSc. Food Science and Technology (SUA)
Mr. Frank M. Kaseka	MSc. Food Science (SUA), BSc. Food Science and Technology (SUA)*
Mr. Tumaini K. Marango	MSc. Food Quality Management (Wageningen University), BSc. Food Science and Technology (SUA)
Ms. Lilian S. Maro	MSc. Food Safety (Wageningen University), BSc. Food Science and Technology (SUA)
Ms. Amina M. Ahmed	MSc. Food Science (BSc. Food Science and Technology (SUA) *
Mr. Arthur B. Mhauka	MSc. Public Health & Food Safety (SUA), BSc. Food Science and Technology (SUA), Diploma in Environmental Health Sciences (UDSM)
Ms. Naelijwa Mshanga	MSc. Food Biotechnology & Nutritional Sci (NM-AIST), BSc Human Nutrition (SUA)*

Ms. Zerida Samwel

MSc. Human Nutrition, (SUA), BSc. Home Economics & Human Nutrition (SUA)

Msc. Food Technology (CAN THO University) BSc. Food Science and Technology (SUA)

Ms. Jackline Majuva

MSc. Agricultural economics (SUA), BSc. Agricultural Economics (SUA).

Ms. Anna Minja Arturu

MSc. Food Technology (SUA), BSc. Food Science and Technology (SUA)

Tutorial Assistants

Mr. Elisha Ezekiel Ntumbo

BSc. Food Science and Technology (SUA)

Mr. Warren Henry Kilemile

BSc. Food Science and Technology (SUA)

Instructors

Ms. Prisca Siyame

MSc Life Sciences (Food and Nutritional Sciences) (NM-AIST), BSc. Food Science and Technology (SUA).

Mr. John Emmanuel

BSc. Food Science and Technology (SUA)

Technicians

Mr. Charles E. Chekecha

BSc. Lab Tech. (SUA), FTC Science and Lab. (DIT)

Mr. Moses Musa

Diploma in Food Science and Technology (MUST)*

Mr. Rahimu Kaijage

Diploma in Food Science and Technology (MUST)

**Study leave*

8.7.1.3 PROGRAMME COURSES

DIPLOMA IN FOOD SCIENCE AND TECHNOLOGY

A. Diploma in Food Science and Technology (1st Year)

Semester I

Code	Name	Credit
AS 6116	Introduction to Food Science	10
AS 6117	Principles of Preservation	12
AS 6118	Introduction to Biochemistry	10
AS 6119	Introduction to Microbiology	12
IT 6117	Fundamentals of Computer Application	6
MS 6130	Algebra for Laboratory and Food Science	10
TOTAL		60

Semester II

Code	Name	Credit
AS 6122	Food Microbiology	10
AS 6123	Material Science and Food Packing	10
AS 6124	Basic Food and Engineering	10
AS 6125	Food Biochemistry	10
HS 6117	Communication Skills	10
BM 6122	Entrepreneurship	10
MS 131	Basics of Calculus	12
TOTAL		72

B. Diploma in Food Science and Technology (2nd Year)**Semester I**

Code	Name	Credit
AS 6201	Food Chemistry	12
AS 6202	Introduction to Biotechnology	12
AS 6203	Principles of Human Nutrition	10
AS 6204	Basic Food Instrumentation	10
AS 6205	Plant Layout and Equipment Maintenance	12
ST 6222	Applied Statistics	10
TOTAL		66

Semester II

Code	Name	Credit
AS 6206	Food Analysis	10
AS 6207	Cereal and Legume Processing Technology	12
AS 6208	Food Contaminant and Hygiene	8
AS 6209	Food Research Methods	9
NS 6136	Industrial Practical Training (IPT)	10
NS 6136	Analytical Chemistry	11
TOTAL		60

C. Diploma in Food Science and Technology (3rd Year)**Semester I**

Code	Name	Credit
AS 6301	Food and Nutrition Security	10
AS 6302	Sensory Evaluation of Foods	10
AS 6303	Food Engineering Operations	12
AS 6304	Beverage Technology	10
AS 6305	Meat Science and Technology	10
AS 6306	Dairy Technology	8
AS 6307	Project I	8
TOTAL		68

Semester II

Code	Name	Credit
AS 6308	Fish and Marine Products Technology	9
AS 6309	Food Biotechnology	10
AS 6310	Food Safety and Quality Management	12
AS 6311	Pilot Plant Processes	9
AS 6312	Project II	10
AS 6313	Industrial Practical Training (IPT)	10
TOTAL		60

BACHELOR OF FOOD SCIENCE AND TECHNOLOGY**A. Bachelor of Food Science and Technology (1st Year)****Semester I**

Code	Course name	Credits
NS 8126	General Chemistry	12
MS 8124	Algebra and Calculus	8
NS 8127	Physics	9
HS 8101	Communication Skills	8
DS 8108	Development Perspectives	6
CS 8104	Programming Concepts	9
AS 8101	Introductory Food Science	8
AS 8102	Technical Drawing	8
TOTAL		68

Semester II

Code	Course name	Credits
ST 8123	Introductory Statistics	10
AS 8103	General Microbiology	8
AS 8104	Food Processing and Preservation	12
AS 8105	Physico-Chemistry of Food	11
AS 8106	Principles of Food Engineering	11
AS 8107	Principles of Animal and Crop Production	11
AS 8108	Instrumental Methods of Food Analysis	8
AS 8109	Food Entrepreneurship	8
TOTAL		79

B. Bachelor of Food Science and Technology (2nd Year)**Semester I**

Code	Course name	Credits
ST 8222	Biometry	9
AS 8201	Food Biochemistry	8
AS 8202	Food Microbiology	8
AS 8203	Food Process Engineering - I	12
AS 8204	Plant Layout, Processes and Design	12
AS 8205	Technology of Beef, Poultry and Eggs	11
AS 8206	Cereals and Pulse Processing Technology	10
AS 8207	Principles of Human Nutrition	10
TOTAL		80

Semester II

Code	Course name	Credits
AS 8208	Technology of Fish and Marine Food products	12
AS 8209	Food Research Methods	8
AS 8210	Food Process Engineering - II	12
AS 8211	Sugarcane Processing and Sugar Technology	10
AS 8212	Industrial Practical Training - I	12
AS 8213	Beverage Technology	8
AS 8214	Postharvest Handling of Perishable Crops	12
AS 8215	Dairy Technology	10
TOTAL		84

B. Bachelor of Food Science and Technology (3rd Year)**Semester I**

Code	Course name	Credits
AS 8301	Plantation Products and Spices Technology	9
AS 8302	Food Product Development	12
AS 8303	Food Biotechnology	8
AS 8304	Food Hygiene	7
AS 8305	Food Safety and Quality Management	12
AS 8306	Food Chemistry and Analysis	11
AS 8307	Food Project - I	12
TOTAL		71

Semester II

Code	Course name	Credits
AS 8308	Food Packaging	12
AS 8309	Food Sensory Evaluation	8
AS 8310	Food Project - II	12
AS 8311	Industrial Practical Training - II	12
AS 8312	Agro-Food Economics and Marketing	8
AS 8313	Technology of Oils and Fats	10
AS 8314	Postharvest Handling of Non-Perishable Crops	11
TOTAL		73

8.7.2 THE DEPARTMENT OF CROP SCIENCE AND HORTICULTURE

8.7.2.1 LABORATORIES AND WORKSHOP

MUST Demonstration Farm

8.7.2.2 LIST OF STAFF

(Head of Department)

Dr. Marco E. Mng'ong'o

PhD in Sustainable Agriculture (NM-AIST), MSc. Soil Sciences (Ghent University, Belgium), BSc. Agriculture General (SUA)

Lecturers

Dr. Marco E. Mng'ong'o

PhD in Sustainable Agriculture (NM-AIST), MSc. Soil Sciences (Ghent University, Belgium), BSc. Agriculture General (SUA)

Assistant Lecturers

Mr. Abubakar M. Mshora

MSc. Horticulture (Punjab University, India), BSc. Agriculture General (SUA)

Ms. Rehema E. Mwaipopo

MSc. Crop Science (SUA), BSc. Horticulture (SUA)

Mr. Justine Kalleku

MSc. Plant Biotechnology (Korea), BSc. Horticulture (SUA)

Mr. Christopher C. Msigwa

MSc. Plant Pathology (Hungary), BSc. Horticulture (SUA)

Ms. Kefrine Lutambi

MSc. Crop Science (SUA), BSc. Horticulture (SUA)

Mr. Selema S. Shimo*

MSc. Agricultural Biotechnology (Hungarian University of Agriculture and Life Sciences, Hungary), BSc. Science with education (UDSM)

Tutorial Assistants

Mr. Priams Rwekiza Kashuku

BSc. Veterinary Medicine (SUA)

Ms. Fikira Abdulrahman Chande

BSc. Aquaculture (SUA)

Ms. Sara John Mloka

BSc. Horticulture (SUA)

Mr. Zakaria V. Kigodi

BSc. Veterinary Medicine (SUA)

Mr. Edyomu Teacher John

BSc. Horticulture (SUA)

Mr. Absolam Komanya

BSc. Animal Science (SUA)

Ms. Farida Mgeni

Agromechnics (VETA)

**Study leave*

8.8 MTWARA CAMPUS COLLEGE OF TECHNICAL EDUCATION

8.8.1 DEPARTMENT OF ENGINEERING AND DEPARTMENT OF TECHNICAL EDUCATION

Programmes

The Department offers one (1) programme:

- i. Bachelor of Technical Education in Civil Engineering;

8.8.2 LABORATORIES/WORKSHOP

- i. Civil workshop

8.8.3 LIST OF STAFF

Head -Department of Technical Education

Dr. Adam Joseph Chidyau

PhD (Educational Assessment and Evaluation) - Mwenge Catholic University; MED (Educational Assessment and Evaluation) - Mwenge Catholic University; BSc..Ed (Physics & Chemistry) – CUEA Nairobi

Head -Department of Engineering

Dr. Omari Shegwando

PhD. in Env. Science and Eng.(NM-AIST), MSc. ETP (ARU), BSc. Environmental Eng. (UDSM)

Assistant Lecturers

Lameck Bernard Baya

Masters of Science in Civil Engineering

Osmundus John Mberwa

Master of Arts in Linguistics (Communication skills)

Francis John Kisandu

Master of Arts in Philosophy (Applied Philosophy)

Evaline William Ugulumu

Master of Science with Education (Mathematics)

Odeli John Kigodi

Master of Science in Mathematical Modelling

Alinanine Ngondole Kapula

Master of Science in Mathematics

Yuaja Msoso

Master of Education Curriculum Studies

Kelvin Felix Kisaka

Master in Business Administration & Bachelor of Commerce in Entrepreneurship

Tutorial Assistant

Fanuel Bodman Mbwagha	Bachelor Degree in Civil Engineering
Upendo Medrack Gogo	Bachelor of Civil Engineering
Ruth Fidelis Mzomozi	Bachelor Degree of Science in Civil Engineering
Tazamael Jacob Akyoo	Bachelor Degree in Civil Engineering
Josephat Bernard Delli	Bachelor Degree in Civil Engineering
Roines Elizeus Berenado	Bachelor of Computer Science
Limi Bulolo Simon	Bachelor of Arts with Education
Samweli Lameck Mathayo	Bachelor of Education in Psychology

PROGRAMME**BACHELOR OF TECHNICAL EDUCATION IN CIVIL ENGINEERING****Semester I Year 1**

Code	Course Name	Credits
TE 8101	Foundation and Philosophy of Technical Education	6
TE 8102	Educational Psychology	6
MS 8101	Linear Algebra and Calculus	6
CS 8104	Programming Concepts	6
BM 8108	Entrepreneurship Education	6
CE 8101	Engineering Drawing, I	9
CE 8102	Construction Technology I	9
CE 8103	Workshop practice	8
CE 8104	Structural Mechanics I	8
CE 8110	Civil Engineering Materials	6
Total		70

Semester II Year 1

Code	Course Name	Credits
TE 8103	Inclusive Education	6
TE 8104	Sociology of Education	6
MS 8102	Applied Calculus	6
CS 8110	Advanced C Programming	9
CE 8105	Engineering Drawing II	9
CE 8106	Construction Technology II	7
CE 8107	Building Construction	8
CE 8108	Structures Mechanics II	8
CE 8109	Land Survey	9
Total		68

Semester I Year 2

Code	Course Name	Credits
TE 8201	Professional Communication for Teachers	6
TE 8202	Assessment and Evaluation	6
MS 8221	Differential Equations	6
CE 8201	Soil Mechanics I	6
CE 8102	Civil Engineering Materials. -I	6
CE 8203	Fluid Mechanics	6
CE 8204	Engineering Survey I	9
CE 8205	Road Construction and Maintenance	8
CE 8206	Concrete Technology	6
CE 8207	Structural Analysis I	8
CE 8116	Industrial Practical Training	8
Total		69

Semester II Year 2

Code	Course Name	Credits
TE 8203	Professionalism and Ethics in Education	6
TE 8204	Classroom Research	4
MS 8303	Statistics and Numeric Analysis	6
CE 8208	Engineering Survey II	9
CE 8209	Fluid Mechanics and Hydraulics	9
CE 8210	Engineering Geology	6
CE 8211	Civil Engineering Materials. -II	9
CE 8212	Soil Mechanics II	6
CE 8213	Structural Analysis II	9
CE 8214	Building Planning and Drawing	6
Total		70

Semester I Year 3.

Code	Course Name	Credits
TE 8301	Curriculum and Teaching	6
CE 8301	Quantity Survey I	7
CE 8302	Geometric Design and Traffic Engineering	9
CE 8303	Reinforced Concrete Design and Detailing I	9
CE 8304	Foundation Engineering	9
CE 8305	Highway Engineering Materials	8
CE 8306	Construction Management	8
CE 8307	Engineering Hydrology	6
TE 8204	Industrial Practical Training (IPT) II	8
Total		70

Semester II Year 3

Code	Course Name	Credits
TE 8302	Instructional Leadership	6
CE 8308	Building Services	6
CE 8309	Quantity Surveying II	8
CE 8310	Reinforced Concrete Design and Detailing II	9
CE 8311	Water Supply Engineering	9
CE 8312	Contract Planning and Administration	7
CE 8313	Pavement Design and Construction	9
CE 8314	Research Methodology	7
CE 8315	Construction of Multi-Storey Structures	8
Total		69

Semester I Year 4

Code	Course Name	Credits
TE 8401	Teaching Methods 1	10
CE 8401	Engineering Economics	6
CE 8402	Structural Steel Design	6
CE 8403	Waste Water Management	6
CE 8404	Pavement Maintenance	6
CE 8405	Bridge Design and Construction	8
CE 8406	Pre-Stressed Concrete Design	6
CE 8407	Irrigation Engineering	6
CE 8408	Project I	15
CE 8316	Industrial Practical Training (IPT) III	8
Total		71

Semester II Year 4

Code	Course Name	Credits
TE 8402	Teaching Methods 2	18
CE 8409	Design of Masonry and Retaining Structures	6
CE 8410	Structural Timber Design	6
CE 8411	Solid Waste Management	6
CE 8412	Industrial Building Construction	6
CE 8413	Hydraulic Structures	8
CE 8414	Transportation Planning Engineering	6
CE 8415	Water Resources Management	6
CE 8416	Project II	15
Total		72

8.9 DIRECTORATE OF LIBRARY SERVICES (DLS)

8.9.1 DEPARTMENT OF INFORMATION AND RECORDS STUDIES (IRS)

Programmes

The department is currently preparing curricula for offering Certificate, Diploma and Bachelor degree programmes.

8.9.1.1 LIST OF STAFF

(Head of Department)

Dr. Nabahani B. Hamadi

PhD in Computer Science (BJUT - China), MSc. Automated systems software (KHNURE - Ukraine), BSc. Computer science (KHNURE - Ukraine).

Assistant librarian trainee

Mr. Atulinda K. Katto

Bachelor of library and information management (Open University of Tanzania)

Mr. Sospeter E. Martinius*

Bachelor of information and records management (SUA)

Mr. Amani L. Magava

Bachelor of Science in library and information management (Mzumbe University), Diploma in library, records and information studies (SLADS), Certificate in library, records and information studies (SLADS).

Mr. David G. Ruvugo	Bachelor of Science in library and information management (Mzumbe University)
Ms. Zuhura W. Mayendi	Bachelor in records archives and information management (TPSC)
Ms. Leah S. Makiria	Bachelor of information and records management (SUA), Diploma in library and information studies (Jordan University College), Certificate in library and information science (Jordan University College)
Ms. Zainabu H. Lilutu	Bachelor of information and records management (SUA), Diploma in information technology (SUA), Certificate in information technology (SUA)

**On study leave*

***Secondment*

9.0 ACADEMIC RELATED UNITS

9.1 RESEARCH AND PUBLICATIONS DIRECTORATE

The Research and Publications Directorate is responsible for overall coordination and administration of Research and Publications activities. In addition, the Directorate performs the following activities:

- i. Coordinates projects for both students and staff.
- ii. Plans and coordinates curriculum activities.
- iii. Plans, organizes and produces posters, leaflets. Newsletters and other information documents.
- iv. Arranges for academic workshops.
- v. Acts as the custodians of Research and Consultancy reports and disseminate findings for academic and other uses.

9.2 MUST CONSULTANCY BUREAU (MCB) Company Ltd

MCB Company Ltd is an incorporated company under the Company Ordinance CAP 212, and registered with the registrar of companies, BRELA. It has a Class IV registration to undertake Civil, Building, Electrical, and Mechanical works from the National Contractors Registration Board (CRB) since March 2017.

The Company has its headquarters and offices located at Mbeya University of Science and Technology (MUST). The company is owned by Mbeya University of Science and Technology (MUST), formerly Mbeya Institute of Science and Technology (MIST) and Mbeya Technical College (MTC). It constitutes the Board of Directors and other personnel, and run by the Managing Director and Project Manager.

9.3 INDUSTRIAL LINKAGE AND LABOUR DEPARTEMNT

The department of Industrial Linkage and Labour is responsible for coordinating Students' Industrial/Field Practical Training (IPT/FPT/TP). The IPT/FPT/TP is recognized as a course module and is conducted often after completing the class modules. The IPT/FPT/TP module is designed to enable MUST graduates to become competent and able to meet challenges of the job market and also makes them think positively towards self-employment undertakings. The office is also responsible for Industrial Relations and students' employment guidance.

9.4 UNIVERSITY FACILITIES

9.4.1 ASSEMBLY HALL (THE NYERERE HALL)

The University has a multipurpose assembly hall named after the first president named "Nyerere Hall", it has a capacity to hold 800 people and is used for meetings, lectures, social functions and gatherings.

9.4.2 CAFETERIA

The University provides meals to Diploma students in a well-equipped cafeteria and kitchen facilities capable of accommodating 350 students at a time. The equipment include modern cooking and refrigeration facilities. The services are provided under the private sector partnership (PSP) arrangement.

9.4.3 SOCIAL CLUB

The social club provides recreational and accommodation services to guests and members of the University community.

Provides meals services to off campus and private sponsored students and members of the community a low cost.

9.4.4 MAMA/BABA LISHE

The University has a building where caterers (mama/ baba lishe) provide food service for the students. This service is meant to ensure that food at affordable prices is provided for the students who need it. Provision of this catering service at the University also ensures that meals are provided in a clean and safe environment.

10 UNDERGRADUATE EXAMINATION REGULATIONS

PREAMBLE

These Regulations are meant to provide guidelines for conduct of University examinations and carrying out students' assessment. The Regulations present what staff and students should abide in the whole examination process. These Regulations shall apply to all undergraduate programmes offered by the University that are evaluated by any form of Continuous Assessment and Semester Examination, except where otherwise indicated. These Regulations pertain to all examinations that are conducted by the College and any other academic unit of the University. These Examination Regulations will take effect from the Academic year 2025/2026 for first-year Students.

10.1 GENERAL EXAMINATION REGULATIONS

10.1.1 Definitions

Abscondment	The act of being absent from scheduled examination at the time, day and place specified without prior permission or failure to attend scheduled classes to the stipulated minimum percentage (75%) of attendance in a specific semester.
Appeal	A request for a review of a decision made by an Examinations Authority about the performance in an examination of a student.
Board	Refers to the group of people who have power to make decisions and control over a formal written, spoken or practical test(s) and examination(s) in the University. It specifically includes Department Committee, College/School Sub-committee Board, College/School Board, Undergraduate Committee and the University Senate.
Candidate	Any person registered for any programme of study conducted by the University and eligible for examination.
Carry Over	Repeating the failed course(s) in the subsequent years by fulfilling all requirements of the course(s) as stipulated in these regulations and it is abbreviated as "CO".
Continuous Assessment	An assessment process that consists of quizzes, tests, assignments, case studies, and field/project work report where applicable.
Core Course	An essential and compulsory course of a programme which must be completed by all students in a particular semester.
Course	Any independent unit that contributes in making up a programme of study offered and it has a unique identification code.
Cumulative GPA	Refers to the summation of all grade points of all credit course divided by the total number of credits taken by a student beginning from his/her admission till the last

	examination held.
De-conformant of an Award	Any act of depriving the right of owning the award for diploma, degree or any other academic legality possessed by the graduand/graduate after failing to adhere or comply to certain academic conditions.
De-registration	An official record that disqualifies a particular student as no longer eligible as legitimate student of the University.
Diploma	A non-degree programme studied for a minimum of two/three years.
Discontinuation	Stopping a student from continuing with studies and/or deprivation of a degree, non-degree award or any other academic credentials already awarded by the University. The student will stay away from the University for three (3) years and he/she may re-apply for first year in another programme different from the first one that he/she was discontinued provided that such student has minimum entry requirements to the programme.
Elective Course	Course chosen by a student from the list of the options taken as additional course to compulsory courses in particular semester.
Examination	Any formal written, spoken or practical timed and supervised assessment(s) (Continuous Assessment, Semester Examination and Industrial/Field Practical Training).
Examination Cheating	Possession of, using, giving, receiving or copying unauthorized materials during and /or after a test, examination, assignment, quizzes, project, research report or collaborating with another candidate to commit examination irregularity. It also includes any kind of dishonesty, destruction, falsification or any evidence of examination irregularity.
Examination Irregularity	Any act or conduct prohibited or failure to abide by general or specific examination regulation(s).
Examination Venue	Any area that the Senate has approved to be used for conducting examinations of any form.
Final Examination Results	Refer to results which combines the first and/or second semesters' examinations' results approved by the Senate.
Incomplete Examination Results	Examination results with unfinished component of assessment.
Invigilation	Refers to the action of monitoring candidates while they are taking an examination to make sure that they have everything they need; they keep to the rules and all

	regulations regarding the given examinations.
Invigilator	Refers to a person monitoring candidate while they are sitting for examination(s) to make sure that they have everything they need, they keep to the rules and all regulations regarding the given examination(s).
Maximum Period of Registration	The maximum time (years) of which a student will stay at the University pursuing his/her programme (ie. five years and six years for three and four-year programmes respectively).
Oral Examination	A test in which examiners pose question(s) in spoken form and the answers must be in spoken form.
Pending Issue	An issue of which a decision is not yet made by the given authority.
Plagiarism	Refers to an act of copying another person's ideas, words or work and pretend that they are your own; this includes lifting, stealing, illegally use, bootlegging of work, passing off of the words or ideas of someone else as his/her without proper acknowledgement or crediting of original source or use of academic work that constitute breach of copyright.
Postponement of Examinations	Adjourn examinations to a later date with the approval of the authority and it is abbreviated as PEX.
Postponement of Studies	Adjourn studies to a later date with the approval of the authority and it is abbreviated as 'POS'
Pre-requisite Course	An essential course of a programme which must be completed before proceeding to the next semester or level.
Programme	The totality of courses offered towards the award of certificate to the student
Provisional Examination Results	Examination results which have not yet been approved by the Senate. They express the temporary score(s) of the formal written, spoken or practical test(s) and examination(s) in the University done at the end of the given academic semester. These results are arranged for the present time only and are likely to be changed in the future by the Senate.
Registration	An official record that qualifies a particular student as eligible and legitimate student of the University
Semester	The time period in which a particular learning takes place in the University. One semester consists of seventeen (17) weeks of which fifteen (15) weeks are set for tuition and two (2) weeks are for examinations.
Semester Examination	An examination administered as first sitting at the end of a semester or at the end of a taught course as stipulated in these Regulations.

Semester Grade Point Average	Refers to the summation of the product of all credit modules and grade point scored by a student divided by the total number of credits taken by a student during a semester.
Senate	The overall principal decision-making organ in respect of all academic matters of the University and it is responsible for the academic work of the University both in teaching, research and consultancy.
Special Examination	An examination administered to a candidate as the first sitting parallel to Supplementary Examinations after failing to sit for semester examination with genuine reason(s); and it is awarded the marks equivalent to semester examination.
Student	Any person registered for any programme of study conducted by the University.
Supplementary Examination	An examination administered to a candidate after failing the first sitting in the semester examination or special examination after fulfilling all required conditions for that sitting and awarded a maximum of grade C.
Termination of Studies	An official record that refers to a particular student who has stopped his/her studies intentionally/unintentionally before completing the final year at the University. It is abbreviated as TOS.
Unauthorized Material	Any form of prohibited written or printed material(s) which is/are not allowed into the examination venues including but not limited to written papers, books, notes, annotated materials, cellular or mobile phone, radios, radio cassette or other type of players, computer, iPod, smart pen, smart watch, smart spectacle, earphones, recording apparatus, programmable calculator, calculator with unauthorized written material, written handkerchief, DVD, VCD, soft or alcoholic drinks, annotated documents which one knows, believes, suspects or reasonably ought to have known, believed or suspected that the same could be used to assist him/her cheating in the examination and any other material as may be specified from time to time by the DVC Academic, Research and Consultancy.
Undergraduate	Refers to the University or College student who is studying for his/her first degree, diploma or certificate.
University	Mbeya University of Science and Technology.
Valid/genuine Reason	Means any reason that may be accepted such as medical ground(s), acquired consent or officially granted permission by the University.
Withheld Results	Results which have been retained/ not been released due to various reasons.

10.1.2 Eligibility for Examinations

- 10.1.2.1 A candidate shall be allowed to sit for examination if he/she is dressed in a decent manner as stipulated in Student's by Laws.
- 10.1.2.2 A candidate shall be allowed to sit for any semester examination if he/she has registered and paid all prescribed fees by the University within two weeks from the first day of beginning the particular semester.
- 10.1.2.3 A candidate shall sit for semester examination in a given course(s) if he/she has attained at least 75% of attendance in a course(s) delivery.
- 10.1.2.4 A candidate shall be allowed to sit for semester examination if he/she has completed course assessment in all required courses.
- 10.1.2.5 A candidate shall sit for supplementary examination(s) in the failed course(s) provided that the overall GPA is 1.8 or above. Supplementary Examination shall be held before commencement of the next academic year.
- 10.1.2.6 The highest mark awarded in the supplementary examination(s) shall be minimum passing grade i.e. Grade 'C'. This will be used in the calculation of Overall GPA.

10.2 SPECIFIC EXAMINATION REGULATIONS**10.2.1 Course Assessment Criteria**

- 10.2.1.1 Student performance shall be assessed continuously throughout the course. Such Continuous Assessment shall include at least two-timed test under examination conditions and homework exercises in a specific semester. The weight of such Continuous Assessment in every course shall be 40% and Semester Examination shall be 60%, unless otherwise stated as stipulated in the curriculum for a given course.
- 10.2.1.2 Continuous Assessment shall be open to students before sitting for the Semester Examination through Students Information Management System (SIMS) and the signed printout from instructor shall be submitted to the respective Head of Department at least two weeks before commencement of semester examinations.
- 10.2.1.3 A candidate who for genuine reason(s) has not completed continuous assessment in a course(s) shall be awarded an "Incomplete" Continuous Assessment (ICA). Such a student shall be required to sit for special continuous assessment(s) in a given semester before commencement of semester examination.
- 10.2.1.4 It shall be the duty of the concerned instructor to inform the students at the beginning of the semester on the procedures of assessment for the respective course.
- 10.2.1.5 All courses shall be examined or otherwise assessed at the end of each semester and the results shall count in determining successful completion of studies.
- 10.2.1.6 Determination of overall GPA for pass or fail status of the candidate shall be done at the end of each academic year by the concerned authority.

10.2.2 Examination Setting, Moderation and Marking

- 10.2.2.1 The examination process shall involve setters, moderators and markers.
- 10.2.2.2 The criteria, procedure to appoint setters, moderators and markers together with their roles are stipulated in separate document (Examination Setting, Moderation and Marking).
- 10.2.2.3 All examinations which are set must be moderated as per moderation procedures and the moderation report(s) shall be submitted to the Head of Department.

10.2.3 Conduct of Semester Examinations

- 10.2.3.1 Draft Timetable for semester examinations shall be available and accessible in University Website, Notice Board and SIMS in four weeks before the commencement of the semester examinations.
- 10.2.3.2 Final Timetable for semester examinations shall be available and accessible in University Website, Notice Board and SIMS in two weeks before the commencement of the semester examinations.
- 10.2.3.3 It shall be the duty of the candidate to consult the concerned Department's Examination Coordinator for changes of Draft Examinations Timetable in not more than one week after the release of Draft Examinations Timetable.
- 10.2.3.4 No candidate shall enter into the examination room unless he/she has produced his/her Student Identity Card and Examination Card for inspection by the Invigilator before entering to the examination room.
- 10.2.3.5 No candidate shall be admitted to the examination room after 30 minutes have elapsed since examination commencement.
- 10.2.3.6 No student shall be allowed to leave the examination room 30 minutes before the end of examination.
- 10.2.3.7 A student who is unable to continue doing the examination may be allowed to leave the examination room 30 minutes after the commencement of the examination. Such student shall neither be allowed to return into the examination room nor leave with the question paper or answer booklets.
- 10.2.3.8 Without prejudice article 10.2.3.6, a candidate who finishes an examination before the finishing time may be allowed to leave the examination room provided that 30 minutes have elapsed since the commencement of the examination.
- 10.2.3.9 A candidate may leave the examination room temporarily for five minutes; only with the permission of the Invigilator after filling the Examination Short-call Form. In any such situation, the Invigilator will satisfy him/herself that the candidate does not carry with him/her any unauthorized material.
- 10.2.3.10 A candidate allowed to leave the examination room temporarily will be accompanied by an examination attendant designated by the Invigilator while outside the examination room.
- 10.2.3.11 A candidate shall not bring any book, paper or written information or other unauthorized materials before

entering into the examination room. A candidate who is suspected of hiding unauthorized material shall be asked by the Invigilator to surrender the material and if necessary, shall be subjected to a body search. Refusing to surrender the suspected materials or body search is tantamount to misconduct and will result to denial of examination room entry.

- 10.2.3.12 A candidate sitting for semester examination or test shall be guilty of an irregularity if:
- (i) He/she possess any unauthorized materials such as written or printed document or memorandum, notes, sketch, map, diagram, any inadmissible electronic/non electronic equipment or article in the examination room;
 - (ii) He/she helps or tries to help or tries to obtain help from another candidate or communicates or tries to communicate with any other person other than an Invigilator when the examination or test has begun;
 - (iii) He/she causes disturbance in the examination venue, or acts in an improper or unseemly manner and refuses to comply after a warning issued by an Invigilator to cease such disturbance, improper conduct, or destroys what would have been evidence of such conduct.
- 10.2.3.13 While an examination is in progress the following shall be observed:
- (i) A candidate shall not copy or attempt to copy from another candidate or engage in any similar activity;
 - (ii) When a candidate needs any assistance; he/she may attract the attention of the Invigilator by raising his/her hand.
- 10.2.3.14 No candidate shall be allowed to borrow or lend any tools/equipment (e.g. calculator, pen, pencil, rubber, ruler, drawing instruments) from another candidate or asking the Invigilator to borrow or lend on behalf thereof in the examination room.
- 10.2.3.15 No candidate shall be allowed to take outside of examination room any used or unused answer booklet(s)/question paper(s).
- 10.2.3.16 A candidate shall not in any way interfere with the stapling of the answer booklets. Any complaints about the answer booklet should be brought to the attention of the Invigilator.
- 10.2.3.17 No candidate shall be allowed to possess and use programmable calculators or calculators with facilities for storing and retrieving text; smart watch, smart pen, portable computers, electronic organizers, mobile phones and other electronic devices capable of communicating directly with similar nature.
- 10.2.3.18 Any candidate found with unauthorized material(s) or device(s) in in the examination room; shall be deemed guilty of examination irregularity. The found unauthorized materials or devices shall be immediately confiscated by the Invigilator and the University will be under no obligation to issue the candidate with a replacement of unauthorized material(s) or device(s).
- 10.2.3.19 All rough work shall be done at the back of the answer booklet(s) and must be cancelled showing not being

part of the solutions/answers.

10.2.3.20 No candidate is allowed to write anything on the question paper(s). Any written information on question paper will be treated as an unauthorized material(s).

10.2.3.21 No candidate is allowed to write anything on the Examination ID Card. Any written information on Examination ID Card will be treated as an unauthorized material(s).

10.2.3.22 Provision for examination offence(s) and penalty (ies) stipulated in these regulations shall apply to any student found guilty of any offence(s).

10.2.4 Supervision and Invigilation of Examinations

10.2.4.1 The principal who shall also be the Chief Invigilator shall appoint a Supervisor for each examination session.

10.2.4.2 For each examination, there shall be the Supervisor and Invigilator appointed by the Principal of the College as the case may be, in consultations with Heads of Departments or other appropriate authority.

10.2.4.3 The Invigilator must report at the examination venue at least half an hour before the commencement of the examination.

10.2.4.4 The Supervisor and the Invigilator shall be responsible in ensuring that no candidate is allowed to enter into the examination room with unauthorized material.

10.2.4.5 The Invigilator shall allow candidates to enter in the examination room half an hour to time.

10.2.4.6 When candidates are seated, the Invigilator shall make sure that:

- (i) Candidates are in possession of the correct paper;
- (ii) Candidates read carefully the instruction on the examination paper;
- (iii) Candidates commence examination on the specified time.

10.2.4.7 The Invigilator shall not allow any candidate who reports half an hour late to sit for examination after the commencement of the examination.

10.2.4.8 When the examination is in progress; the Invigilator shall mark the attendance list, check the Student ID Card and Examination ID Card and note every instance of absence. In so doing, the Invigilator shall satisfy him/herself that the student is qualified to do the semester examination.

10.2.4.9 The Supervisor/Invigilator may permit a candidate to leave the examination room temporarily for only five (5) minutes on genuine reason(s). The given Invigilator must designate another Invigilator/examination attendant to accompany the candidate. In such a case the Invigilator shall keep records of candidate(s) who leave the examination room temporarily.

- 10.2.4.10 The Supervisor/Invigilator shall move around the examination room(s) as often as he/she deems necessary.
- 10.2.4.11 The Supervisor/Invigilator shall not engage himself/herself in any activity other than invigilation during the examination.
- 10.2.4.12 The Supervisor/Invigilator shall announce to candidates at reasonable intervals (e.g. one hour gone, half an hour left, etc.) the time available to them from time to time and eventually must announce for examination stoppage.
- 10.2.4.13 On stoppage of examination, the Invigilator shall instruct candidates to leave the answer booklets appropriately labelled and question papers on their tables, collect answer booklets and instruct candidates to leave the examination room.
- 10.2.4.14 The Invigilator shall count all answer booklets against the attendance list, for submission to the Head of Department or any authorized person. It shall be the responsibility of the Head of Department to verify the booklets. The supervisor/Invigilator shall also return all unused answer booklets, question papers and other materials to the Head of Department Office.
- 10.2.4.15 The Supervisor/Invigilator shall fill and submit irregularity report form on each examination to the Examinations Officer and copied to the Head of Department who will eventually report to the appropriate authority.
- 10.2.4.16 The examination irregularity report from relevant authority shall be forwarded to the University Senate. Based on its review, the Senate may nullify the results of that examination and discontinue the candidate; or if proved otherwise, the candidate shall be reinstated accordingly.
- 10.2.4.17 If a candidate is suspected of an examination irregularity, the following procedures shall be followed:
- (i) The Invigilator shall approach the candidate immediately after suspicion/discovery;
 - (ii) The Invigilator shall collect all unauthorized materials;
 - (iii) The Invigilator shall require a candidate to sign on the Invigilator's Examination Irregularity Form of the issue (collected material(s), time and place);
 - (iv) The Invigilator shall require other nearby Invigilator(s) to sign as witnesses of the offence made by the given candidate;
 - (v) The Invigilator may also require other nearby candidate(s) to sign as witnesses of the offence made by the given candidate;
 - (vi) The Invigilator shall allow the candidate to proceed with examination but his/her all results will be withheld pending to decision of concerned University Authority.
- 10.2.4.18 In case of failure or refusal to sign on the Invigilator's Examination Irregularity Report, the suspected candidate's action shall be deemed a contempt of the University Authority, and shall mean accepting or causing

commotion in the examination room, which is tantamount to violation of examination regulations and this shall lead to discontinuation from studies.

10.2.4.19 The Invigilator shall be assisted by VAI whose information are legally and legitimately acceptable for any examination proceeding.

10.2.4.20 The Invigilator shall adhere to all provisions as stipulated in these Examination Regulations.

10.2.5 Absence from Examinations

10.2.5.1 A candidate who for genuine reason(s) has not completed Semester Examination(s) (SE) in a course(s) shall apply for by writing the letter to the University within the first week of missing the examination(s) and he/she will be awarded PEX status. Such a student shall be eligible to sit for special semester examination(s) as the first attempt in a given semester during supplementary examination session provided that he/she has all Continuous Assessment (CAs) for that particular course (s).

10.2.5.2 In case a candidate has incomplete in SE and has supplementary examinations, he/she will be allowed to sit for special Semester Examination as well as the supplementary examinations. However, results of supplementary examinations shall not be considered unless the GPA amounts 1.8 or above after considering firstly the results of Special Examination(s).

10.2.5.3 In case, a candidate's results do not amount to the GPA of 1.8 after considering firstly special examination(s) results; his/her supplementary examination(s) shall not be considered and the candidate shall be automatically discontinued from studies.

10.2.5.4 A candidate who falls sick during the examination period shall inform his/ her Head of Department immediately with assistance of Invigilator and report to the University Health Centre.

(i) If this leads to inability to sit for some or all courses, a certified medical report from the MUST Medical Officer In-charge shall be forwarded to his/her Head of Department not more than two days after the incidence.

(ii) A candidate found to have cheated and/or forged medical report during semester examination shall be deemed guilty of examination irregularities; and shall have absconded the given examination(s).

10.2.5.5 A candidate who misses *any* scheduled Continuous Assessment (ie. quiz, individual assignment, group assignment, presentation or test), Semester Examination, Supplementary/Special Examination, Carry over Examination or IPT/FPT/TP without genuine reason(s) shall be absconded, and eventually he/she will be discontinued from studies.

10.2.6 Releasing of Examination Results

- 10.2.6.1 The provisional semester examination results shall be released through SIMS after three weeks from the last date of the semester examination.
- 10.2.6.2 The provisional supplementary/special examination results will be released after two weeks from the last date of the examination.
- 10.2.6.3 Undergraduate Studies Committee shall release the Provisional Examination Results after recommending to the Senate.

10.2.7 Conditions for Proceeding to Next Level

- 10.2.7.1 A candidate shall proceed in the following academic year of study after attaining a minimum overall GPA of **2.0** or above in the given academic year of assessment with a minimum total of 120 course credits.
- 10.2.7.2 A candidate who fails to pass in any course assessed by continuous assessment only shall carry over once the failed course(s) in the subsequent academic year provided that, his/her overall GPA of 2.0 is attained.
- 10.2.7.3 A candidate who fails to pass in any course after sitting for supplementary examination(s); shall carry over the failed course(s) once in the subsequent academic year during the Regular Semester Examination Session provided that, his/her overall GPA of 2.0 is attained.
- 10.2.7.4 In case, a candidate's results do not amount to the GPA of 2.0 after sitting for supplementary examination(s) shall be automatically discontinued from studies.
- 10.2.7.5 A candidate who fails to pass in any course after sitting once for carry over; shall be discontinued from studies in the given academic year.
- 10.2.7.6 The highest mark awarded in the carry over(s) shall be minimum passing grade i.e. Grade 'C' and this will be used in the calculation of overall GPA.
- 10.2.7.7 A candidate whose overall GPA is less than 1.8 in the first sitting of the academic year shall be discontinued from studies in the given academic year of assessment.

10.2.8 Specific Conditions of Design Studio Course for Architecture Students

- 10.2.8.1 No architecture student shall be allowed to proceed with the next class with a failed design studio grade (ie. D or F).
- 10.2.8.2 These procedures will be followed when the architecture student fails the design studio course,
- i) If a student fails semester I design studio, he/she will be allowed to continue with Semester II Design Studio and resubmit the failed Semester I Design Studio (or together with failed Semester II Design Studio) during Supplementary Examinations session.

- ii) If the student fails the resubmissions during Supplementary Examinations session, he/she will not be allowed to continue with next year studies instead he/she will be required to carry the failed studios to next year.
- iii) If the student passes the carry, he/she will be allowed to continue with next year.
- iv) If the student fails the carry, he/she will be discontinued from studies.
- v) While resubmitting Design Studio course, a student shall:
 - a) Resubmit the Design Studio course only once in a given academic year.
 - b) Attend all the remedial classes or consultations (if any) during the carry period under guidance of his/her supervisor.
- vi) If a student has resubmitted Design Studio course the better of the two grades, he/she has obtained in that course shall be used in the computation of his/her Cumulative Grade Point Average (CGPA). The repeated effort shall be recorded on the permanent record, but not count as credit earned.
- vii) If a student fails to resubmit Design Studio course during supplementary examinations period for justified reasons, he/she will be allowed to do the so-called special resubmission during supplementary examinations period in the next academic year.
- viii) When waiting for the Special resubmission, the student will not be allowed to join the next year until he/she passes the Special resubmission examination.

10.3 EXAMINATION IRREGULARITIES AND PENALTIES

10.3.1 Discontinuation

- 10.3.1.1 A candidate who is found engaging himself/herself in smoking, eating or drinking of beverages or doing other acts that may cause nuisance in the examination room; shall be deemed guilty of irregularity, stopped from continuing with the given examination and eventually discontinued from studies.
- 10.3.1.2 A candidate found borrowing or lending any tools/equipment (e.g. calculator, pen, pencil, rubber, ruler, drawing instruments) from another candidate without asking permission from the Invigilator in the examination room; shall be discontinued from studies.
- 10.3.1.3 A candidate found late 30 minutes after examination commencement shall be deemed guilty of examination irregularity and shall be discontinued from studies.
- 10.3.1.4 A candidate found leaving examination room before 30 minutes after commencement of examination; shall be deemed guilty of examination irregularity and shall be discontinued from studies.
- 10.3.1.5 A candidate who intentionally absent him/herself from attempting any scheduled Continuous Assessment (s), End of Semester Examination(s) or Supplementary/Special/Carry Over Examination without genuine reason(s) shall be treated as absconded and eventually discontinued from studies.

- 10.3.1.6 A candidate found cheating and/or forging medical report of his/her absence during semester examinations shall be deemed guilty of examination irregularities; and shall have absconded the given examination(s) and eventually discontinued from studies.
- 10.3.1.7 Any candidate found with possession or access of unauthorized materials as assistance in his/her examination shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.8 A candidate talking or communicating or making an arrangement to another candidate or any person for assistance during the examination session; inside or outside the examination room without the permission of an Invigilator shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.9 A candidate found copying or indulging in copying or giving another candidate answer book/question paper for copying with the intention of assistance shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.10 A candidate found writing on any other piece of paper, parts of the body or anywhere, a question set in the paper or anything connected with a question set the paper or solution thereof shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.11 A candidate found passing/receiving or attempting to pass on or receive, a copy of question set in the paper or question paper itself or a part thereof or a solution of a question paper, during the examination session shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.12 A candidate found possessing of solution to a question set to the paper in collusion with any member of supervisory or any other staff or some outside agency shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.13 A candidate found smuggling in the answer book or taking out or arranging to send out an answer book or continuation sheet, during or after the examination with or without the help or collusion of any person connected with the examination room or of any agency within or outside examination room shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.14 A candidate found writing outside the examination room an answer book or continuation sheet for a candidate, which the letter smuggles into the examination room or to replace the answer book of the candidate after the examination shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.15 A candidate found showing misconduct or misbehaving towards the Invigilator or any member of the supervisory staff shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.

- 10.3.1.16 A candidate found impersonating another candidate shall be deemed committed irregularities and thereof shall be discontinued from studies, also that person may be reported to the police.
- 10.3.1.17 A candidate for whom the impersonation was attempted shall be expelled from the University and discontinued from studies.
- 10.3.1.18 A candidate obtaining admission/forging ID for the examination on the false representation made by a candidate himself/herself shall be deemed guilty of examination irregularities; declared ineligible for the given examination and discontinued from studies and may be reported to the police.
- 10.3.1.19 A candidate forging another person's signature on a student's examination registration form or using a forged document knowing it to be forged and with a view to seeking admission shall be deemed guilty of examination irregularities; declared ineligible for the given examination and discontinued from studies and may be reported to the police.
- 10.3.1.20 A candidate leaving the examination room without delivering the answer book to the concerned Invigilator and taking away answer book with him/her or internationally tearing off or otherwise disposing off his/her answer book or any part thereof or the continuation sheet or part thereof inside or outside the examination room shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.21 A candidate approaching or influencing directly or indirectly a member of the University staff regarding his/her cheating case; shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.22 A candidate swallowing or attempting to swallow a note or paper or snatching or cause disappearance or destroy any unauthorized material; shall be deemed guilty of examination irregularities; and shall have failed whole examination and eventually discontinued from studies.
- 10.3.1.23 A candidate attacking physically or verbally the Invigilator or any member of supervisory staff; shall be deemed guilty of examination irregularities; and shall have failed the whole examination and eventually discontinued from studies.
- 10.3.1.24 A candidate found cheating and/or forging medical report during semester examination shall be deemed guilty of examination irregularities; and shall have absconded the given examination(s) and eventually discontinued from studies.
- 10.3.1.25 A candidate found communicating or attempting to communicate directly or indirectly through a relative, guardian or friend with an examiner for the purpose of influencing him/her on award of marks; shall be deemed guilty of examination irregularities; and the given examination results shall be nullified and eventually discontinued from studies.

10.4 APPEAL**10.4.1 Appealing Procedures**

- 10.4.1.1 A student who is not satisfied with his or her examination results or related decisions may lodge an appeal within fourteen (14) days from the date the Provisional Examination Results are released. The appeal shall be considered only after the student has paid the prescribed appeal fee and submitted the appeal through the Online Students Information Management System (SIMS) within the specified deadline.
- 10.4.1.2 A request for an appeal hearing shall be accompanied by non-refundable fee, prescribed by the University, for a course (s) or for any other academic ground(s) of appeal made to the University. Such a fee(s) shall be revised from time to time.
- 10.4.1.3 Time frame for appeal hearing shall be set to facilitate speedy and prompt hearing as per procedure, so as to ensure that study progression from one UQF level to another is not interfered.
- 10.4.1.4 The Senate Appeals Committee shall, on the basis of the laid down guidelines and procedures, hear the appeal, investigate, discuss and make recommendations accordingly.
- 10.4.1.5 In case of the necessity for re-marking, Principal shall appoint a suitable expert(s) in the relevant course to be a third marker. Third maker shall re-mark the respective script(s) using the same marking scheme used by the internal and external examiners.
- 10.4.1.6 Marks from the third marker shall be tabled before the College Board on behalf of Senate Appeals Committee for provisional approval before the final approval by the Senate.
- 10.4.1.7 All appeals should follow the procedures outlined in the Examination Regulations. No appeal will be considered where:
- i) The candidate appeals for re-marking but fails to establish reasonable grounds for prejudice, incompetence, or lack of integrity on the part of the Internal Examiner;
 - ii) It arises for the first-time issues concerning the supervision, teaching or coursework assessment. Such matters should only be considered if they have been raised by the student promptly and in writing, at the time they first arose; and
 - iii) A student alleges illness or other factors although he/she had an opportunity to postpone studies or examinations(s) but voluntarily opted not to take that opportunity.
- 10.4.1.8 The decision made by the Senate on any academic matter for a student shall be final.

10.5 PLAGIARISM**10.5.1 Plagiarism Cases**

10.5.1.1 Commitment of plagiarism to a candidate shall be considered if:

- (i) The candidate has fabricated or falsified results/data;
- (ii) The candidate has submitted the same, or substantially the same work more than once at the same or another institution;
- (iii) The candidate has submitted or presented the work of another person as his or her own;
- (iv) The candidate has submitted false records, information or documents;
- (v) The candidate has omitted due acknowledgement of the work of another person;
- (vi) There is collusion i.e. when two or more candidates collaborate to produce the same work submitted by each, without prior formal permission for such collaboration;
- (vii) The candidate has used, by payment or otherwise, a third party to produce Research Project report or any assignment write-up in whole or in part.

10.5.1.2 All plagiarisms stated from 5.1.1 (i) to (vii) shall be checked and certified by the mandated supervisor, examiner, Head of Department or mandated member of the various responsible committees.

10.5.1.3 All cases of alleged plagiarism shall be reported to the DVC ARC who shall refer to Director of Undergraduate Studies for investigation.

10.5.1.4 The minimum tolerable level for plagiarism shall be 25% of the whole assignment, research or project proposal, research or project report.

10.5.1.5 A candidate found guilty in plagiarizing any assignment, research or project proposal, research or project report or part thereof; he/she shall be discontinued from studies.

10.6 AWARD OF ACADEMIC CERTIFICATES AND TRANSCRIPTS

Academic Certificates and Transcripts will be awarded to student who has a status of pass for all his/her examination from the year of registration to final year.

10.6.1 Grading System, Award Classification and Computation of GPA

(a) Grading System

Grades and Grade Points for each course shall be assigned with reference to ranges of scores as indicated below:

Score Range	Grade	Grade Points	Definition of Grade
70-100	A	5	Excellent
60-69	B ⁺	4	Very good
50-59	B	3	Good
40-49	C	2	Fair
35-39	D	1	Weak
0-34	E or F	0	Poor

(b) Classification of Awards

(i) The GPA for final Degree or Diploma shall be computed from credits and grades classified as indicated below:

Class of Award	Division	Cumulative GPA
First Class		4.4 – 5.0
Second Class	Upper	3.5 – 4.3
	Lower	2.7 – 3.4
Pass		2.0 – 2.6

(ii) A Class with Honour shall be awarded to a Bachelor Degree student whose cumulative GPA falls in First Class or Upper Second-Class award and he/she did not supplement or carry over any course during his/her studies.

(c) Computation of GPA

(i) **Overall GPA** shall be computed from the summation of all products for course credits and grade points divide to the summation of all course credits for the two semesters in a particular academic year.

$$\text{Overall GPA} = \frac{\text{Sum of } (P \times C)}{\text{Sum of } C}$$

- (ii) **Cumulative GPA** shall be the combined GPA of all academic years of studies computed from the summation of all products for course credits and grade points *divide* to the summation of all course credits.

$$\text{Cumulative GPA} = \frac{\text{Sum of } (P \times C)}{\text{Sum of } C}$$

Where;

P: Grade points assigned to a letter grade scored by the student in a given course

C: Number of credits associated with the course.

10.6.2 Conditions for Awards

A student shall be deemed eligible for the award of Academic Transcript and Certificate of Graduation, if there is evidence that; a student has completed and passed all courses for the award and has fulfilled all terms and conditions established by the University.

10.7 REPLACEMENT OF ACADEMIC TRANSCRIPTS AND CERTIFICATES

10.7.1 Procedures for Replacement of Academic Transcripts and Certificates

10.7.1.1 In occurrence of loss, partly or complete destruction of the original certificates/transcript or copy thereof, the University may be responsible to issue a certified copy of certificate based on the following conditions for a student:

- (i) Producing the evidence of the loss from the police;
- (ii) Producing evidence of the public announcement from the Government Gazette; and
- (iii) Producing a sworn affidavit.

10.7.1.2 The certificate shall be issued until a period of 12 months has elapsed from the date of such a loss.

10.7.1.3 The transcript shall be issued until a period of one month has elapsed from the date of such a loss.

10.7.1.4 The academic certificate and transcript shall be replaced by paying a non-refundable fee of Tsh 100,000/= (one hundred thousand only) and Tsh 20,000/= (twenty thousand only) respectively. The fees are subject to review by Senate from time to time.

10.8 REVIEW OF UNDERGRADUATE EXAMINATION REGULATIONS

These Examination Regulation are subject to review from time to time as need arises.