Dar es Salaam Institute of Technology

Prospectus -2026/2027

START YOUR FUTURE TODAY AT DIT

DIT is committed to provide a learning environment that promotes a passion for excellence in professionalism and enduring knowledge which stimulates creativity and innovation consistent with the country and regional needs. We embrace competence-based education and training approach. The Institute is fast establishing itself as the ideal tertiary institution for the holistic students' development. We are focused on nurturing the growth of academic excellence and instilling the importance of scientific, engineering skills and entrepreneurship, through the Teaching Factory Concept.

STATEMENT OF THE RECTOR

Dar es Salaam Institute of Technology (DIT) was established by the Act of Parliament No.6 of 1997, amended by Written Laws (Miscellaneous Amendment) Act. No. 4 of 2023 as a higher technical training institution in Tanzania. DIT has a vision of becoming a leading technical education institution in addressing societal needs. The mission of DIT is to provide competence based technical education, through training, research, innovation and development of appropriate technology. DIT is an agent of industrialization, a progressive and customer-centered higher learning institution.

DIT understands that such a mission could only be realized if local technical training institutions will significantly increase students' enrolment and improve teaching methodology. Technical training at DIT is competency based, characterized by the ability to carry out an occupational activity, but still needs to be consolidated. In order to achieve this, we are fostering a teaching factory approach whereby technical training is interactively linked to a real life factory business. This is realized by either establishing a virtual or physical factory. The former is mainly achieved through industrial linkages. It is also envisioned to couple training with technology incubators as they provide space, partnerships and networks to build a national community in which project/research students, innovators, entrepreneurs, scientists, technologists, professionals and investors can continuously exchange knowledge, practices, develop innovative businesses and expand their networks locally, regionally and globally.

Strategies for improving the quality of teaching and learning process are notably vivid in a good number of curricula developed and reviewed recently. The application of ICT in teaching is also emphasized in the new curricula. Besides, DIT envisions putting in place support services for business start-ups for its students after completion of training, and similar measures for easing labour-entry and job-retention. To facilitate the teaching factory at DIT staff and students are intermittently attached to industries. Such initiatives are the testimony of DIT's willingness and readiness to play a key role in industrialization agenda.

DIT is also planning to increase students' enrolment to more than 12000 students by 2027 through extending and strengthening its services to various parts of the country including Dar es Salaam, Mwanza, Songwe and Dodoma regions. We are also glad that the Government of Tanzania has already extended financial support in tune of TZS 74 billion for infrastructure development and procurement of modern teaching facilities in the two DIT campuses (Dar es

Salaam and Mwanza) through a World Bank loan under East Africa Skills for Transformation and Regional Integration Project (EASTRIP). Currently, DIT offers a wide range of programmes namely certificates, ordinary diploma, bachelor to master level in the fields of Maintenance Management, Computing and Communications Technology, Computational Science and Engineering, Sustainable Energy Engineering, civil engineering, computer engineering, electrical engineering, mechanical engineering, science and laboratory technology. Other fields are oil and gas engineering, information technology, mining engineering, biomedical equipment engineering, communication system technology and renewable energy technology. Others include multimedia and film technology, biotechnology, Leather products and allied technologies and food science and technology. Others are Masters' programmes in Computer Engineering, Cyber Security and Forensic Investigation, Telecommunications Systems and network Engineering, Diploma in Industrial Automation, Bachelor of Information Technology, Bachelor of Multimedia and Film Technology and Bachelor of Biomedical Engineering. The newly developed Doctor of Technology (DTech) programme is under validation processes by the NACTVET.

In the current year 2026/2027, DIT will continue strengthening the strategies aimed at providing competence in applied science and engineering programmes and hands-on practice through the Teaching Factory concept. The Institute will keep on improving learning environment, which is key for nurturing critical thinking skills and personal development to enhance knowledge based economic growth in the country.

THE DIT WE WANT

Prof. Preksedis Marco Ndomba

RECTOR

MEMBERS OF THE DIT GOVERNING COUNCIL

NO.	NAME	INSTITUTION	TITLE
1.	Eng. Dkt. Richard Joseph Masika	Former Rector of Arusha Technical College (DTC)	Chairman of the Council
2.	Prof. Preksedis M. Ndomba	Dar es Salaam Institute of Technology (DIT)	Secretary
3.	Prof. Duwa Hamisi Chengula	Mbeya University of Science and Technology (MUST)	Member
4.	Prof. Ladslaus Laurent Mnyone	Ministry of Education, Science and Technology (MOEST)	Member
5.	CPA. Antony M. Kasore	Vocational Education and Training Authority (VETA)	Member
6.	Dr. Fredrick Mathew Salukele	Ministry of Education, Science and Technology (MOEST)	Member
7.	Dr. Hanifa Yusuf Mohamed	Ministry of Industries and Trade (MIT)	Member
8.	Mr. Nicolaus Mayunga Sitta	Office of Attorney General (OAG)	Member
9.	Ms. Happyness A. Munisi	Dar es Salaam Institute of Technology (DIT)	Member
10.		DIT Students' Organization (DITSO)	Member

MANAGEMENT STAFF OF THE DAR ES SALAAM INSTITUTE OF TECHNOLOGY

1. INSTITUTE EXECUTIVES

Rector
Prof. Preksedis M. Ndomba BSc. (Eng) (Dar), MSc (Eng.) (Dar), PhD (UDSM/NTNU)

Deputy Rector (Academic, Research and Consultancy)
Prof. Ezekiel M. Amri, BSc. Ed., MSc. Bot. (UDSM), PhD Bot, (UDSM)

Acting. Deputy Rector (Planning, Finance and Administration)
Dr. Respicius C. Kiiza, BSc. Eng. (UDSM), MSc Eng (UDSM), PhD (KTH - Sweden), P. Eng. (T)

2. DIRECTORS

Director of Academics

Dr. Petro E. Pesha, BSc. Electronic Science & Comm. (UDSM), MSc. Eng. Electronics (Stellenbosch, RSA), PhD Eng. (Cape Town, RSA), Registered ICT Professional (NAS), IEEE Member Africa.

Director of Academics Support Services

Dr. Paul F. Mmbaga, ADE. Electronics and Telecoms (DIT, Tanzania), MSc. Comm. and Information Systems (XJTU, China), PhD in Eng. Optical Comm. (University of Edinburgh, UK), Certified Fibre Optic Technician (FOA, USA), IEEE Member

Director of Research Consultancy and Publications

Dr. Respicius C. Kiiza, BSc. Eng. (UDSM), MSc Eng (UDSM), PhD (KTH - Sweden), P. Eng. (T)

Director DIT Mwanza Campus
Dr. John A. Msumba, FTC Eng (DTC), ADE (DIT), BSc. (Hons)- Electronics (University of Pretoria), MSc – Electronics (University of Pretoria- RSA), PhD Electronic Eng. (University of Kwazulu- Natal- RSA), Certificate in Wireless Telephone- UP-Motorola- RSA

Director DIT Songwe Campus
Dr. Frank C. Lujaji, BSc. Mech. Eng. (UDSM: Dar es Salaam) Msc. Eng. (Rep. South Africa). PhD (NM-AIST: Arusha)

Director Dodoma Technical College (DTC DIT Dodoma Campus)
Dr. Joseph W. Matiko, BEng. Electronics and Tecomm. Eng. (DIT: Dar es Salaam) Msc Wireless Communications (Lund University, Sweden). PhD (University of Southampton: UK)

Director of Information and Communication Technology
Mr. Ombeni Mnzava, Adv Dipl. Comp Science, MSc IT and Mgt. (IFM)

Director of Students' Services

Mr. Misago H. Yosiah, BED, (UDSM), MA (Ed) (UDSM)

Ag. Director of Human Resource Management and Administration
Ms. Leah Lwihura Kachecheba, Bachelor in Public Administration (Mzùmbe-Morogoro Tanzania), Master's in Business Administration Human Resource Management (Open University of Tanzania-Dar es Salaam Tanzania)

Director of Finance and Accounts
CPA Kudra S.Bitesigirwe
ADA (CBE), CPA (T), MBA- Corporate Management (Mzumbe)

Director General, DIT Company Ltd
Dr. Sist P. Cariah, (DSc. Ing) Doctor of Science in Aerospace Eng (Riga Aviation University of Latvia)

Director, India Tanzania Center of Excellence in Information and Communication Technology (ITCEICT)
Dr. F. Mwalongo, BSc. (Comp. Sc.) (UDSM), MSc (Comp. Applications) (India), PhD (Comp. Sc) German

Ag. Director, Institute Consultancy Bureau (DIT-ICB)

Dr. Haji. S. Fimbombaya, BEng (Computer Electronics) (Russia), MSc (Digital Networks & Communications) (UK), PhD (Telecomm) (UDSM). Registered ICT Professional (Signal Processing) (ICT Commission), Professional Computer Engineer (ERB)

Ag. Director, DIT FactoryEdu Hub

Dr. Johnson L. Malisa, BSc. Eng (UDSM), MSc. Eng (UDSM), PhD (UDSM/NTNU)

Ag. Deputy Director, DIT FactoryEdu Hub

Dr. Mbazingwa E. Mkiramweni, BEng. Electronic Information (Beijing, China), MEng

3. OFFICERS

Institute Examination Officer
Dr. Ambele R. Mtafya, BSc. Ed.(UDSM), MSc Comp Sc.(China), PhD Comp Sc. (China)

Institute Admissions Officer
Dr. Triphonia J. Ngailo, BEd (Maths) (Tumaini), MSc. Maths (UDSM), PhD (Maths) UDSM

4. COORDINATORS

Curriculum Development Coordinator (CDC)
Dr. L. Gerson, BA Ed. (UDSM), MA Linguistics (UDSM),PhD (Linguistics) UDSM

Postgraduate Studies Coordinator
Dr. Kilaza S. Mwaikono, FTC (DIT), BSc – Food Science and Technology (SUA), MSc – Quality in Analytical Laboratories (University of Algarve – Portugal and University of Cadiz-Spain), PhD - Health and Biomedical Sciences (NM-AIST), Post Doc. Microbiome - Bioinformatics (University of Cape Town)

Research and Publications Coordinator
Dr. Ahab K. Ndabigaye, BSc. Molecular Biology & Biotechnology (UDSM), MSc. Life Sciences and Bioengineering (NM-AIST), PhD in Biomedical Sciences (University of Tasmania, Tasmania, Australia)

Acting Intellectual Property and Technology Transfer Coordinator
Dr Daniel Angelo Kisinga, BSc EE (UDSM), MSc Power systems and high voltage engineering (UDSM), MSc Advanced electrical machines, power electronics and drives (University of Sheffield, UK) and PhD in Automatic Control and Systems Engineering (University of Sheffield,Uk)

5. HEADS OF ACADEMIC DEPARTMENTS

Head. Department of Civil Engineering (Main Campus)
Dr. Antony M. Thomas BSc-Civil Eng. (UDSM-Dar), MSc-Water Resources Eng. (UDSM-Dar), PhD-Environmental Eng. (CQU-Chongqing)

Department of Civil Engineering (Songwe Campus)
Mr. Jovitus L. Kato, BSc-Civil Eng. (ARU-Dar), MSc-Structural Eng. (UDSM-Dar)

Department of Computer Studies
G. Tesha, Cert (Music Prod) (Thailand), FTC (Comp.) (DIT), BEng (Telecoms) (DIT), Meng (Comm.) (China), PhD (Info. & Comm. Eng.) (China) Registered Computer hardware Management Professional (ICT Commission)

Department of Electrical Engineering
Dr. Mwaka I. Juma, B.Eng. (DIT), MSc. EE (Chongqing University-China), PhD. EE (UDSM)

Department of Electronics and Telecommunications Engineering (Main campus)
Prof. Kenedy Aliila Greyson, FTC Electronics and Telecom. Eng. (DTC), ADE Electronics and Telecom. Eng. (DIT), PGD Data Communication Systems (Temple University, USA), MSc. Telecom. Eng. (UDSM), PhD Electrical Engineering (Suranaree, Thailand), ICT Commission (P), IEEE Member

Department of Electronics and Telecommunications Engineering (Dodoma Campus)

Dr. Promota Haule, BEng. Electronics and Telecom. Eng. (DIT), MSc. Comm. (UK), PhD in Telecom Eng. (UDSM)

Head. Department of Mechanical Engineering

Dr. Esebi A. Nyari, Bachelor in Mechanical Engineering (UDSM), MSc. in Production Engineering (UDSM), PhD in Sustainable Energy Science and Eng. (SESE) (NM-AIST)

Department of Science and Laboratory Technology (Main Campus)

Dr. Ismail M. Suleiman, BSc. Biotechnology and Laboratory Sciences (SUA), MSc. Epidemiology and Laboratory Management (MUHAS), PhD in Microbiology (SWU-China).

Department of Science and Laboratory Technology (Mwanza Campus)

Mr. Juma M. Magambo, BSc. (Chemistry & Biology) (SUA), MSc. (Food Quality & Safety) (SUA)

Department of Leather Products Technology (Mwanza Campus)

Mr. William S. Lohay, BSc Ed (UDSM), MIEM (UDSM), MSc. Leather Technology, (University of Northampton, UK)

Department of General Studies

Dr. Geomira G. Sanga, BSc. Ed. (UDSM), MSc (Math) (Stellenbosch, RSA), PhD (Maths) UDSM

Department of Library

Dr. A. Mnabe, BA Statistics. (UDSM), MA (Statistics) UDSM , PhD (Statistics) UDSM

Industrial Liason and Carrier Guidance

Eng. Afidhi S. Yusufu, BEng. Electronics & Telecommunications (DIT)
Master of Communications Management - MCM (Kigali, Rwanda)

6. MANAGERS

Planning and Development Unit Manager

Mr. Amosi Mcheche Nyandwi, MA - Economics - University of Dar es Salaam, BSc. Agricultural Economics and Agribusiness- Sokoine University of Agriculture, Dip. Geography and Mathematics, Education

7. HEADS OF SUPPORTING DEPARTMENTS

Internal Audit
Mr. Salim Mrindoko, Cert in Comp. Progr. (ICS TC) DSM, Diploma in Software Eng. (ICS TC)) DSM, Advanced Dipl in Information Processing ((ICS TC)) DSM, ADA (IFM) DSM, PGD in Financial Mngt (IFM) DSM, CPA (T), MSc. Finance (IFM/ Strathclyde University UK).

Procurement Management Unit
CPSP. Adella K. Mwarika, Msc. Procurement and Suply Chain Management (Mzumbe University) CPSP (Procurement Board), Advanced Diploma in Procurement and Supplies Management

Quality Assurance Bureau
Dr. Hadija S. Ng'imba, BA (Ed.)(UDSM), MA Linguistics (UDSM), PhD Linguistics (UDSM)

Communication and Marketing Unit
Ms. Consolatha E.Shoo BA (BAMCs)

Estate Unit
Mr. Winston Kachema Rajab, Masters of Arts in Project Planning and Management. (UDSM) Bachelor of science in property and facilities management. (Ardhi University)

Dispensary
Dr. Godwin A. Ndeki, Dip ADCM (Bugando), MSc HSM (Mzumbe Univ.)

Legal Service Unit

Advocate Assey B. Nabor, B.A Philosophy (Urbanian University of Rome),L.L.B (UDSM),MBA (OUT),L.L.M(Mzumbe University),DIploma in Human Rights (Uppsala University-Sweden), Arbitrator and Advocate of the High Court of Tanzania.

MAIN CONTACT ADDRESSES

DAR ES SALAAM INSTITUTE OF TECHNOLOGY (DIT)

Postal Address:	P. O. Box 2958, Dar es Salaam, Tanzania.
General lines:	+255-(0)22-2150174, +255-(0)22-2152496 +255-(0)22-2153200
Facsmile:	+255-(0)22-2152504
Website:	http://www.dit.ac.tz

RECTOR

Telephone: +255-(0)22-2150824

E-Mail: rector@dit.ac.tz

DEPUTY RECTOR (ACADEMICS, RESEARCH AND CONSULTANCY)

Telephone: +255-(0)22-2152292

E-Mail: drarc@dit.ac.tz

DEPUTY RECTOR (PLANNING FINANCE AND ADMINISTRATION)

Telephone: +255-(0)22-2152826

E-Mail: drpfa@dit.ac.tz

DIRECTOR OF ACADEMICS

Telephone: +255-(0)22-2153511

E-mail: da@dit.ac.tz

DIRECTOR OF ACADEMIC SUPPORT SERVICES

Telephone: +255-(0)22-2153511

E-mail: dass@dit.ac.tz

DIRECTOR OF STUDENTS' SERVICES

Telephone: +255-(0)22-50174/2150943

E-mail: dss@dit.ac.tz

DIRECTOR OF RESEARCH, CONSULTANCY AND PUBLICATIONS

Telephone: +255-(0)22-2151395 +255-(0)22-2150174

E-Mail: research@dit.ac.tz

DIRECTOR, DIT MWANZA CAMPUS

Box 2525, MWANZA

Telephone +255-(0)28-2981164/6

E-mail: head@mwanzacampus.dit.ac.tz

DIRECTOR, DIT SONGWE CAMPUS

Box 367, Songwe Momba Tunduma, Songwe

Telephone

Email: head@songwecampus.dit.ac.tz

DIRECTOR, INDIA TANZANIA CENTER OF EXCELLENCE IN INFORMATION AND COMMUNICATION TECHNOLOGY (ITCOEICT)

Telephone

Homepage: http://www.itcoeict.dit.ac.tz,

E-mail: director@dit.ac.tz

DIRECTOR, INSTITUTE CONSULTANCY BUREAU

Telephone: +255-(0)22-2150902

E-mail: icbm@dit.ac.tz

HEAD, COMMUNICATION AND MARKETING UNIT

Telephone: +255-(0)22-2150902

E-mail: pro@dit.ac.tz

DIRECTOR OF FINANCE AND ACCOUNTS

Telephone: +255-222153151

HEAD, INDUSTRIAL LIASON AND CAREER GUIDANCE

Telephone: +255-(0)22-2151322

E-mail: ilo@dit.ac.tz

HEAD, GENDER MANAGEMENT UNIT (GMU) COORDINATOR

Telephone: +255-(0)22-2150174

E-mail: gmu@dit.ac.tz

HEAD, ADMISSIONS OFFICE

Telephone: +255-(0)22-2150174

E-mail: admissions@dit.ac.tz

HEAD, EXAMINATION OFFICE

Telephone: +255-(0)22-2150174

E-mail: examinations@dit.ac.tz

SYSTEM ADMINISTRATOR

Telephone: +255-(0)22-2150174

E-mail: sysadmin@dit.ac.tz

CURRICULUM DEVELOPMENT COORDINATOR

Email: cdc@dit.ac.tz

HEAD, COMPUTER STUDIES DEPARTMENT

Telephone: +255 (0) 22 – 2151709

E-mail: computer@dit.ac.tz

HEAD, CIVIL ENGINEERING DEPARTMENT

Telephone: +255 (0) 22 – 2151484

E-Mail: civil@dit.ac.tz

HEAD, ELECTRICAL ENGINEERING DEPARTMENT

Telephone: +255 (0) 22 – 2151485

E-Mail: electrical@dit.ac.tz

HEAD, ELECTRONICS AND TELECOMMUNICATION ENGINEERING DEPARTMENT

Telephone: +255 (0) 22 – 2151055

E-Mail: telecomms@dit.ac.tz

HEAD, MECHANICAL ENGINEERING DEPARTMENT

Telephone:+255 (0) 22 – 2150975

E-mail: mechanical@dit.ac.tz

HEAD, SCIENCE & LABORATORY TECHNOLOGY DEPARTMENT

Telephone:+255 (0) 22–2151870

E-mail: labtechnology@dit.ac.tz

HEAD, GENERAL STUDIES DEPARTMENT

Telephone: +255-(0)22 -2150878

Email: gs@dit.ac.tz

TABLE OF CONTENTS

START YOUR FUTURE TODAY AT DIT II

STATEMENT OF THE RECTOR III

MEMBERS OF THE DIT GOVERNING COUNCIL V

MANAGEMENT STAFF OF THE DAR ES SALAAM INSTITUTE OF TECHNOLOGY VI

1. INSTITUTE EXECUTIVES VI

2. DIRECTORS VI

3. OFFICERS VII

4. COORDINATORS VIII

5. HEADS OF ACADEMIC DEPARTMENTS VIII

6. MANAGERS IX

7. HEADS OF SUPPORTING DEPARTMENTS X

MAIN CONTACT ADDRESSES X

TABLE OF CONTENTS XV

CHAPTER ONE 1

INTRODUCTION 1

CHAPTER TWO 5

ACADEMIC PROGRAMMES OFFERED 5

2.1. Vocational Training Programmes 5

2.2. Basic Technician Certificate and Technician Certificate 5

2.3. Ordinary Diploma Programmes 5

2.4. Higher Diploma Programmes 6

2.5. Bachelor Degrees Programmes (NTA 8) 6

2.6. Masters' Programmes (NTA 9) 7

CHAPTER THREE 11

ADMISSION REGULATIONS 11

CHAPTER FOUR 36

FEES AND OTHER FINANCIAL REQUIREMENTS 36

CHAPTER FIVE 51

EXAMINATION REGULATIONS 51

CHAPTER SIX 75

PROFILE OF ACADEMIC DEPARTMENTS 75

6.1 DEPARTMENT OF CIVIL ENGINEERING 75

6.2 DEPARTMENT OF COMPUTER STUDIES 96

6.3 DEPARTMENT OF ELECTRICAL ENGINEERING 122

6.4 DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING 143

6.5 DEPARTMENT OF MECHANICAL ENGINEERING 158

6.6 DEPARTMENT OF SCIENCE AND LABORATORY TECHNOLOGY 170

6.7 DEPARTMENT OF GENERAL STUDIES 187

6.8 E-LEARNING PROGRAMME 195

CHAPTER SEVEN 196

PROFILES OF ACADEMIC RELATED DIRECTORATES, DEPARTMENTS OR UNITS 196

7.1 RESEARCH AND PUBLICATION UNIT 196

7.2 POSTGRADUATE STUDIES UNIT 197

7.3 THE INSTITUTE CONSULTANCY BUREAU (DIT ICB) 198

7.4 DEPARTMENT OF INDUSTRIAL LIAISON AND CAREER GUIDANCE (ILCG) 212

7.5 LIBRARY SERVICES 214

7.6 DIRECTORATE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) 215

CHAPTER EIGHT 218

OTHER DIT CAMPUSES 218

8.1 MWANZA CAMPUS 218

8.2 SONGWE CAMPUS 236

CHAPTER NINE 245

GENERAL INFORMATION 245

9.1 BEST STUDENTS' PRIZES AND AWARDS 245

9.1.1 STUDENTS' ACCOMMODATION 245

9.1.2 STUDENTS' ADMINISTRATION 246

9.1.3 STUDENTS' CATERING SERVICES 246

9.1.4 MEDICAL SERVICES 246

9.1.5 GENDER MANAGEMENT UNIT (GMU) 247

9.1.6 PROMOTING AND SUPPORTING FEMALE STUDENTS 247

9.1.7 RENTAL SERVICES 248

9.1.8 ACADEMIC ALMANAC FOR ACADEMIC YEAR 2024/2025 249

CHAPTER ONE

INTRODUCTION

1.1 Brief Information about DIT

The Dar es Salaam Institute of Technology (DIT) is located in the Dar es Salaam city centre, at the junction of Morogoro Road and Bibi Titi Mohamed Street. DIT was established in 1997 by the Act of Parliament, "the DIT Act No.6 of 1997" to replace the Dar es Salaam Technical College, which had a long history of technical training in Tanzania. This history dates back to 1957 when its predecessor; the Dar es Salaam Technical Institute was established aiming at providing vocational training in the country. The Institute later expanded its scope to offer technical secondary school courses and training for Technical Assistants before it was upgraded in 1962 to become the Dar es Salaam Technical College (DTC), the first formal technical training institution in the country.

One of the responsibilities of DTC was to train technicians under the London City and Guilds Training Program. In order to enhance its contribution to the national capacity building in technical manpower, the College in 1964 introduced two-and-a-half-year Ordinary Technician Diploma (OTD) programmes in Civil, Electrical, Telecommunications and Mechanical Engineering. These were later upgraded into three-year Full Technician Certificate (FTC) courses in 1970/1.

Later, the College also introduced Diploma in Engineering (DE) programmes in the four traditional engineering disciplines to provide post-FTC technical training. Courses for Laboratory Technology and Diploma in Technical Education (DTE) were also introduced in 1962. The position of DTC in the provision of higher technical education was consolidated in 1991 when the corresponding Advanced Diploma in Engineering (ADE) programmes replaced the Diploma in Engineering (DE) courses. Today, DIT, DE and ADE graduates can be found in almost all engineering firms/institutions. There are positive feedbacks from the respective employers indicating overall good performance by ADE graduates.

The current political and economic trends, as well as the new technological changes have increased competition in the demand for, and supply of quality products including technical education and services. Under such a competitive environment, the leading position of DTC in the provision of higher technical education could not be sustained for long given its old

set-up and mission. Hence a new institution was therefore necessary to replace the Dar es Salaam Technical College. Such an institution could effectively address the current technological developments, provide competitive academic outputs in terms of quality technical training, applied research and expertise services to the community. The Dar es Salaam Institute of Technology was therefore established in 1997 to realize that aspiration, as guided by its vision and mission.

DIT is a fully accredited by the the National Council for Technical and Vocational Education and Training (NACTVET). Currently, DIT offers a wide range of full-time, part-time and professional applied sciences and engineering training courses /programmes. The Institute has replaced the FTC and ADE programmes with Ordinary Diploma and Bachelor of Engineering programmes respectively. In addition, the Institute has started offering Bachelor of Technology in Laboratory Sciences and some courses in master programmes: Master in Computational Science and Engineering, Master of technology in Computing and Communications, Master of Engineering in Maintenance Management and Master of Engineering in Sustainable Energy Engineering. Other courses are Bachelor of Mining Engineering and Bachelor of Oil and Gas and Diploma programmes in Biotechnology, Food Science and Technology, Multimedia and Film technology, Information Communication Technology and Communication Systems technology.

Dar es Salaam Institute of Technology has four campuses in Dar es Salaam, Mwanza, Songwe and Dodoma regions. Dar es Salaam Main Campus offers a wide range of full and part time in applied science engineering and professional training programmes leading to the awards of Ordinary Diploma, Bachelor of Engineering, Bachelor of Technology and Master Degree programmes. These programmes are offered by six academic Departments namely, Civil Department, Electrical Department, Electronics & Telecommunications Department, Mechanical Department, Computer Studies Department, and Laboratory Science & Technology Department. The General Studies Department supports the academic departments through teaching Mathematics, Communications Skills, Research and Entrepreneurship Education modules. In addition, various short term professional training courses are offered by DIT through the Institute Consultancy Bureau (ICB) and the India-Tanzania Center of Excellency in Information Communication Technology (ITCoEICT).

Currently, DIT Mwanza campus offers Ordinary Diploma courses in Science and Laboratory Technology and Leather Products Technology. DIT Songwe campus in Songwe region is offering Ordinary Diploma courses in Civil Engineering and Vocational Training Programmes on Plumbing and Pipe Fitting (PL) and Information Communication Technology (ICT) and various professional short training programs. Dodoma Campus (Dodoma Technical College) is expecting to start offering Ordinary Diploma courses in Space Technology

related programmes in Academic Year 2026/2027.

The expectations of Tanzanians towards DIT are very high because of the impact of producing graduates who meet the market demand. As expressed in the Tanzania Education and Training Policy 2023 and Tanzania Development Vision 2025, advancement in science and technology is a key area of focus for its positive impact to social economic growth as it ensures a knowledge-based economic growth. In order for DIT to match with its new structure, roles and functions, current market demand, training curricula are reviewed after every five years to incorporate various stakeholders' views.

This prospectus therefore, describes the main features of the DIT in line with customers and stakeholders' interests. It provides an outline of academic programmes, admission requirements, procedures and regulations to be met for one to get admission and graduate at the Institute. In addition, examination regulations, course programmes, course duration, list of academic staff and other relevant information are also provided.

1.2 Organization Structure of DIT

The top organ of the DIT is the Council followed by the Chief Executive Officer (Rector) who is supported by the Deputy Rector (Academic, Research and Consultancy) and the Deputy Rector (Planning Finance and Administration). The two Deputies are supported by directors, heads of various departments, coordinators and managers who oversee teaching, learning and manage Institutional resources. The Organization structure of DIT is shown in Figure 1.2.

1.3 Organization of the Prospectus

This prospectus provides an outline of the academic programmes currently offered by DIT and the near-future plans towards the realization of the mission of the Institute with respect to training as presented in Chapter Two. It also provides information on procedures and regulations for admission to such programmes and the corresponding fees in chapters Three and Four respectively. Chapter Five provides examination regulations with details of all matters related to examinations conducted by the Institute for various programmes leading to the awards of NTAs 4-9 levels namely; the Ordinary Diploma, Bachelor Degree and Master Degree programmes. More information regarding procedures for offering master degree programmes at DIT are detailed in the postgraduate guidelines.

Chapter Six shows the profiles of academic departments and other related units of the Institute including a list of academic staff and course outlines for academic programmes offered by respective departments. The inputs of the prospectus as highlighted above are complemented with some additional and general information for the DIT dispensary,

accommodation and catering services available to DIT Community as shown in Chapter Seven. Chapter Eight presents general information regarding students' prizes and awards, important information for students and the center of excellence in ICT. Chapter Nine covers the information on DIT Mwanza and Songwe campuses. The academic calendar for the academic year 2026/2027 for offered programmes is shown on chapter Nine.

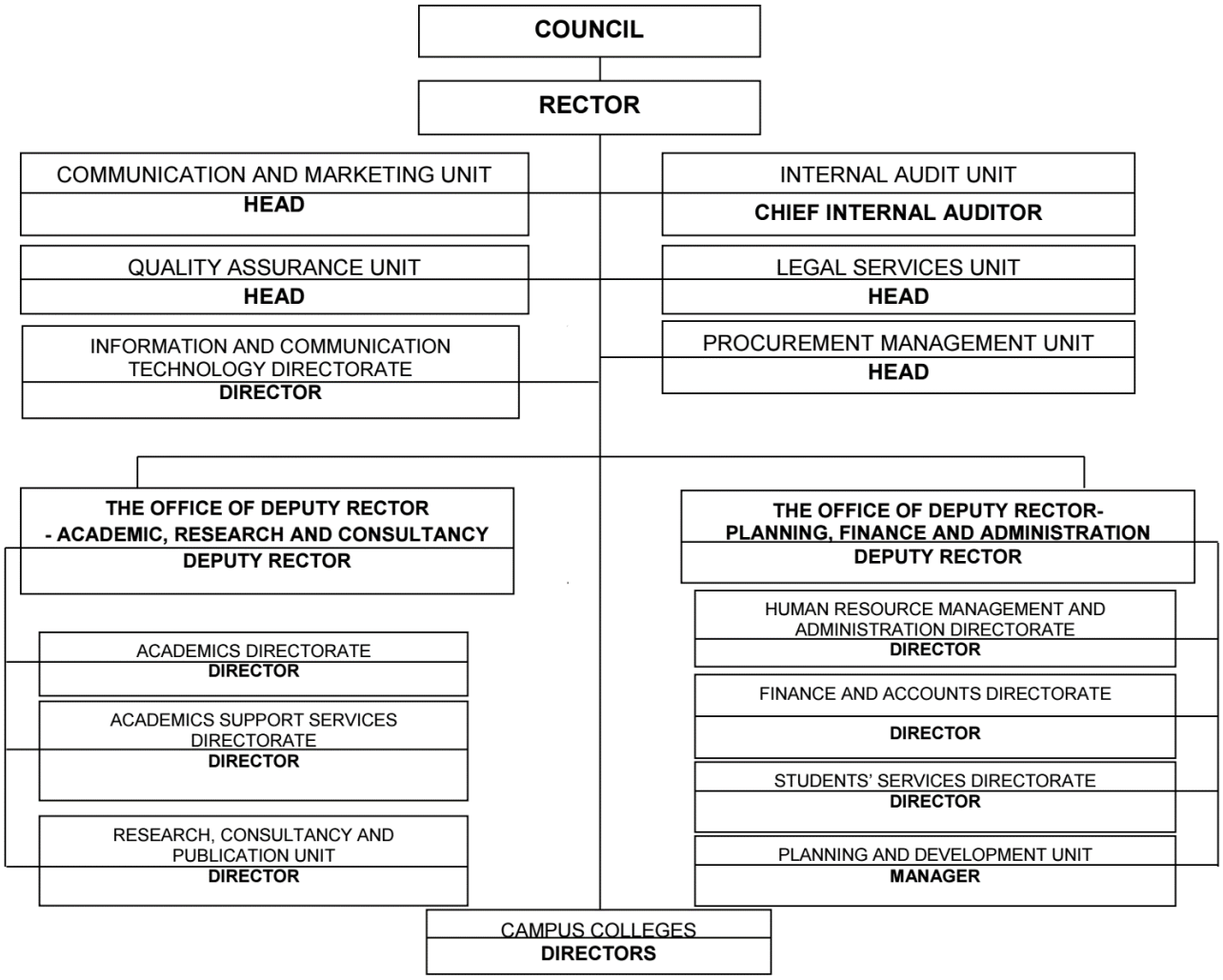

Figure 1.2 Organization Structure of DIT

CHAPTER TWO

ACADEMIC PROGRAMMES OFFERED

DIT is fully accredited by the National Council for Technical Education (NACTE) to run and grant awards to successful candidates as per the institute's and NACTE's regulations. Awards offered are National Technical Award (NTA) Level 4 – 6 (Ordinary Diploma Programmes), Bachelor Degree Programmes (NTA Level 7 – 8) and NTA Level 9 (Master Degree Programmes). DIT is also registered by VETA to offer vocational training (NVA level I-III).

2.1. Vocational Training Programmes

DIT Songwe Campus in Songwe, DIT Mwanza campus and the India Tanzania Center of Excellence in Information and Communication Technology(COEICT) in DIT Dar es Salaam Campus, have been registered by Vocational Education Training Authority (VETA) to run vocational training courses at National Vocational Awards (NVA) Level 1–3 in Information and Communication Technology (ICT).

2.2. Basic Technician Certificate and Technician Certificate

The Basic Technician Certificate and Technician Certificates are independent exit level of NTAs 4-5, respectively. Students who wish to exit or fail to attain an Ordinary Diploma but have successfully fulfilled the requirements for awards of Basic Technician Certificate (NTA 4) or Technician Certificate (NTA 5) shall be awarded the awards qualified for.

2.3. Ordinary Diploma Programmes

i. Ordinary Diploma in Civil Engineering (offered at DIT Main and Songwe campuses)
ii. Ordinary Diploma in Computer Engineering
iii. Ordinary Diploma in Electrical Engineering
iv. Ordinary Diploma in Electrical and Renewable Energy Engineering
v. Ordinary Diploma in Biomedical Equipment Engineering
vi. Ordinary Diploma in Electronics and Telecommunications Engineering
vii. Ordinary Diploma in Mechanical Engineering
viii. Ordinary Diploma in Science and Laboratory Technology (offered at DIT Main and Mwanza campus)

ix. Ordinary Diploma in Mining Engineering
x. Ordinary Diploma in Information Technology
xi. Ordinary Diploma Communication System Technology
xii. Ordinary Diploma Multimedia and Film Technology
xiii. Ordinary Diploma in Food Science Technology
xiv. Ordinary Diploma in Biotechnology
xv. Ordinary Diploma in Industrial Automation Engineering
xvi. Ordinary Diploma in Leather Processing Technology (offered at DIT Mwanza campus)
xvii. Ordinary Diploma in Food Processing Technology (offered at DIT Mwanza campus)
xviii. Ordinary Diploma in Leather Products Technology (offered at DIT Mwanza campus)
xix. Ordinary Diploma in Textile Technology (offered at DIT Mwanza campus)
xx. Ordinary Diploma in Agricultural Post-Harvest Technology (offered at DIT Mwanza campus)
xxi. Ordinary Diploma Fashion and Design Technology (offered at DIT Mwanza campus)
xxii. Ordinary Diploma in Agro Bioprocess Technology (offered at DIT Mwanza campus)

2.4. Higher Diploma Programmes

The higher diploma is part of the Bachelor Degree Program. Students who wish to exit or fail to attain Bachelor Degree but have successfully fulfilled the requirements for the awards of a Higher Diploma shall be awarded the Higher Diploma (NTA 7).

2.5. Bachelor Degrees Programmes (NTA 8)

The Bachelor degree programmes are carried out for three academic years and four academic years for Ordinary Diploma and Form six graduates, respectively. The listed below are the degree programmes currently running at DIT.

i. Bachelor of Engineering (B.Eng) in Civil Engineering
ii. Bachelor of Engineering (B.Eng) in Computer Engineering
iii. Bachelor of Engineering (B.Eng) in Electrical Engineering
iv. Bachelor of Engineering (B.Eng) in Electronics and Telecommunications Engineering
v. Bachelor of Engineering (B.Eng) in Mechanical Engineering
vi. Bachelor of Technology (B.Tech) in Laboratory Sciences (offered at DIT Main and Mwanza Campuses)

vii. Bachelor of Engineering (B.Eng) in Oil and Gas Engineering
viii. Bachelor of Engineering (B.Eng) in Mining Engineering
ix. Bachelor of Engineering (B.Eng) in Biomedical Engineering

2.6. Masters' Programmes (NTA 9)

In response to the market demand capacity and technological challenges, DIT has three postgraduate programmes,

i) Master of Engineering in Maintenance Management (18 months)
ii) Master in Computational Science and Engineering (18 months)
iii) Master of Technology in Computing and Communications (18 months)
iv) Master of Engineering in Sustainable Energy Engineering (24 months)
v) Master of Science in Cyber Security and Digital Forensics (18 Months)
vi) Master of Information System Engineering and Management (18 Months)
vii) Master of Engineering in Telecommunication Systems and Networks (18 Months)

These programmes are offered by coursework and dissertation. The detailed information on the courses offered, duration, and awards granted and related remarks are summarized in Table 2.1.

Table 2.1: A summary of Programmes Offered at DIT

PROGRAMMES OFFERED	PROGRAMME DURATION	CAMPUS
Certificate Programmes (NVA 1-3)		
Information Communication Technology (ICT)	NVA 1-1 Year NVA 2-1 Year NVA 3-1 Year	Dar es Salaam, Songwe & Mwanza
Plumbing and pipe fitting (PPF)	NVA 1-1 Year NVA 2-1 Year NVA 3-1 Year	Songwe
Leather Product Technology	NVA 1-1 Year NVA 2-1 Year NVA 3-1 Year	Mwanza
Science and Laboratory Technology	NVA 1-1 Year NVA 2-1 Year	

	NVA 3-1 Year	
Diploma Programmes (NTA 4-6)		
Ordinary Diploma in Leather Products Technology	NTA 4-1 Year NTA 5-1 Year NTA 6-1 Year	Mwanza
Ordinary Diploma in Leather Processing Technology		
Ordinary Diploma in Food Processing Technology		
Ordinary Diploma in Science and Laboratory Technology		
Ordinary Diploma in Textile Technology		
Ordinary Diploma in Agricultural Post-Harvest Technology		
Ordinary Diploma Fashion and Design Technology		
Ordinary Diploma in Agro Bioprocess Technology		
Ordinary Diploma in Civil Engineering	NTA 4-1 Year	Dar es Salaam & Songwe
Ordinary Diploma in Computer Engineering		Dar es Salaam
Ordinary Diploma in Electrical Engineering		
Ordinary Diploma in Electronics and Telecommunication Engineering		
Ordinary Diploma in Mechanical Engineering		
Ordinary Diploma in Science and Laboratory Technology		Dar es Salaam &

	NTA 5-1 Year NTA 6-1 Year	Mwanza
Ordinary Diploma in Mining Engineering		Dar es Salaam
Ordinary Diploma in Biomedical Equipment Engineering		
Ordinary Diploma in Information Technology		
Ordinary Diploma in Electrical and Renewable Energy Engineering		
Ordinary Diploma in Communication System Technology		
Ordinary Diploma in Multimedia and Film Technology		
Ordinary Diploma in Food Science and Technology		
Ordinary Diploma in Industrial Automation Engineering		
Ordinary Diploma in Biotechnology		
Degree Programmes (NTA 7-8)		
Bachelor of Eng. in Civil Engineering	NTA 7 : 2-3 Years NTA 8 : 1 Year	Dar es Salaam
Bachelor of Eng. in Computer Engineering		
Bachelor of Eng. in Electrical Engineering		
Bachelor of Eng. in Electronics and Telecommunication Engineering		
Bachelor of Eng in Mechanical Engineering		
Bachelor of Engineering in Oil and Gas Engineering		
Bachelor of Engineering in Mining		

Bachelor of Technology in Laboratory Sciences	NTA 7-8	Dar es Salaam and Mwanza
Bachelor of Engineering in Biomedical Engineering		
Masters' Programmes (NTA 9)		
Master of Engineering in Maintenance Management	18 Months	Dar es Salaam
Master of Technology in Computing and Communications	18 Months	
Master in Computational Science and Engineering	18 Months	
Master of Engineering in Sustainable Energy Engineering	24 months	
Master of Science in Cyber Security and Digital Forensics	18 Months	
Master of Information Systems Engineering and Management	18 Months	
Master of Engineering in Telecommunication Systems and Networks	18 Months	

CHAPTER THREE

ADMISSION REGULATIONS

DIT offers a wide range of full-time, part-time and professional applied sciences and engineering training courses programmes, Ordinary Diploma, Bachelor of Engineering programmes (i.e. National Technical Awards (NTA) Level 4-9) in line with the NACTVET competence based modular training system and Masters in Computational Science and Engineering, Master of Engineering in Maintenance Management, Master of Technology in Computing and Communication, Master of Engineering in Sustainable Energy Engineering, Masters of Engineering in Telecommunications Systems and Networks, Masters in Information Systems Engineering and Management and Master of Science in Cyber Security and Digital Forensic. The Admission Regulations document is organized into eight (8) sections, where section 1.0 covers the background and sections 2.0 to 8.0 are the clauses covering: admission requirements, admission conditions for transferring and resuming students, procedures for transferring and resuming students, and other important information related to admission.

1. BACKGROUND

The Dar es Salaam Institute of Technology (DIT) is located in the Dar es Salaam city centre, at the junction of Morogoro Road and Bibi Titi Mohamed Street. DIT was established in 1997 by the Act of Parliament, "the DIT Act No.6 of 1997" to replace the Dar es Salaam Technical College, which had a long history of technical training in Tanzania. This history dates back to 1957 when its predecessor; the Dar es Salaam Technical Institute was established aiming at providing vocational training in the country. The Institute later expanded its scope to offer technical secondary school courses and training for Technical Assistants before it was upgraded in 1962 to become the Dar es Salaam Technical College (DTC), the first formal technical training institution in the country.

Dar es Salaam Institute of Technology offers (4) masters programmes, (9) Bachelor degree programmes, (24) Diploma programmes and 5 National vocational awards through Campuses and Departments which lead to the awards of Masters, Bachelor degree, Diploma, and Certificate qualifications. This programmes are offered at DIT three campuses namely, DIT- Dar es Salaam Main Campus, DIT-Mwanza ampus in Mwanza and DIT-Songwe Campus in Songwe, Region.

DIT offers a wide range of programmes namely certificates, ordinary diploma, bachelor to master level in the fields of Maintenance Management, Computing and

Communications Technology, Computational Science and Engineering, Sustainable Energy Engineering, civil engineering, computer engineering, electrical engineering, mechanical engineering, science and laboratory technology. Other fields are oil and gas engineering, information technology, mining engineering, biomedical equipment engineering, communication system technology and renewable energy technology. Others include multimedia and film technology, biotechnology, Leather products and allied technologies and food science technology.

DIT will continue strengthening the strategies aimed at providing competence in applied science and engineering programmes and hands-on practice through the Teaching Factory concept. The Institute will keep on improving learning environment, which is key for nurturing critical thinking skills and personal development to enhance knowledge based economic growth in the country

1.1. Vision Statement of the Institute

The vision of Dar es Salaam Institute of Technology (DIT) is to become the leading technical education Institution in addressing societal needs.

1.2. Mission Statement of The institute

The mission of Dar es Salaam Institute of Technology is to provide competence based technical education through training, research, innovation and development of appropriate technology.

1.3. Admission

Dar es Salaam Institute of Technology Admission Office manages a fair, transparent and consistent admission processes to Certificates, Diploma, Bachelor and postgraduate programmes, providing advice and support to prospective students and academic departments. Working with the broader Institute community, national agencies and the government on a wide range of admissions-related issues, the admission office ensures compliance with Institute regulations and relevant government legislation. Key areas of focus include overall coordination and policy matters pertaining to admission, curriculum, examinations, and student's records and loans.

The admission office under the Directorate of Academic Support Services is working closely with other DIT organs such as Campuses, other Directorates, Departments, Units, Centers, Quality Assurance (QA) bureau , and Library Services . The office ensures that all students' academic matters at DIT proceed smoothly. The Directorate of Academic Support Services operates under the office of Deputy Rector Academic, Research, and Consultancy (DR-ARC); serving the DIT main campus, Mwanza Campus, and Songwe Campus.

The prospective students are requested to consult Postgraduates, Undergraduate and

Diploma programmes Admission Guidebooks prepared annually by TCU at www.tcu.go.tz and NACTVET at www.nacte.go.tz for more details. The subsequent sections are the programmes offered by DIT and their minimum admission requirements.

1 ADMISSION REQUIREMENTS FOR NATIONAL VOCATIONAL AWARD (NVA) (LEVEL 1 - 3) PROGRAMMES

DIT is accredited by the Vocational Education and Training Authority (VETA) to run NVA programmes. Currently, the NVA programmes are offered in all DIT campuses, i.e., Dar es Salaam main campus (ICT), Songwe campus (ICT and Plumbing), and Mwanza campus (ICT, Laboratory and Leather Technology)

1.1 Minimum Entry Qualifications for NVA Level 1

To qualify for admission into NVA Level 1, a candidate must be a holder of a CSEE **OR** Certificate of Primary Education **OR** any other equivalent qualifications as per /NACTVET regulations.

1.2 Minimum Entry Qualifications for NVA Level 2

To qualify for admission into NVA level 2, a candidate must be a holder of NVA Level 1 **OR** any other equivalent qualifications as per /NACTVET regulations.

1.3 Minimum Entry Qualifications for NVA Level 3

To qualify for admission into NVA Level 3, a candidate must be holders of NVA level 2 **OR** any other equivalent qualifications as per NACTVET regulations.

2 ADMISSION REQUIREMENTS FOR NTA (4-6) PROGRAMMES

Candidates may join the Ordinary Diploma (NTA LEVEL 4-6) programmes offered by DIT if they hold the following qualifications:

2.1 General Entry Qualifications for Basic Technician Certificate in Engineering or Technology (NTA LEVEL 4)

To qualify for admission into Basic Technician Certificated in Engineering or Technology (NTA LEVEL 4) programmes, a candidate must be a holder of a CSEE with at least four (4) passes (i.e., D grade or higher) in Physics/Engineering Science, Mathematics and Chemistry and any other subject.

OR

NVA Level III in the relevant Vocational field with at least of D grade in two (2) subjects at Certificate of Secondary Education (CSEE).

2.2 Specific Entry Qualifications for Basic Technician Certificate in Biomedical Equipment Engineering (NTA LEVEL 4)

To qualify for admission into Basic Technician Certificated in Biomedical Equipment Engineering (NTA LEVEL 4) programmes, a candidate must be a holder of a CSEE with four (4) passes (i.e., D grade or higher) in Physics/Engineering Science, Mathematics, Chemistry and Biology **OR** any other equivalent qualifications from recognized institutions as per NACTVET regulations.

OR

NVA Level III in the relevant Vocational field with at least of D grade in two (2) subjects at Certificate of Secondary Education (CSEE).

2.3 Specific Entry Qualifications for Basic Technician Certificate Science and Laboratory Technology, Food Science and Technology, Leather Processing Technology and Leather Products Technology (NTA Level 4) Programmes

For admission into Basic Technician Certificate (NTA Level 4) programmes, in Science and Laboratory Technology, Food Science and Technology and Leather Products Technology, applicants must be a holder of a CSEE with at four (4) passes (i.e. D grade or higher) in Physics, Mathematics, Chemistry, and Biology **OR** any other equivalent qualifications from recognized institutions as per NACTVET regulations.

OR

NVA Level III in the relevant Vocational field with at least of D grade in two (2) subjects at Certificate of Secondary Education (CSEE).

2.4 Specific Entry Qualifications for Basic Technician Certificate in Multimedia and Film Technology, and Information Technology (NTA Level 4) Programmes

For admission into Basic Technician Certificate (NTA Level 4) programmes, in Multimedia and Film Technology, and Information Technology applicants must be a holder of a CSEE with at least four (4) passes (i.e. D grade or higher) in Physics or Computer and Mathematics and any other subjects excluding religious subjects **OR** any other equivalent qualifications from recognized institutions as per NACTVET regulations.

OR

NVA Level III in the relevant Vocational field with at least of D grade in two (2) subjects at Certificate of Secondary Education (CSEE).

2.5 Specific Entry Qualifications for Basic Technician Certificate in Textile Technology, (NTA Level 4) Programmes

For admission into Basic Technician Certificate (NTA Level 4) programmes, in Textile Technology, applicants must be a holder of a CSEE with at least four (4) passes (i.e. D grade or higher) in Chemistry and Mathematics and any other subjects excluding religious subjects OR any other equivalent qualifications from recognized institutions as per NACTVET regulations.

OR

NVA Level III in the relevant Vocational field with at least of D grade in two (2) subjects at Certificate of Secondary Education (CSEE)

2.6 Specific Entry Qualifications for Basic Technician Certificate in Post-Harvest Technology, (NTA Level 4) Programmes

For admission into Basic Technician Certificate (NTA Level 4) programmes, in Post-Harvest Technology, applicants must be a holder of a CSEE with at least four (4) passes (i.e. D grade or higher) in Agriculture/Biology, Chemistry and Mathematics and any other subjects excluding religious subjects OR any other equivalent qualifications from recognized institutions as per NACTVET regulations.

OR

NVA Level III in the relevant Vocational field with at least of D grade in two (2) subjects at Certificate of Secondary Education (CSEE).

3.7 Specific Entry Qualifications for Basic Technician Certificate in Fashion and Design Technology, (NTA Level 4) Programmes

For admission into Basic Technician Certificate (NTA Level 4) programmes, in Fashion and Design Technology, applicants must be a holder of a CSEE with at least four (4) passes (i.e. D grade or higher) in any subject excluding religious subjects OR any other equivalent qualifications from recognized institutions as per NACTVET regulations.

OR

NVA Level III in the relevant Vocational field with at least of D grade in two (2) subjects at Certificate of Secondary Education (CSEE).

3.8 Specific Entry Qualifications for Basic Technician Certificate in Bioprocess Technology, (NTA Level 4) Programmes

For admission into Basic Technician Certificate (NTA Level 4) programmes, in Bioprocess Technology, applicants must be a holder of a CSEE with at least four (4) passes (i.e. D grade or higher) in Physics/Engineering Science, Chemistry and Mathematics and any other subjects excluding religious subjects OR any other equivalent qualifications from recognized institutions as per NACTVET regulations.

OR

NVA Level III in the relevant Vocational field with at least of D grade in two (2) subjects at Certificate of Secondary Education (CSEE).

3.9 General Entry Qualifications for Technician Certificate in Engineering or Technology (NTA Level 5) Programmes

To qualify for admission into Technician Certificate in Engineering or Technology (NTA Level 5) programmes, a candidate must be a holder of Basic Technician Certificate in Engineering or Technology (NTA Level 4) **OR** any other equivalent qualifications as per NACTVET regulations.

3.10 Specific Entry Qualifications for Technician Certificate in Science and Laboratory Technology, Food Science and Technology, and Leather Products Technology (NTA Level 5) Programmes

To qualify for admission into Technician Certificate in Science and Laboratory Technology, Food Science and Technology, and Leather Products Technology (NTA Level 5) programmes, a candidate must be a holder of Basic Technician Certificate (NTA Level 4) in relevant programmes **OR** any other equivalent qualifications as per NACTVET regulations.

3.11 Specific Entry Qualifications for Technician Certificate in Multimedia and Film, and Information Technology (NTA Level 5) Programmes

To qualify for admission into Technician Certificate in Multimedia and Film Technology, and Information Technology (NTA Level 5), a candidate must be a holder of Basic Technician Certificate (NTA Level 4) in relevant programmes **OR** any other equivalent qualifications as per NACTVET regulations.

3.12 Specific Entry Qualifications for Technician Certificate in Textile Technology, (NTA Level 5) Programmes

To qualify for admission into Technician Certificate in Textile Technology (NTA Level 5), a candidate must be a holder of Basic Technician Certificate (NTA Level 4) in relevant programmes **OR** any other equivalent qualifications as per NACTVET regulations.

3.13 Specific Entry Qualifications for Technician Certificate in Post-Harvest Technology, (NTA Level 5) Programmes

To qualify for admission into Technician Certificate in Post-Harvest Technology (NTA Level 5), a candidate must be a holder of Basic Technician Certificate (NTA Level 4) in relevant programmes **OR** any other equivalent qualifications as per NACTVET regulations.

3.14 Specific Entry Qualifications for Technician Certificate in Fashion and Design Technology, (NTA Level 5) Programmes

To qualify for admission into Technician Certificate in Fashion and Design Technology (NTA Level 5), a candidate must be a holder of Basic Technician Certificate (NTA Level 4) in relevant programmes **OR** any other equivalent qualifications as per NACTVET regulations.

3.15 Specific Entry Qualifications for Technician Certificate in Bioprocess Technology, (NTA Level 5) Programmes

To qualify for admission into Technician Certificate in Bioprocess Technology (NTA Level 5), a candidate must be a holder of Basic Technician Certificate (NTA Level 4) in relevant programmes **OR** any other equivalent qualifications as per NACTVET regulations.

3.16 General Entry Qualifications for Diploma in Engineering or Technology (NTA Level 6) Programmes

To qualify for admission into Diploma in Engineering or Technology (NTA Level 6) programmes, a candidate must be a holder of Technician Certificate in Engineering or Technology (NTA Level 5) in relevant programmes OR any other equivalent qualifications as per NACTVET regulations.

3.17 Specific Entry Qualifications for Diploma in Science and Laboratory Technology, Food Science and Technology, and Leather Products Technology (NTA Level 6) Programmes

To qualify for admission into Diploma in Science and Laboratory Technology, Food Science and Technology and Leather Products Technology (NTA Level 6) programmes,

a candidate must be a holder of Technician Certificate (NTA Level 5) in relevant programmes OR any other equivalent qualifications as per NACTVET regulations.

3.18 Specific Entry Qualifications for Diploma in Multimedia and Film Technology, and Information Technology (NTA Level 6) Programmes

To qualify for admission into Diploma in Multimedia and Film Technology, and Information Technology (NTA Level 6), a candidate must be a holder of Basic Technician Certificate (NTA Level 5) in relevant programmes OR any other equivalent qualifications as per NACTVET regulations.

3.19 Specific Entry Qualifications for Diploma in Textile Technology, (NTA Level 6) Programmes

To qualify for admission into Diploma in Textile Technology (NTA Level 6), a candidate must be a holder of Basic Technician Certificate (NTA Level 5) in relevant programmes OR any other equivalent qualifications as per NACTVET regulations.

3.20 Specific Entry Qualifications for Diploma Certificate in Post-Harvest Technology, (NTA Level 6) Programmes

To qualify for admission into Diploma in Post-Harvest Technology (NTA Level 6), a candidate must be a holder of Basic Technician Certificate (NTA Level 5) in relevant programmes OR any other equivalent qualifications as per NACTVET regulations

3.21 Specific Entry Qualifications for Diploma Certificate in Fashion and Design Technology, (NTA Level 6) Programmes

To qualify for admission into Diploma in Fashion and Design Technology (NTA Level 6), a candidate must be a holder of Basic Technician Certificate (NTA Level 5) in relevant programmes OR any other equivalent qualifications as per NACTVET regulations

3.22 Specific Entry Qualifications for Diploma Certificate in Bioprocess Technology, (NTA Level 6) Programmes

To qualify for admission into Diploma in Bioprocess Technology (NTA Level 6), a candidate must be a holder of Basic Technician Certificate (NTA Level 5) in relevant programmes OR any other equivalent qualifications as per NACTVET regulations

3 ADMISSION REQUIREMENTS FOR NTA (7-8) PROGRAMMES

Candidates may join the Bachelor Degree in Engineering or Technology (NTA Level 7-8) programmes offered by DIT if they hold the following qualifications:

3.1 Minimum Entry Qualifications for Higher National Diploma in Engineering (NTA Level 7) Two (2) Years Programmes

To qualify for admission into a Higher National Diploma in Engineering (NTA Level 7) two (2) years programmes,

(i) A candidate must be a holder of Ordinary Diploma in Engineering (NTA Level 6) **OR** its equivalent in the respective field with minimum GPA of 3.0 from a recognized Institution by NACTVET, **AND** at least any of the following;

(ii) A student who successfully completed NTA level 6 and did not meet the minimum entry requirements (GPA of 3.0) may join this programmes through the foundation course recognized by TCU-science cluster

(iii) Holder of Full Technician Certificate (FTC) or its equivalent in the relevant field from a recognized Institution by NACTVET with an average of minimum pass of C or an average of minimum 3 points based on the following conversion scale: A=5, B=4, C=3, D=2 or its equivalent and:at least four (4) passes (i.e D grade or higher) in the relevant subjects at Certificate of Secondary Education (CSEE) **OR** General Certificate Course in Engineering (GCE) in the relevant field with a minimum of D grade in Mathematics at CSEE.

3.2 Minimum Entry Qualifications for Higher National Diploma in Engineering (NTA Level 7) Three (3) Years Programmes

(i) To qualify for admission into Higher National Diploma in Engineering (NTA Level 7) three (3) years programmes, a candidate must be holders of ACSEE in the combination of Physics, Chemistry and Mathematics (PCM); or Physics, Geography and Mathematics (PGM); Physics, Mathematics and Computer (PMC) with Principal Pass in Mathematics and Physics from the same sitting with a total of not less than 4.0 points based on the following conversion scale: (A=5, B=4, C=3, D=2, E=1, S=0.5, F=0 for candidates who completed Form VI before 2014 and after 2015, and A=5, B+=4, B=3 C=2, D=1, E=0.5, F=0 for candidates who completed Form VI in 2014 and 2015.

OR

(ii) To qualify for admission into Higher National Diploma in Engineering (NTA Level 7) three (3) years programmes, a candidate must be holders of ACSEE in the combination of Physics, Chemistry and Biology (PCB); or Chemistry, Biology and Geography (CBG); Chemistry, Biology and Nutrition (CBN), Chemistry, Biology and Agriculture (CBA) with Principal Pass in Chemistry or Physics and Biology from the same sitting with a total of not less than 4.0 points based on the following conversion scale: (A=5, B=4, C=3, D=2, E=1, S=0.5, F=0 for candidates who completed Form VI before 2014 and after 2015, and A=5, B+=4, B=3 C=2, D=1, E=0.5, F=0 for candidates who completed Form VI in 2014 and 2015. And at least four (4) passes (i.e D grade or higher) in relevant subjects at CSEE with a minimum of D grade in Physics and Mathematics.

OR

(iii) A holder of Ordinary Diploma in Engineering (NTA Level 6) in other engineering fields with minimum GPA of 3.0 from a recognized Institution by NACTVET, and at least any of the following:

4.3 Specific Entry Qualifications for Higher Diploma in Science and Laboratory Technology (NTA level 7) Two (2) Programmes.

(iv) To qualify for admission into Higher National Diploma in Science and Laboratory Technology (NTA Level 7) two (2) years programmesme, candidates must be a holder of Ordinary Diploma (NTA Level 6) in the relevant programmesme or its equivalent in the respective field with minimum GPA of 3.0 from a recognized Institution by NACTVET and at least four (4) passes (i.e D grade or higher) in relevant subjects at CSEE with a minimum of D grade in Chemistry or Biology.

OR

(v) Holder of good Full Technician Certificate (FTC) or its equivalent in the relevant field from a recognized Institution by NACTVET with an average of a minimum pass of C or an average of minimum 3 points based on the following conversion scale: A=5, B=4, C=3, D=2 or its equivalent and at least four (4) passes (i.e D grade or higher) in the relevant subjects at Certificate of Secondary Education (CSEE) OR General Certificate Course in Engineering (GCE) in the relevant field with a minimum of D grade in Chemistry and Biology at Certificate of Secondary Education (CSEE).

(vi) Candidates from VETA to qualify for admission into Higher National Diploma in Science and Laboratory Technology (NTA Level 7) two (2) years programme, candidates must be a holder of Ordinary Diploma (NTA Level 6) in the relevant programmes or its equivalent in the respective field with minimum GPA of 3.0 from a recognized Institution by NACTVET and with a minimum of D grade in Mathematics at CSEE (for students fromS NVA)

3.3 Minimum Entry Qualifications for Bachelor of Engineering (NTA Level 8) Programmes

To qualify for admission into Bachelor of Engineering (NTA Level 8), the candidate must be holders of a Higher National Diploma in Engineering or Technology (NTA level 7) in the relevant field OR any other equivalent qualifications as per NACTVET regulations.

4 ADMISSION REQUIREMENTS FOR NTA LEVEL 9 PROGRAMMESS

Candidates joining Master Degree (NTA Level 9) programmes offered by DIT shall hold the following qualifications:

4.1 Minimum Entry Qualifications for Master of Engineering in Maintenance Management Programmes:

Admission to the programmes will be open to candidates who have NTA level 8 qualifications or equivalent and fulfil one of the following requirements:

(i) Applicants must be Holders of Bachelor degree in Engineering with a GPA of at least 2.7 from a recognized higher learning institution or its equivalent from any other accredited higher learning Institutions as per NACTVET regulations.

OR

(ii) Applicants must be Holders of Bachelor degree in Engineering with PASS from a recognized higher learning institution and with three years working experience.

OR

(iii) Holders of Advanced Diploma in Engineering with a PASS from a recognized higher learning institution with a minimum of three years of working experience.

4.2 Minimum Entry Qualifications to join Master of Technology in Computing and Communications programmes:

Admission to the programmes will be open to candidates who have NTA level 8 qualifications or equivalent who fulfil one of the following requirements:

(i) Applicants must be Holders of Bachelor degree in Engineering or Science in related fields with a GPA of at least 2.7 from a recognized higher learning institution.

OR

(ii) Applicants must be Holders of Bachelor degree in Engineering or Science in related fields with PASS from a recognized higher learning institution provided that their average undergraduate performance in the subjects related to the programme of study was a 'B' grade or higher.

OR

(iii) Holders of Advanced Diploma in Engineering or Science in related fields with a PASS from a recognized higher learning institution with a minimum of five years working experience.

4.3 Minimum Entry Qualifications to join Master of Engineering in Sustainable Energy Engineering:

Admission to the programmes will be open to candidates who have background in Mathematics at NTA level 8 qualifications or equivalent and fulfil one of the following requirements:

(i) Applicants must be Holders of Bachelor degree in Engineering or Science in a relevant field with a GPA of at least 3 from a recognized higher learning institution.

OR

(ii) Applicants must be Holders of Bachelor degree in Engineering or Science in a relevant field with a GPA of at least 2.7 from a recognized higher learning institution and a minimum of three years working experince.

OR

(iii) Holders of Advanced Diploma in Engineering or Science in a relevant field with a PASS from a recognized higher learning institution with a minimum of five years working experience.

4.4 Minimum Entry Qualifications to join Master of Computational Science and Engineering:

Admission to the programmes will be open to candidates who have NTA level 8 qualifications or equivalent who fulfil one of the following requirements:

(iv) Applicants must be Holders of Bachelor degree in Engineering or Science in related fields with a GPA of at least 2.7 from a recognized higher learning institution.

OR

(v) Applicants must be Holders of Bachelor degree in Engineering or Science in related fields with PASS from a recognized higher learning institution provided that their average undergraduate performance in the subjects related to the programme of study was a 'B' grade or higher.

OR

(vi) Holders of Advanced Diploma in Engineering or Science in related fields with a PASS from a recognized higher learning institution with a minimum of five years working experience.

4.5 Minimum Entry Qualifications to join Masters of Science in Cybersecurity and Digital Forensics

Admission to the programmes will be open to candidates who have NTA level 8 qualifications or equivalent who fulfil one of the following requirements:

(i) Applicants must be Holders of Bachelor degree in Engineering or Science in related fields with a GPA of at least 2.7 from a recognized higher learning institution.

OR

(ii) Applicants must be Holders of Bachelor degree in Engineering or Science in related fields with PASS from a recognized higher learning institution provided that their average undergraduate performance in the subjects related to the programme of study was a 'B' grade or higher.

OR

(iii) Holders of Advanced Diploma in Engineering or Science in related fields with a PASS from a recognized higher learning institution with a minimum of five years working experience.

4.6 Minimum Entry Qualifications to join Masters of Information Systems Engineering and Management

Admission to the programmes will be open to candidates who have NTA level 8 qualifications or equivalent and fulfil one of the following requirements:

(i) Applicants must be Holders of Bachelor degree in Engineering with a GPA of at least 2.7 from a recognized higher learning institution or its equivalent from any other accredited higher learning Institutions as per NACTVET regulations.

OR

(ii) Applicants must be Holders of Bachelor degree in Engineering with PASS from a recognized higher learning institution and with three years working experience.

OR

(iii) Holders of Advanced Diploma in Engineering with a PASS from a recognized higher learning institution with a minimum of three years of working experience.

4.7 Minimum Entry Qualifications to join Master of Engineering (MEng) in Telecommunication Systems and Networks

Admission to the programmes will be open to candidates who have NTA level 8 qualifications or equivalent who fulfil one of the following requirements:

(i) Applicants must be Holders of Bachelor degree in Engineering or Science in related fields with a GPA of at least 2.7 from a recognized higher learning institution.

OR

(ii) Applicants must be Holders of Bachelor degree in Engineering or Science in related fields with PASS from a recognized higher learning institution provided that their average undergraduate performance in the subjects related to the programme of study was a 'B' grade or higher.

OR

(iii) Holders of Advanced Diploma in Engineering or Science in related fields with a PASS from a recognized higher learning institution with a minimum of five years working experience.

5 ADMISSION CONDITIONS FOR AND RESUMING STUDENTS

(i) The resumption of studies is only possible within the respective period of studies and when the applied programmes for is still available. The candidate will be admitted without exception to the currently valid curriculum and the fees/costs payable to the Institute by the candidate in that respective

academic year will apply.

(ii) Masters student may freeze studies for maximum of two years upon request after completion of courseworks. The resumption of studies will based on condition in item (i) above.

(iii) Pursuant to the Institute examination regulations, a student who postponed studies for more than two academic years or absconded studies shall not be allowed to resume studies and will be required to apply for re-admission and pay all respective application fee.

6 PROCEDURES FOR APPLICATION AND ADMISSION

7.1 General application Procedures

(i) Candidates applying for admission into various programmes must apply through the DIT Online System within the announced deadline. Information about fees structure and application forms (DIT/PS/APPL/01 and DIT/PS/APPL/02) and procedures are available at DIT website (www.dit.ac.tz)

Online application procedures	(1) The applicant opens the DIT website (2) Clicks on online application and is forwarded to the online application part of the student management system (SOMA) (3) The applicant gets application instructions describing what needs to be done in the whole application process. (4) Create account • Fill in entry qualification • Fill in form four index number and Year • Confirm index number, year and name • Select the level of

	education one is applying for (NVA, Certificate/Diploma, Bachelor, Masters') • Create a password • Add personal information • Click finish to submit the information 5. Login using the registered form four index number and password 6. Generate control number. (The system generates a control number) 7. Pay application fee using the control number 8. Select course and campus. 9. Verify entry qualifications 10. Submit application. 11. Review submitted information

(ii) All eligible applicants applying for re-admission at NTA Level 5 or NTA Level 6 or NTA Level 8 are required to collect an application form from the Director of Academic Support Services office.

(iii) Applicants are advised to read and understand minimum entry requirements as provided in admission guidebooks provided by DIT, NACTVET and TCU guidebooks

(iv) All applications must pay a non-refundable application fee as described in application guideline advert.

6.1.1 SELECTION PROCESS

Selection process allows Admission officer to select qualified students to specific programs at DIT and reject unqualified applicants. Selection is conducted after application deadline. Selection of candidates is grounded on possession of minimum entry requirements as stipulated in admission guidelines and regulators guidebooks. The selection process involves the following steps;

(i) The applications are scrutinized and ranked according to the performance in terms of qualifications and the availability of admission slots through the DIT systems.
(ii) Possession of highest entry qualifications will be considered where slots are not enough to accommodate all qualified applicants
(iii) The institute will scrutinize selections to ensure fare selection and rejection of all applicants through DIT organs including Academic directorate, Academic Board, Academic Committee and Council.
(iv) Selected applicants who have been approved by institute organs will submitted to regulatory bodies.
(v) Successful applicants will be notified through DIT Online System, DIT Website and DIT Notice Boards.
(vi) Provision of false information or failure to provide details by the applicant shall lead to disqualification.

7.2 International Students Applications information

(i) In order to give enough time for processing international applications, the deadline for international applicants will be three weeks earlier than local applicants' deadline.
(ii) International applicants will be required to submit certified copies of their relevant certificates to DIT for validation processes. The Institute will be responsible for handling the validation processes on behalf of applicants.
(iii) Application fee paid by the International applicant shall include the certificate validation processing fee.
(iv) Applicants with foreign certificates will be considered after obtaining an equivalent of translation of their academic certificates from Tanzania Commission for Universities (TCU) or the National Council for Technical Education (NACTVET) or National Examination Council of Tanzania (NECTA).
(v) All international students are required to apply for a residence permit from their nearest Tanzania embassy before they enter Tanzania.

7.3 Admission for Short-Term/Occasional Students

These are students admitted into any programme for duration less than that specified in the curriculum information report. The applicant who intends to enrol in NTA levels for short term basis is required to meet the DIT admission criteria as described in each respective NTA level.

8.1 STUDENTS REGISTRATION

8.2 Registration

(i) Students will have to register each semester. Special registration for students who resumes studies after postponement or discontinuation as

per institute's regulations shall be conducted by admission officers to avoid contradicting regulators procedures and requirements.

(ii) Registration of first year students shall be conducted through both online registration and physical student information verification.

(iii) Every student is required to report at the Institute at the beginning of the semester and on the date prescribed by the Institute.

(iv) Selected candidates for Basic Technician Certificate, Technician certificate and Diploma will have to complete NACTEVET registration before getting DIT registration number.

(v) All students reporting for studies four weeks after commencement of studies will not be registered for studies.

(vi) All continuing students at DIT are required to register for studies in every semester through DIT Online system or as may be determined by the DIT management.

(vii) All students shall be registered for studies at DIT upon payment of prescribed fees of the Institute within four weeks from the beginning of semester.

(viii) All fees paid to the Institute shall not be refunded. Unused fee shall be carried forward.

(ix) Registered students will be issued Identity Cards (IDs), in a semester upon payment of the prescribed fee, respectively.

(x) Students who have been selected but failed to register for any reason cannot defer admission to the next academic year. Such students shall have to apply afresh.

(xi) The student shall not be allowed to change his/her name during studies at the Institute. Names appearing on the original academic certificates used during applications shall be used.

(xii) The student will be allowed to change the programme of study within two week from the commencement of the semester only if there is availability of slots in the new programme.

(xiii) Students discontinued from studies on **examination irregularity grounds** may be re-admitted to a different programme in the immediate next academic year or repeat **ALL** modules of the same Programme of the respective semester when next offered.

(xiv) Students discontinued from studies on **abscondment grounds** may repeat **ALL** modules of the respective semester when next offered.

(xv) Students discontinued from studies on **disciplinary grounds** are barred from re-admission to any programmes at the Institute.

(xvi) Students who shall not register for studies within specified registration period shall automatically be ABSCONDED from studies.

8.2.1 During registration

During registration every student must produce the following documents:

(i) A duly filled DIT Joining Instructions.
(ii) A duly filled acceptance form to abide by the Institute Rules and Regulations.
(iii) A duly filled in medical examination form.
(iv) All the original receipts/pay-slips of payments to the Institute through the Bank.
(v) Original certificates, academic transcripts, statement of results, or any related document as may be determined by the Institute.
(vi) Original copy a birth certificate/affidavit.
(vii) Undergraduate certificates for candidates who graduated in other Universities/Institutes/colleges outside Tanzania certified by TCU.

8.2.2 Students Transfer

(i) Students may be allowed to transfer internally (from one programme to another) within the campus or externally (from one campus to another or institution to another) subject to institute regulations.
(ii) Transfer is done at the beginning of an academic year as per regulator's admission calendar.
(iii) Student accepted for transter/verification will required to pay transfer fee as required by NACTVET
(iv) All transfers shall be reported to Academic board meeting for APPROVE

8.2.2.1 Transfer Procedures for Inter-External transfers

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

8.2.2.2 Criteria for transfer

1. Must be an admitted applicant in other universities during that particular academic year.
2. The programme to which transfer is sought must have empty slots to accommodate students;
3. The applicant must possess the minimum entry requirements for that particular degree programme, e. The candidate submits an application for transfer at DIT
4. The Department goes through the forms to check which applicants qualify.
5. The department submits the reports to the office of the Director of Academics and support services

6. The successful students list will be submitted to the IAB for approval
7. After approval the successful students will be notified and continue with the registration procedures as per clause 8.2
8. The admission officers pushes transferred students to TCU according to the TCU deadline using SOMA through an API.

8.2.2.3 Internal/Intra Institute transfers

Internal/ Intra-Institute transfer shall mean transfer from programme to another within the Institute/Campuses provided the applicant meets minimum entry criteria of such programmes

- A student will not be allowed to transfer a programme he/she admitted at DIT to another unless the following conditions are met:
- He/she is a registered students at DIT
- The student has filled and submitted his/her transfer application

8.2.2.4 General conditions for application of transfer:

a. Availability of a vacancy in the preferred programme,
b. Meet the minimum admission requirements for the sought programme,
c. Payment a non- Refundable fee of TZS. 15,000 NACTVET fee for verification and quality assurance or as may be reviewed from time to time,
d. The transfer shall be effective after the approval of the Institute Academic board,
e. No candidate shall be allowed to start a transferred degree programme before approval of the IAB
f. All transfers shall be verified by TCU and NACTVET
g. Students admitted with equivalent qualifications shall NOT be allowed to change programmes, because they have been admitted under strict conditions,

8.2.2.3 Regulations on Students Credit Transfer

8.2.2.3.1 General Regulations on Credit Transfer for Foreign and Local students

(i) Credit transfer can only be allowed if such credits have been obtained within a period of not more than two years.
(ii) Maximum credits allowable for transfer, is 75% of the required credits of the DIT programmes.
(iii) A student, who intends to transfer for purpose of graduating in a receiving institution, shall be required to earn at least 50% of the total credits from that institution's core course.

(iv) DIT students under exchange programmes on study-abroad programmes shall be allowed to transfer credits obtained from the other university to DIT.
(v) Applications for credit transfer shall be channeled to the Departments through the Direct for Academics and Support services and to IAB for approval.
(vi) The applications for credit transfer shall be allowed within a specified period of time as shall be determined by NACTVET AND TCU.

8.2.2.3.2 Conditions Governing Credit Transfer from other Higher learning Institution to DIT

(i) The Higher Education Institution from which a student wants to transfer credit from must be a an Institution with full accreditation by a recognized body in the country assigned to deal with such matters and the accreditation status of the institution shall be independently verified by DIT, NACTVET and TCU.
(ii) The applying student must have an active degree programme registration at his/her institution.
(iii) The applicant's academic entry qualifications in the previous university shall be similar to those required by DIT including the respective programme's cut-off point in the relevant year.
(iv) Maximum credits allowable for transfer, is 75% of the required credits of the DIT programmes.

8.2.3 POSTPONEMENT OF STUDIES

(i) A student requesting for postponement must have been registered, studied and completed a minimum of one semester.
(ii) A student can be allowed to postpone due to various reasons such as health problems, family matters, pregnancy and other compelling circumstances.
(iii) Permission to Postpone studies shall be gradnted by Director of Academic Support Services after producing satisfactory evidence for the reasons for postponement and written approval from the sponsor.
(iv) Postponement shall not be permitted beyond four (4) consecutive semesters unless under exceptional cirucumstance.

8.2.4 STUDENTS IDENTITY CARDS

(i) Registered students shall be provided with identity cards upon completion of registration.
(ii) Any student who has lost an identity card has to provide police loss report as an evidence for the loss that has occurred. This should go hand in hand with payment of identity card fee prescribed by the Institute fee structure in order to process another identity card.
(iii) A lost identity card will be prepared within three days after payment of identity fee

8.2.5 Payment modalities.

(i) Payment of Institute fee and direct costs will be done in four (04) instalments per academic year.

(ii) Payment for the first instalment should be completed during registration, which takes place in the first four weeks of the first semester. This initial instalment shall cover all other contributions (administrative costs) and atleast **25%** of the fees, as well. As for the second instalment, must be paid no later than two weeks before the commencement of the first semester exams.

(iii) Payment for the third instalment should be completed during second semester registration, which takes place in the first four weeks of the semester, while the fourth instalment, must be paid no later than two week before the commencement of the second semester exams.

8.2.6 Safety of students' admission records

To have proper storage of students' admission records, digital files will be opened for each registered student. The file will contain all scanned students' admission documents such as academic certificates, birth certificate, medical examination form and other correspondences under the student's registration number.

8.2.7 Institute Regulations

Upon admission, all First Years students must obtain and read thoroughly and comply with the following regulations: (Other information can be obtained on DIT Website (http://www.dit.ac.tz).

(i) Conditions for Government sponsorship (in case of government-sponsored students).
(ii) Students General Welfare, Conduct and Disciplinary Regulations.
(iii) Examination Regulations.
(iv) The Constitution of the Dar es Salaam Institute of Technology Students Organization (DITSO).
(v) Industrial Practical Training (IPT) Regulations.
(vi) Library Regulations.
(vii) Postgraduate guidelines.
(viii) DITSO Financial Regulations
(ix) Institute Prospectus.
(x) Institute Students Accommodation Bureau policy.
(xi) Students Accommodation Agreement.

8.3 Programmes Offered

Programmes Name		Duration	Campus
	Certificate Programmes (NVA 1-3)		
Information Technology & Technology	NVA 1	1 Year	Dar es Salaam Songwe Mwanza
	NVA 2	1 Year	
	NVA 3	1 Year	
Plumbing and pipe fitting (PPF)	NVA 1	1 Year	Songwe
	NVA 2	1 Year	
	NVA 3	1 Year	
Leather Product Technology	NVA 1	1 Year	Mwanza
	NVA 2	1 Year	
	NVA 3	1 Year	
Laboratory Science and Technology	NVA 1	1 Year	
	NVA 2	1 Year	
	NVA 3	1 Year	
Diploma Programmes (NTA 4-6)			
Ordinary Diploma in Leather Products Technology	NTA 4	1 Year	Mwanza
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Leather Processing Technology	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Food Processing Technology	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	

Ordinary Diploma in Civil Engineering	NTA 4	1 Year	Dar es Salaam Songwe
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Computer Engineering	NTA 4	1 Year	Dar es Salaam
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Electrical Engineering	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Electronics and Telecommunication Engineering	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Mechanical Engineering	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Science and Laboratory Technology	NTA 4	1 Year	Dar es Salaam Mwanza
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Mining Engineering	NTA 4	1 Year	Dar es Salaam
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Biomedical Equipment Engineering	NTA 4	1 Year	
	NTA 5	1 Year	

	NTA 6	1 Year	
Ordinary Diploma in Information Technology	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Electrical Renewable Energy	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Communication System Technology	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Multimedia and Film Technology	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Food Science and Technology	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Ordinary Diploma in Biotechnology	NTA 4	1 Year	
	NTA 5	1 Year	
	NTA 6	1 Year	
Degree Programmes (NTA 7-8)			
Bachelor of Eng. in Civil Engineering	NTA 7	2/3 Years	Dar es Salaam
	NTA 8	1 Year	
Bachelor of Eng. in Computer Engineering	NTA 7	2/3 Years	
	NTA 8	1 Year	
Bachelor of Eng. in Electrical Engineering	NTA 7	2/3 Years	
	NTA 8	1 Year	
Bachelor of Eng. in Electronics and	NTA 7	2/3 Years	

Telecommunication Engineering	NTA 8	1 Year	
Bachelor of Eng in Mechanical Engineering	NTA 7	2/3 Years	
	NTA 8	1 Year	
Bachelor of Engineering in Oil and Gas Engineering	NTA 7	2/3 Years	
	NTA 8	1 Year	
Bachelor of Engineering in Mining	NTA 7	2/3 Years	
	NTA 8	1 Year	
Bachelor of Technology in Laboratory Sciences	NTA 7	2/3 Years	
	NTA 8	1 Year	
Masters Programmes (NTA 9)			
Master of Engineering in Maintenance Management	NTA 9	18 Months	Dar es Salaam
Master of Technology in Computing and Communication	NTA 9	24 Months	
Master of Computational Science and Engineering	NTA 9	24 Months	
Master of Engineering in Sustainable Energy Engineering	NTA 9	24 Months	

CHAPTER FOUR

FEES AND OTHER FINANCIAL REQUIREMENTS

4.1. General Information

Apart from tuition fee, each student is required to pay the following:

4.1.1 Registration Fee

All selected candidates will be required to register annually and pay a registration fee of 10,000/= only for Tanzanian citizen and USD 40 for non-Tanzanian citizen per year. For Postgraduate Programmes, registration fee is TSh 50,000/= for Tanzanian or USD 50 for non-Tanzanian students per year.

4.1.2 Caution Money

Each student is required to pay TSh. 10,000/= for Tanzanian citizen or USD 50 for non-Tanzanian students as caution money. The money shall be refunded upon completion of course if he/she was not involved in any loss or damage of the Institute's properties. Where losses/damage exceed 10,000/= or USD 50 the student shall be asked to pay the difference.

4.1.3 Identity Card

Each student is required to come with two recently taken stamp size photographs and TSh. 10,000/= for the cost of identity card. This amount is paid once. Replacement for a lost identity card shall be done after obtaining a loss report from Police Station and payment of TSh. 10,000/= for Tanzanian citizen or USD 20 for non-Tanzanian students.

4.1.4 Membership to the DIT Students' Organization

Every DIT registered student is a member of the DIT Students Organization (DITSO). The membership registration fee for the first year students is TSh. 10,000/= for Tanzanian citizen or USD 20 for non-Tanzanian students Membership subscription fees for every continuing student is TShs 5,000/= for Tanzanian student or USD 20

for non-Tanzanian students each year.

4.1.5 Students Relief Fund /Medical Contribution

Students with no valid health insurance membership cards are required to pay a total of TShs. 50,400/= for Tanzanian students or USD 60 for non-Tanzanian students as a contribution towards students joining NHIF. A non-Tanzanian student under postgraduate programme is required to pay USD 75. This amount is paid directly to the Institute's Bank Account. Students with NHIF or other health insurance membership cards are not required to pay the contribution. However, the ID for a health insurance membership is required before registration as evidence of payment for this contribution. Every student is required to pay TShs. 5000/= or USD 5 for non-Tanzanians for student relief fund whereby the generated fund will be used as per DIT relief fund policy.

4.1.6 Accommodation in DIT Hostels

Ordinary Diploma (NTA Level 4-6) government sponsored students seeking accommodation in the Institute's hostels are required to bring with them: plates, cups, spoons, forks, bed sheets, pillows, mosquito nets and blankets. Every student shall pay in advance the prescribed accommodation fees before being granted institute's accommodation.

4.1.7 Specific Information on Students Sponsorship

Students pursuing Ordinary Diploma (NTA level 4-6) programmes may join the Institute under government sponsorship or as privately sponsored candidates. Whereas students pursuing Bachelor degree are encouraged to apply for scholarship, loan from Higher Education Students Loan Board (HESLB) or third party. The fee structures for government, private sponsored students pursuing Ordinary Diploma (NTA level 4-6) programmes, students pursuing Bachelor degree programmes and students pursuing Master Programmes are as shown in Table 4.1, 4.2 and 4.3, respectively.

Table 4.1 (a) Fees /Costs Direct Payable to the Institute for Government Sponsored Diploma Student (NTA Level 4-6)

S/N	Description	1st Year (NTA 4)	2nd Year (NTA 5)	3rd year (NTA 6)
1	Tuition fee	130,000.00	130,000.00	130,000.00
2	Registration fee	10,000.00	10,000.00	10,000.00
3	DIT Examination fee	60,000.00	60,000.00	60,000.00
4	Student's identity card	10,000.00	10,000.00	10,000.00
5	Library membership fee	10,000.00	10,000.00	10,000.00
6	National Health Insurance Fund (NHIF)*	50,400.00	50,400.00	50,400.00
7	DIT students union organization fee	10,000.00	10,000.00	10,000.00
8	Caution money	10,000.00	-	-
9	Student NACTE fee	5,000.00	15,000.00	15,000.00
10	Student relief fund**	5,000.00	5,000.00	5,000.00
11	Sports & games	5,000.00	5,000.00	5,000.00
12	Costs for industrial visits costs & supervision	15,000.00	15,000.00	15,000.00

**To be paid by all students with no health insurance or invalid health insurance.*
*** Generated funds to be used as per the DIT student relief fund policy*

Table 4.1 (b) Fees /Costs Direct Payable to the Institute for Private Sponsored Students (NTA Level 4-6)

S/N	DESCRIPTION	Tanzanian1st Year (NTA 4)	Non-Tanzania USD	Tanzanian 2nd Year (NTA 5)	Non-Tanzania USD	Tanzanian 3rd Year (NTA 6)	Non-Tanzanian (USD)
1	**Tuition fee**	**950,000.00**	**1,000.00**	**950,000.00**	**1,000.00**	**950,000.00**	**1,000.00**
2	Registration fee	10,000.00	40.00	10,000.00	40.00	10,000.00	40.00
3	DIT examination fee	60,000.00	75.00	60,000.00	75.00	60,000.00	75.00
4	Student's identity card	10,000.00	10.00	10,000.00	10.00	10,000.00	10.00
5	Library membership fee	10,000.00	50.00	10,000.00	50.00	10,000.00	50.00
6	National Health Insurance Fund (NHIF)/Medical Contribution*	50,400.00	60.00	50,400.00	60.00	50,400.00	60.00
7	DIT students union organisation fee	10,000.00	20.00	10,000.00	20.00	10,000.00	20.00
8	Caution money	10,000.00	50.00	-	-	-	-
9	Student NACTE fee	15,000.00	10.00	15,000.00	10.00	15,000.00	10.00
10	Student relief fund**	5,000.00	5.00	5,000.00	5.00	5,000.00	5.00
11	Sports & games	5,000	10.00	5,000.00	10.00	5,000.00	10.00
12	Costs for industrial visits costs & supervision	15,000.00	15.00	15,000.00	15.00	15,000.00	15.00
		1,150,400.00	1,355.00	1,140,400.00	1,295.00	1,140,400.00	1,295.00

**To be paid by all students with no health insurance or invalid health insurance.*

*** Generated funds to be used as per the DIT student relief fund policy*

Table 4.1 (c) Costs Direct Payable to the Students (NTA LEVEL 4-6)

S/N	Description	1st Year(NTA 4)	2nd Year (NTA 5)	3rd Year (NTA6)
1.	Books & Stationeries	**150,000.00**	**150,000.00**	**150,000.00**
2.	Meals	952,000.00	952,000.00	952,000.00
2	Accommodation*	595,000.00	595,000.00	595,000.00
3	Industrial Practical Training (IPT) expenses	600,000.00	600,000.00	-
4	Transport allowance to attend IPT	40,000.00	40,000.00	-
5	Field/industrial visit (study tour) cost	40,000.00	40,000.00	40,000.00
6	Final year project	-	-	200,000
7	Books & stationeries	**150,000.00**	**150,000.00**	**150,000.00**
TOTAL COSTS		**2,377,000.00**	**2,377,000.00**	**1,937,000**

*The cost for accommodation is the minimum indicative price for students securing accommodation other than DIT hostel

N.B. The Institute reserves the right to change or modify fees and costs rate from time to time

Table 4.2 (a) Fees /Costs Direct Payable to the Institute by B.Eng. /B.Tech. (NTA level 7-8) for Private Sponsored Students

S/N	DESCRIPTION	1st Year		2nd Year		3rd Year	
		Tanzanian (Tshs)	Non-Tanzania USD	Tanzanian (Tshs)	Non-Tanzania USD	Tanzanian (Tshs)	Non-Tanzanian USD
1	Tuition fee*	1,350,000.00	2,000.00	1,350,000.00	2,000.00	1,350,000.00	2,000.00
2	Registration fee	10,000.00	40.00	10,000.00	40.00	10,000.00	40.00
3	DIT Examination fee	60,000.00	100.00	60,000.00	100.00	60,000.00	100.00
4	Student's identity Card	10,000.00	10.00	10,000.00	10.00	10,000.00	10.00
5	Library Membership fee	10,000.00	50.00	10,000.00	50.00	10,000.00	50.00
6	National Health Insurance Fund (NHIF)/Medical Contribution**	50,400.00	75.00	50,400.00	75.00	50,400.00	75.00
7	DIT Students Union Organization fee	10,000.00	20.00	10,000.00	20.00	10,000.00	20.00
8	Caution money	10,000.00	30.00	-	-	-	-
9	TCU/NACTE fee	20,000.00	10.00	20,000.00	10.00	20,000.00	10.00
10	Student Relief Fund***	5,000.00	5.00	5,000.00	5.00	5,000.00	5.00
11	Sports & games	5,000.00	10.00	5,000.00	10.00	5,000.00	10.00
12	Costs for industrial visits costs & supervision	15,000.00	15.00	15,000.00	15.00	15,000.00	15.00
	Total	**1,555,400.00**	**2,315.00**	**1,545,400.00**	**2,335.00**	**1,545,400.00**	**2,335.00**

*Student benefiting from HESLB facility will be required to pay first part of the fees which is not covered by the HESLB
**For Non-NHIF or non-health insurance Member
*** Generated funds to be used as per the DIT student relief fund policy

Table 4.2 (b) Costs Direct Payable to the B.Eng./BTech. Students (NTA level 7-8) for Private Sponsored Students

S/N	DESCRIPTION	1st Year (NTA 7(1))		2nd Year (NTA 7(2))		3rd Year (NTA 8)	
		Tanzanian (TSHS)	Non-Tanzania (USD)	Tanzanian (TSHS)	Non-Tanzania (USD)	Tanzanian (TSHS)	Non-Tanzanian (USD)
1	Industrial Practical Training (IPT)	700,000.00	700.00	700,000.00	700.00	-	-
2	Transport fare to attend IPT*	40,000.00	40.00	40,000.00	40.00	-	-
3	Industrial/field visits costs	40,000.00	40.00	40,000.00	40.00	40,000.00	40.00
4	Book/Stationery costs	150,000.00	150.00	150,000.00	150.00	150,000.00	150.00
5	Meals costs	952,000.00	960.00	952,000.00	960.00	952,000.00	960.00
6	Accommodation**	595,000.00	600.00	595,000.00	600.00	595,000.00	600.00
7	Final year project fee	-	-	-	-	300,000.00	300.00
Total Costs		**2,477,000.00**	**2,490.00**	**2,477,000.00**	**2,490.00**	**2,037,000.00**	**2050.00**

*IPT rate per day TShs 10,000 x 56 days

**Variable depending on IPT place/location

N.B. The institute reserves the right to change or modify fees and cost rate from time to time.

It is the responsibility of the student to ensure that fees and other costs are remitted timely

Table 4.3 (a). Master of Engineering in Maintenance Management (MEng MM), Master of Technology in Computing and Communications (MTCC) and Master of computational science and engineering (MCSE) Programmes (NTA Level 9)

Fees/Cost Payable to the Institute by MEng MM, MTCC and MCSE Student /Sponsor (NTA level 9)

S/N	DESCRIPTION	1st Year (NTA 9)		Semester III Dissertation (NTA 9)	
		Tanzanian (TShs)	Non-Tanzania (USD)	Tanzanian (TShs)	Non-Tanzania (USD)
1	Tuition fees	3,100,000.00	2,950.00	750,000.00	750.00
2	Registration fees	50,000.00	50.00	50,000.00	50.00
3	DIT examination fees	200,000.00	200.00	200,000.00	200.00
4	DIT identity card	10,000.00	10.00	10,000.00	10.00
5	Library membership	30,000.00	50.00	-	-
6	DITSO contribution	10,000.00	10.00	10,000.00	10.00
7	Caution money	10,000.00	10.00	-	-
8	National health insurance Fund (NHIF)*	50,400.00	50.00	50,400.00	50.00
9	Graduation fees	-	-	50,000.00	50.00
11	NACTE/TCU fee	20,000.00	20.00	20,000.00	20.00
12	Students relief fund**	5,000	5.00	5,000.00	5.00
	Total costs	**3,490,400.00**	**3.365.00**	**1,145,400.00**	**1,145.00**

***To be paid by the non-NHIF member or the non-health insurance member

** Generated funds to be used as per the DIT student relief fund policy

Table 4.3 (b). Costs Payable Direct to the M.Eng MM, MTCC and MCSE (NTA Level 9) Students by Sponsors/Parents/Guardians

S/N	DESCRIPTION	1st Year (NTA 9)		Semester III Dissertation (NTA 9)	
		Tanzanian (TShs)	Non-Tanzanian (USD)	Tanzanian (TShs)	Non-Tanzanian (USD)
1	Book and stationery	650,000.00	650.00	50,000.00	50.00
2	Dissertation production costs*	-	-	250,000.00	250.00
3	Living and facilitation costs allowance*	3,600,000.00	3,600.00	1,800,000.00	1,800.00
4	Research costs*	-	-	2,000,000.00	2,000.00
Total costs		**4,250,000.00**	**4,250.00**	**4,100,000.00**	**4,100.00**

*Minimum indicative costs

NB: All students under 'students exchange training Programmes' (occasional students) will pay their fees on a Semester

The Institute reserves the right to change or modify fees and cost rate from time to time.

It is the responsibility of the student to ensure that fees and other costs are remitted timely

Table 4.3(c) Fees Structures for Master of Engineering in Sustainable Energy Engineering Programme (MESEE 19) 2023/2024

S/N	Item	1st year		2nd year	
		Tanzanians (TZS)	Non Tanzanians (USD)	Tanzanians (TZS)	Non Tanzanians (USD)
1	**Tuition Fees**	**3,200,000.00**	**2,950.00**	**2,917,000.00**	**2,355.00**
2	Registration fees	50,000.00	50.00	50,000.00	50.00
3	DIT examination fees	200,000.00	200.00	200,000.00	200.00
4	DIT identity card	10,000.00	10.00	10,000.00	10.00
5	Library membership	30,000.00	50.00	-	-
6	Caution money	10,000.00	10.00	-	-
7	Graduation fees	-	-	50,000.00	50.00
8	NACTE/TCU fee	20,000.00	20.00	20,000.00	20.00
9	**Student relief fund	5,000.00	5.00	5,000.00	5.00
10	DITSO contribution	10,000.00	20.00	10,000.00	20.00
11	National Health Insurance Fund **(NHIF)***	50,400.00	50.00	50,400.00	50.00
	Total costs	**3,585,400.00**	**3,365.00**	**3,312,400.00**	**2,760.00**

Table 4.3(d) Fees Payable by Parents/ Guardian/Sponsor Master of Engineering in Sustainable Energy Engineering Programme

S/N	Description	1st year		2nd year	
		Tanzanian (TZS)	Non Tanzanian 1st year (USD)	Tanzanian (TZS)	Non Tanzanian (USD)
1	*Book and stationery	900,000.00	800.00	450,000.00	400.00
2	*Dissertation production costs		-	250,000.00	500.00
3	*Living and facilitation costs allowance	3,600,000.00	3,600.00	3,600,000.00	3,600.00
4	*Research costs	-	-	3,000,000.00	3,000.00
Total costs		**4,500,000.00**	**4,400.00**	**7,300,000.00**	**7,500.00**

*Minimum indicative costs

NOTE THAT:

(a) The Institute reserves the right to change or modify fees and costs rate from time to time
(b) It is the responsibility of the student to ensure that fees and other costs are remitted timely
(c) Fees once paid are non-refundable.
(d) Total amount required for the 1st year can be paid in two instalments. At least 50% of the tuition fee plus other cost should be paid as condition to registration at the 1st semester and the remaining fees is paid in the 2nd semester of an academic year.
(e) You can consult the DIT postgraduate Coordinator for advice on payment schedule.

4.2 Special Faculty/Course Requirements for B.Eng (NTA 7-8) Programme

Faculty/course requirements enable students to realize curriculum and participate effectively in both theoretical and practical studies in accordance with requirements of the curriculum. Cost for this item varies from one course to another depending on the respective curriculum requirements. The corresponding cost implications are outlined in Table 4.4. Course requirement fund is recommended to be paid directly to the Institute.

Table 4.4 Special Faculty/Course Requirements for Bachelor Degree Programmes (NTA Level 7-8)

PROGRAMME	Costs (TShs)
Civil Engineering	350,000.00
Computer Engineering	220,000.00
Electrical Engineering	200,000.00
Mechanical Engineering	350,000.00
Electronic and Telecommunication Engineering	265,000.00
Laboratory Sciences	350,000.00
Oil and Gas Engineering	350,000.00
Mining Engineering	350,000.00

All students under 'students exchange programmes' (Occasional students) will pay their fees on a Semester Basis

4.3 Final Project/Research Requirements

B.Eng. Students are required to undertake Senior Project I and II in the 5th and 6th semesters of their study respectively in accordance with the requirements of curriculum. The cost of undertaking the projects, amount to TSh. 300,000.00 or USD 300.00 for non-Tanzanians, where it is directly paid by the sponsor or third part to the student and the Institute respectively. For Master of Engineering in Maintenance Management (Meng MM), Master of Technology in Computing and Communications(MTCC) and Master of

Computational Science and Engineering (MCSE) Programmes costs for research is TSh. 2,000,000.00 (Tanzanians) or USD 2,000.00 (for non-Tanzanians) and for Master of Engineering in Sustainable Energy Engineering (Meng. SEE) Programme is Tshs 3,000,000.00 for Tanzanians and USD 3000 for non-Tanzanians.

4.4 Tuition Fee and Other Fees Payable to the Institute

All private sponsored students are required to produce verifiable evidence of sponsorship from the respective organizations, parents/guardians, on the first day of each academic year. Sponsors are required to pay full tuition and other fees payable directly to the Institute before the respective students are registered to embark on studies. All fees and other payments payable to the Institute should be paid through the generated control number from students' SOMA account. Fees once paid will not be refunded. No student is registered for the final examination at the end of the semester or awarded a certificate by the Institute unless he/she has fully paid the relevant dues.

4.5 Additional Costs for Other Services

Table 4.5 Hostel Charges per Academic Year

Programme	Tanzanian	Non Tanzanian
	TShs	USD
Block I	50,000.00	500
Block II	50,000.00	
Block III	50,000.00	
Block IV	120,000.00	
Block V	120,000.00	
Chang'ombe Hostel	100,000.00	

Table 4.6 Other Additional Costs

S/N	Programme	Tanzanian	Non Tanzanian
		TShs	USD
1	Application Fees for OD/B.Eng. (NTA Level 4-6,NTA Level 7-8)	15,000.00	15.00
2	Application fees for M.Eng (NTA level 9)	30,000.00	30.00
3	Replacement of lost ID card	10,000.00	20.00

4	DIT academic transcripts	15,000.00	15.00
5	DIT academic statement of results (8 copies)	10,000.00	10.00
		2,500/= for additional copy	2.5 for additional copy
6	Replacement of a lost/damaged DIT academic certificate*	25,000.00	25.00
7	Replacement of a lost/ damaged DIT academic transcript*	15,000.00	15.00
8	Certification of academic copies of certificate as true copy of the original certificate	2,500/= per copy	USD 2,5 per copy
9	Appeal for examination results (Nonrefundable)	10,000/= per module for NTA Level 4-6	10 per module for NTA Level 4-6
		15,000/= per modules for NTA Level 7-8	15 per modules for NTA Level 7-8
		20,000/= per module for NTA Level 9	20 per module for NTA Level 9

N.B: - DIT Hostel accommodation and meals is subject to availability of space

***Per Certificate after attending all the required procedures**

NB A retake student has to pay the tuition fee in full if the modules he/she retakes spread over both semesters of an academic year. If the module/modules he/she retakes are in a single semester of an academic year, he/she has to pay fifty percent (50%) of the tuition fee.

CHAPTER FIVE

EXAMINATION REGULATIONS

During each semester, students are required to sit for examinations in accordance with the Institute's regulations. In fulfilling these requirements, NTA Levels 4-9 students are required to observe the Institute's examination regulations under clause 1.0 (Statutory Examination Powers) as approved by the DIT Council.

1.0 Statutory Examinations Power

The Dar es Salaam Institute of Technology (DIT) is empowered to make regulations governing the conduct and grant of awards as stipulated under the Dar es Salaam Institute of Technology Act No. 6 of 1997, as amended from time to time.

2.0 Primacy of Institute Examination Regulations

Subject to the guidelines issued by the relevant regulatory authorities, the Institute Examination Regulations shall take precedence in respect of the conduct and administration of examinations over any other regulations, unless variation is specifically permitted by the DIT Council.

3.0 Examination Regulations and its Applications

3.1 The examination regulations detail courses of action to be taken by DIT on all matters related to examinations and awards.

3.2 These examination regulations apply to programmes leading to the qualifications of National Technical Awards Levels 4-9.

4.0 Cognizance of Examination Regulations

By registering as a DIT student, every student is deemed to be cognisant of and to have agreed to abide by the examination rules set out in these regulations.

5.0 Examinations

5.1 Examinations include continuous assessment (tests, assignments, seminars, presentations, practical, dissertations, theses or any other form of assessment specified in the study guide(s) and/or assessment plan(s) issued at the beginning of the semester) and end of Semester Examinations including practical where appropriate.

5.2 There shall be a written and, where the course demands, a practical examination at the end of each semester for a course taught.

5.3 The timing of examinations shall be between 07.00 a.m. and 09.00 pm any day of the week including weekends. Approved public holidays and other days when the Institute is closed are excluded.

6.0 Registration for modules

6.1 Core Modules registration shall be done at the beginning of each semester in the DIT student information management system within the students' registration period.

6.2 Elective Modules registration shall be done at the beginning of each semester in the DIT student information management system within the registration period. However, if a student decides to register more or deregister an elective module(s), he or she will be allowed to do so two weeks after the commencement of teaching the module in the same system.

6.3 A candidate shall be examined for all modules registered for.

6.4 For an elective module to be offered, the minimum number of students shall be ten (10) in NTA levels 4-8.

7.0 Eligibility for Examinations

No candidate shall be eligible for end of semester examination in any module unless:

a) The candidate has paid the required fees and registered.

b) The candidate has registered for the prescribed modules;

c) The candidate has completed and passed the prescribed continuous assessment; and

d) The candidate has undertaken and completed the module by attending at least 80% of the lectures and practical.

8.0 Performance Threshold

8.1 Examinations components

Examinations shall have two components that are assessed separately, namely continuous assessment and end of Semester examinations. The candidates shall be required to pass both of them. Postgraduate students' dissertation is an examination component for NTA 9 that shall be conducted and assessed in accordance with procedures stipulated in the DIT Postgraduate Guidelines.

8.2 Weighting of Assessment components

(a) The overall score shall be 100% and shall be composed of Continuous Assessment (CA) and end of Semester Examination (SE) components. The weighting of assessment components shall be 60% for CA and 40% for SE unless otherwise specified in the respective curriculum. The components of CA per module are described in Table 8.1.

Table 8.1: Weighting of the Components of CA per Module

Category	**Weight (in Percentage)**
Classroom tests (at least two tests)	15
Practical/Presentations	15
Individual Assignments/study visit	15
Group Assignments/Homework/study visit	15
TOTAL CA	**60**

(b) For modules where CA is not 60%, the individual assessments shall take 75% (25% classroom tests, 25% practical and 25% individual assignments) and group assessments shall take 25% of total marks for continuous assessment per module.

8.3 Passing score

The passing score for each assessment component out of 100% at the respective NTA levels shall be:

a) 50% for continuous assessment, for the end of semester examination, and for the semester overall assessment for NTA levels 4-5.

b) 45% for continuous assessment, for the end of semester examination, and for the semester overall assessment for NTA level 6.

c) 40% for continuous assessment, for the end of semester examination, and for the semester overall assessment for NTA levels 7-8.

d) 50% for continuous assessment, for the end of semester examination, and for the semester overall assessment for NTA level 9.

8.4 Industrial Practical Training (IPT)

All industrial practical training modules for NTA Levels 4, 5, and 7 shall be carried out after the second semester of the respective academic year. IPT shall be conducted and assessed in accordance with procedures stipulated in the DIT IPT guidelines.

8.5 Students' Projects

There shall be two student's projects modules at NTA 6 and 8. The conduct and assessment of the modules shall be as per the Institute Project Guidelines.

8.6 Dissertation

Dissertation module for NTA 9 shall be conducted and assessed according to the DIT Postgraduate Guidelines.

9.0 Absence from Examination

9.1 A candidate who absents oneself from a scheduled examination without permission from DASS through the respective Head of Department shall be deemed to have absconded from the examination and shall be discontinued from studies.

9.2 A candidate allowed to be absent (authorized absence) from the End of Semester examination(s) shall have to sit for the respective examination(s) when next offered.

9.3 A candidate who absents oneself from any continuous assessment or fails to submit assignment(s) given during the course work without compelling reasons shall be considered to have attempted such assignment(s) and shall be awarded a zero score.

10.0 Postponement of Examination

10.1 All cases of postponement of tests shall be approved by the respective Head of department, who shall thereafter notify the Director of Academics Support Services (DASS).

10.2 All cases of postponement of examinations shall be approved by the Director of Academics Support Services (DASS) through the respective Head of Department.

10.3 All cases of postponement of studies shall be approved by the Director of Academics Support Services (DASS) through the respective Head of Department.

11.0 Dates and Duration of Examinations

11.1 Dates and times of conducting continuous assessments shall be determined and indicated by the respective module master(s) in the course outlines or study guides or otherwise at the beginning of the semester.

11.2 Dates for the end of semester examinations shall be published in the Institute academic calendar approved by the Academic Committee of the Council.

11.3 The duration of the end of semester theory examinations shall be at least two hours for NTAs 4–5, two and a half hours for NTA 6, and three hours for NTAs 7–9.

12.0 Conduction of Examinations

12.2 Candidates shall arrive at the examination room 30 minutes before the start of the examination.

12.3 No candidate shall be allowed to enter the examination room 30 minutes after the start of the examination.

12.4 Candidates shall sign examination attendance sheet during the examination and upon completion and submission of answer booklets.

12.5 No candidate is allowed to tear/dispose/throw our examination booklet or examination paper during the examination.

12.6 No candidate is allowed to leave the examination room for any reason during the first half-hour since the start of the examination.

13.0 Administrative Organs

There shall be two main administrative organs for examination matters; the Institute Academic Board and Institute Academic Committee of the Council.

13.1 Academic Board

There shall be an Academic Board of the Institute.

a) Responsibilities:

(i) The Academic Board shall receive and deliberate all academic matters (Examinations results, examination appeals, irregularities, examination reports and students' performance) and make recommendations to the Academic Committee of the Council for approval.

(ii) In addition, the Academic Board shall receive and deliberate academic policies and regulations and make recommendations to the Academic Committee of the Council for approval.

b) Composition:

(i) Deputy Rector (Academic Research and Consultancy) - Chairperson

(ii) Director of Academics

(iii) Director of Academic support Services.

(iv) Director of Research, Consultancy and Publication

(v) Director of Students Services.

(vi) Campus Directors.

(vii) Heads of Academic Departments/Units.

(viii) Two Student representatives nominated by the DIT Students Organization (DITSO).

(ix) The secretary of the Institute Academic Board shall be the Director of Academics

13.1.1 Irregularities Committee of the Academic Board

There shall be Irregularities Committee of the Academic Board hereinafter called Irregularities Committee.

a) Responsibilities:

i) The Irregularities Committee shall receive irregularities cases, deliberate, investigate and recommend action to be taken by the DASS subject to approval by the Academic Board.

ii) The Academic Board and/or Irregularities Committee shall have powers to summon any academic staff, invigilator or students for questioning, if deemed necessary.

b) Composition

Composition of the Irregularities Committee shall be:

(i) The Committee Chairperson shall be appointed by Deputy Rector-Academic Research and Consultancy among the committee members,

(ii) Institute examination officer-Secretary,

(iii) Representative from the DIT Legal Services Office,

(iv) Head of Department hosting the programme,

(v) Head of Department hosting the module,

(vi) Students representative, and

(vii) Any other member(s) at discretion of DASS.

13.1.2 Academic Appeals Committee of the Academic Board

There shall be Academic Appeals Committee of the Board of the Institute. There shall be two types of academic appeals; those related to unfair marking and those not related unfair marking.

13.1.2.1 Appeals related to unfair marking

For appeals related to unfair marking the DASS shall forward the appeal to the respective departments that offer the module. The Head of Department shall appoint expert(s) that shall determine the validity or remark the scripts and the department shall give its recommendations to the Academic Board.

a) Responsibilities

Receive; deliberate the recommendations of remarks and recommendation to the Institute Academic Board.

b) Composition of the academic appeals related to unfair marking

(i) Head of Department-Chairperson,

(ii) Examination Coordinator-Secretary,

(iii) Re-marker(s),

(iv) First marker(s), and

(v) Any other person the head deemed to be necessary.

13.1.2.2 Appeals not related to unfair marking

The Academic Appeals Committee of the Academic Board shall receive appeals (appeals not related to unfair marking).

(a) Responsibilities

Investigate, discuss and make recommendations to the Academic Board. The Institute Academic Board shall determine the validity of the recommendations.

(b) Composition

(i) The Committee Chairperson shall be appointed by Deputy Rector-Academic Research and Consultancy among the committee members.

(ii) Representative from DIT Academic Staff Association (ASA) – Secretary.

(iii) Head(s) of Department(s) of which the appealing student(s) belong(s).

(iv) Representative from the DIT Legal Services Office

(v) Two Students representatives nominated by DITSO.

(vi) Director of Student Services.

13.1.3 Procedures for Appeal

i. Appeal shall be lodged to the DASS through the Heads of the respective Departments using appeal forms within seven (7) working days from the date of the official publication of results, unless directed otherwise by the Rector.

ii. All appeals must be accompanied by evidence of payment of a nonrefundable appeal fee prescribed per module by the Rector at the beginning of each academic year. The appeal fee can be in either Tanzanian Shillings or US Dollar.

iii. The decision of the Council shall be final and no further appeals shall be entertained.

iv. No appeal for remarking of examination script(s) will be entertained after three (3) years since the last publication of results.

13.2 Academic Committee

There shall be Academic Committee of the Institute.

(a) Responsibilities:

i) The Academic Committee shall receive, deliberate and approve reports and recommendations of the Academic Board.

ii) The Academic Committee shall approve deliberations of the Academic Board and table to the Council for noting.

(b) Composition:

(i) Chairperson – Rector

(ii) Vice Chairperson - Deputy Rector for Academic, Research and Consultancy

(iii) Deputy Rector for Planning, Finance and Administration

(iv) Designated leader of governing units as translated by the DIT Council:

- Director of Academics
- Director of Academics Support Services
- Director of Research, Consultancy and Publication
- Director of Students Services
- Director of India-Tanzania Centre of Excellence in Information and Communication Technology (ITCoEICT)
- Campus Directors

(v) One representative of the Students' Organization

(vi) One senior representative of the academic staff appointed by the Rector

(vii) Two representatives from the Council appointed by the Chairman of the Council

(viii) One representative from the relevant professional bodies or corresponding institutions

The Academic Committee may co-opt any person whose presence is, in its opinion, desirable to attend and participate in a meeting of the Committee but such person shall have no right to vote.

14.0 Examination Irregularities and Penalties

14.1 An examination is any structured assessment activity designed to determine the extent to which each individual learner (candidate) has acquired the intended learning outcomes and skills. An examination irregularity is any offence, act, omission, or event that may undermine or threaten to undermine the integrity, credibility, security, or fairness of the examination and assessment process. Examination irregularities vary depending on the nature of the examination in question.

14.2 Examination irregularities involved in sitting for WRITTEN EXAMINATIONS, TESTS AND QUIZZES:

a) BEFORE the examination starts, examination irregularities shall include, but not limited to, the following:

(i) Fraudulently accessing or attempting to access examination questions or marking scheme(s) before the examination is due.

(ii) Writing of examination related materials OR any unauthorized materials on one's body, clothing, shoes and/or the examination room setting such as walls, desks, chairs, floor, roof, etc.

(iii) Going to an examination room and/or sitting with the intention of attempting the examination in a different room than the one allocated.

b) DURING the examination, examination irregularities shall include, but not limited to, the following:

(i) Possession and/or use of unauthorized materials such as written or printed materials, purses, electronic equipment including cellular or mobile phones, smart watches, radio receivers, radio cassettes or other types of players, computers, electronic devices capable of transmitting and storing information, and any other materials as may be specified from time to time by DRARC.

(ii) Unauthorised communication with any other person within or outside the examination room.

(iii) Attempting or facilitation of copying of another candidate's work.

(iv) Borrowing or exchanging materials such as calculators, rulers, question papers, answer books and pens among candidates.

(v) Writing on the examination question paper.

(vi) Going out of the examination room, temporarily or otherwise, without authorization or permission of the invigilator for the examination.

(vii) Staying out of the examination room from an unduly long time, without authorization or permission of the invigilator for the examination.

(viii) Impersonation in writing or attempting to write an examination.

(ix) Submitting or attempting to submit answer sheet(s) not used in the examination room.

(x) Causing disturbance in or near the examination room through, but not limited to, the following: trespassing, making or causing noise, assaulting the invigilator or another candidate, and using abusive and/or threatening language.

(xi) Forged identification documents in relation to eligibility to sit for examinations, including but not limited to: Identity cards and examination permits.

c) AFTER the examination ends, examination irregularities shall include, but not limited to, the following:

(i) If the submitted examination booklets of two or more candidates have identical handwriting and doubtful similarity in answers as concluded by the module Instructor or Lecturer.

(ii) Unauthorised alteration of examination marks or grades, contents of examination answer booklets, and contents of examination attendance sheets; this includes alterations in both electronic and hard copy forms.

(iii) Fraudulently accessing or attempting to access written examination answer booklets after submission.

14.3 Examination irregularities involved in writing of DISSERTATIONS, IPT LOGBOOKS AND PRACTICAL/PROJECT/INDUSTRIAL VISIT REPORTS:

a) Submission of a plagiarized (including self-plagiarism) assignment, project report, IPT logbook contents, dissertation, or any other academic work. Plagiarism is presenting someone else's work or ideas as your own, with or without their consent, by incorporating them into your work without proper acknowledgement or crediting the original source.

b) Submission of forged reports, such as Industrial Supervisor Reports.

14.4 All cases of alleged examination irregularities as described under sections 13.2 and 13.3 of these regulations shall be referred to the Head of the respective Department immediately, which, through the Irregularities Committee, shall investigate and submit recommendations to the Institute Academic Board.

14.5 Any candidate who shall be proved to have committed the described examination irregularity under sections 14.2 and 14.3 shall be DISCONTINUED from studies subject to the approval of the Institute Academic Committee and endorsed by council

14.6 A candidate aggrieved by the decision of the Institute Academic Committee on the irregularity case may appeal to the DIT governing Council within 14 days from the date of notification of the decision.

15.0 Progression from one Academic Audit Unit to Another

15.1 The Academic Audit Unit for programmes leading to the awards of NTA Levels 4 to 9 shall be semester wise.

15.2 A candidate in NTA levels 4-8 with a semester GPA of 2.0 or above and has passed all modules should be declared "PASS" and shall be allowed to proceed into the next semester or level.

15.3 A first sitting candidate in the NTA levels 4-8 who has a semester GPA of 2.0 or above but failed any module(s) during the semester examination shall be allowed to sit for supplementary examination of the failed module(s).

15.4 The highest grade for NTA levels 4-9 supplementary examinations shall be the lowest pass grade for the respective NTA levels.

15.5 A candidate in NTA levels 4-8 who has a semester GPA of 2.0 or above and fails more than 50% of the module(s) in a semester shall repeat the failed module(s) when next offered.

15.6 A candidate in NTA levels 4-8 who fails SE in some module(s) in that semester and attains a semester GPA of less than 2.0 shall be required to repeat the failed module(s) when next offered.

15.7 A candidate in NTA levels 4-8 who failed a supplementary examination(s) shall be allowed to repeat the failed module(s) when next offered.

15.8 A candidate in the NTA Levels 4-9 failing continuous assessment of some module(s) in that semester shall NOT be allowed to sit for the semester examinations (SE) of the respective module(s) but shall be required to repeat the module(s) when next offered.

15.9 A student in NTA levels 4-8 failing CA and required to REPEAT the module shall be assigned a dummy grade of C in the respective module(s). The grade (C) shall be used for the purpose of calculating the overall semester GPA and, hence, deciding on the semester verdict of the candidate (Supplementary or Repeat).

15.10 A candidate in NTA Levels 4-9 repeating some module(s) shall be required to study the failed module(s) when next offered and pass the respective modules in both CA and SE.

15.11 A candidate repeating the examination shall be awarded the actual marks and grade.

15.12 A candidate in NTA levels 4-9 is allowed to repeat module(s) failed more than once in the same NTA level.

15.13 A candidate in NTA Level 9 with a semester GPA of 3.0 or above, and has passed all modules should be declared "PASS" and shall be allowed to proceed into the next semester.

15.14 A First sitting candidate in NTA Level 9 who has a semester GPA of 3.0 or above but failed any module(s) during the semester examination shall be allowed to sit for supplementary examination of the failed module(s).

15.15 A candidate in the NTA level 9 who has a semester GPA of 3.0 or above and fails more than 50% of the examinable module(s) in a semester shall repeat the failed modules when next offered.

15.16 A candidate in NTA level 9 who fails SE in some module(s) in that semester and attains a semester GPA of less than 3.0 shall be required to repeat the failed module(s) when next offered.

15.17 A candidate in NTA level 9 who failed a supplementary examination shall be allowed to repeat a particular module(s) when next offered.

15.18 A student in NTA level 9 failing CA and required to REPEAT the module shall be assigned a dummy grade B in the respective module(s). The grade (B) shall be used for the purpose of calculating the overall semester GPA and, hence, deciding on the semester verdict of the candidate (Supplementary or Repeat).

15.19 There shall be no carry-over modules for NTA Levels 4, 5, 6, 8 and 9 except NTA Level 7.

15.20 A candidate in the NTA Levels 4-9 resuming from the postponement shall be required to be assessed in the same way as the entire cohort. He or she will also be required to find a combination of modules to complete his/her academic programme. In case the programme has changed then he/she will be required to join a related academic programme.

15.21 Notwithstanding clause 14.20, the student shall be required to continue pursuing the programme in which he/she initially enrolled.

15.22 A special examination candidate shall be assigned a dummy grade of A for the purpose of calculating the overall GPA. If one qualifies for special examination(s), he or she will be allowed to sit for special examination and be awarded the actual marks obtained in the course work and semester examinations, respectively.

15.23 A candidate in NTA levels 4, 5 and 7 who fails Industrial Practical Training (IPT) will repeat the module when next offered.

15.24 A candidate in NTA levels 6 and 8 who fails Project will repeat the module when next offered.

16.0 Release of Examination Results

16.1 Release of Examinations Results

a) Examination provisional results shall be released immediately after the meeting of the Institute's Academic Board.

b) The final examination results shall be released immediately after the approval of the Institute Academic Committee.

c) Candidates shall access their results through the student's individual account on the Online Students Information System, unless specified otherwise by Rector.

d) In the event that the Institute releases examination results by publishing them in the news media, on noticeboards, or on its official website, only examination numbers/ registration numbers shall be used. Under no circumstances shall names or any other identification known to a third party be used to release the results to the public.

e) The Institute shall not, except in its absolute discretion, communicate with candidates or parents, or any other person claiming to act on behalf, on matters related to examination results other than in the manner described under these regulations.

f) Each individual candidate shall be responsible for maintaining awareness of their academic performance. No mass action by candidates shall be entertained in academic matters.

16.1 Approval of Examination Results

Examination results shall be approved by the Institute Academic Committee and shall be regarded as final results. The results approved by the Institute Academic Committee will be tabled before the Council for endorsement.

17.0 Progression from One Level to the Next Level of Award

17.1 A candidate shall be allowed to proceed to the next level of award after passing all prescribed modules at the current level.

17.2 NTA levels 4-9 are exit levels. Formal graduation ceremonies will be for NTA levels 6, 8, and 9. A candidate wishing to graduate at a different level shall be required to apply for graduation participation at least six (6) months before the respective graduation date.

18.0 Conditions for the Award

A candidate shall qualify for the award registered for if:

18.1 He or she has successfully completed and passed all prescribed modules for the award, and

18.2 He/she has achieved the minimum required credits at that level.

19.0 Classification of Awards

i) A Five – Point and Six-Point Systems shall be used in averaging the final grades of awards classified by the Institute at NTA Levels 4-5 and 6-9, respectively.

ii) Grade point (GP) for a module shall be calculated as a product of letter grade points achieved in the module (Table 18.1) and credits of the module, i.e., Σ (Letter Grade points × Credit). Ranges of scores for different grades and levels of study are given in Table 18.1.

Table 19.1: Ranges of Scores for Different Grades

NTAs Level 4-5			NTAs Level 6			NTAs Level 7-8		
Grade	**Definition**	**Score Range**	**Grade**	**Definition**	**Score Range**	**Grade**	**Definition**	**Score Range**
A	Excellent	80 – 100	A	Excellent	75 – 100	A	Excellent	70 – 100
			B+	Well Above Average (Very Good)	65-74	B+	Well Above Average (Very Good)	60-69
B	Above Average (Good)	65 – 79	B	Above Average (Good)	55-64	B	Above Average (Good)	50-59
C	Average (Satisfactory)	50-64	C	Average (Satisfactory	45-54	C	Average (Satisfactory)	40-49
D	Below Average (Poor)	40-49	D	Below Average (Poor)	35-44	D	Below Average (Poor)	35-39
F	Failure	0-39	F	Failure	0-34	F	Failure	0-34

20.0 Procedure for Classification of Degrees

Table 20.1: Classification of Awards for NTAs Level 4-5

Class of Awards	Cumulative GPA
First Class	3.5 – 4.0
Second Class	3.0 – 3.4
Pass	2.0 – 2.9

Table 20.2: Classification of Awards for NTAs Level 6-8

Class of Awards	Cumulative GPA
First Class	4.4 – 5.0
Upper Second Class	3.5 – 4.3
Lower Second Class	2.7 – 3.4
Pass	2.0 – 2.6

Table 20.3: Classification of Awards for NTA Level 9

Class of Awards	Cumulative GPA
First Class	4.4 – 5.0
Second class	3.5 – 4.3
Pass	3.0 – 3.4

Table 20.4: Ranges of Scores for different Grades for NTA level 9 by Coursework and dissertation

Range of Marks (100%)	Grade	Grade point	Definition
70-100	A	5	Excellent
60-69	B+	4	Very Good

Range of Marks (100%)	Grade	Grade point	Definition
50-59	B	3	Good
40-49	C	2	Poor
35-39	D	1	Very poor
0-34	F	0	Failure

21.0 Procedure for Calculating Grade Point Average (GPA)

21.1 Modules considered in computing GPA

i) All core modules shall be included in calculating GPA.

ii) Where the core modules are not sufficient to provide the minimum credits required for the level, some elective modules shall be used to obtain the required credits.

iii) If the candidate takes elective modules above the minimum credits required, elective modules with the highest grade will be used to calculate the GPA.

iv) The remaining elective modules will be included in the transcript.

21.2 Computation of the Semester GPA (SGPA)

The computation of the Semester GPA (SGPA) will be based on the following formula:

$$\text{GPA FOR A GIVEN SEMESTER} = \frac{\sum (\text{Grade points x Credit})}{\sum \text{Credits}}$$

where grades and credits are for the entire semester.

21.3 Computation of the Annual GPA (AGPA)

The computation of the Annual GPA (AGPA) will be based on the following formula:

$$\sum (\text{Grade points x Credit})$$

GPA FOR A GIVEN ACADEMIC YEAR = _____

∑ Credits

where grades and credits are for the entire academic year.

21.4 Computation of the Cumulative GPA (CGPA)

The computation of the Cumulative GPA (CGPA) will be based on the following formula:

∑ (Grade points x Credit)

GPA FOR A GIVEN PROGARAME = _____

∑ Credits

where grades and credits are for the academic programme.

Grade Points Computation for NTA levels 4 - 5

Range of Marks	Grade	Grade point	Equation For the Grade Point
80 – 100%	A	4.0	$\frac{\Sigma \text{ (Letter Grade points} \times \text{Credit)}}{\Sigma \text{ Credits}}$
65 – 79 %	B	3.0	
50 – 64 %	C	2.0	
40 – 49 %	D	1.0	
0 – 39%	F	0	

Grade Points Computation for NTA level 6

Range of Marks	Grade	Grade point	Equation For the Grade Point
75 – 100%	A	5.0	$\Sigma \text{ (Letter Grade points} \times \text{Credit)}$
65 – 74 %	B+	4.0	
55 – 64 %	B	3.0	

45 – 54 %	C	2.0	Σ Credits
35 – 44%	D	1.0	
0 – 34%	F	0	

Grade Points Computation for NTA levels 7 - 9

Range of Marks	Grade	Grade point	Equation For the Grade Point
70 – 100%	A	5.0	$\frac{\Sigma \text{ (Letter Grade points} \times \text{Credit)}}{\Sigma \text{ Credits}}$
60 – 69%	B+	4.0	
50 – 59 %	B	3.0	
40 – 49 %	C	2.0	
35 – 39%	D	1.0	
0 – 34%	F	0	

21.5 Precision for Computations of Cumulative Grade Points

The order of precision of Grade Points Computation shall be as follows:

i. Computations of Cumulative Grade Points shall be made to the fourth decimal place.

ii. Cumulative Grade Points shall be rounded off to three decimal places.

iii. For award classification purposes, final Grade Points shall be truncated to the first decimal place.

22.0 Institute Approved Awards

Upon completion of studies the Institute shall award successful candidates the following Institute awards as approved by the National Council for Technical and Vocational Education and Training (NACTVET):

(a) NTA level 4 – Basic Technician Certificate.
(b) NTA level 5 – Technician Certificate.
(c) NTA level 6 – Ordinary Diploma.
(d) NTA level 7 – National Higher Diploma.
(e) NTA level 8 – Bachelor Degree.
(f) NTA level 9 – Master Degree.

23.0 Right and Discretion of the Institute

(a) Examination results and awards shall be entirely at the discretion of the Institute Academic Committee.

(b) The Institute shall amend, withhold, or nullify the classification for an award of any candidate in proved cases of irregularity or any other form of fraud.

(c) The Institute may revoke any awarded certificate and require it to be returned to the Institute in proven cases of irregularity or any other forms of fraud.

(d) The Institute shall award Academic certificates to successful candidates as endorsed by the Council of the Institute.

(e) The Institute may correct the issued certificate and re-issue the corrected certificate if it is satisfied that there is a need to do so. The Rector shall prescribe the cost to be paid by the bearer of the certificate if the error to be corrected is caused by the bearer.

(f) Examination scripts/booklets shall be preserved for a maximum of three (3) years after the publication of results and shall be disposed of in a manner as may be determined by the Council.

(g) The Institute may issue another copy in case of loss of the original certificate on condition that:

i) The applicant produces an affidavit,

ii) The certificate so issued shall be marked "COPY" across it;

iii) The applicant must produce evidence that the loss has been adequately publicly announced, including a written report from the Police;

iv) The replacement certificate shall not be issued for at least 90 days after reporting the loss to the Institute;

v) A fee shall be charged for the copy of the certificate issued as prescribed in the institute fee structure.

(h) The Institute may issue transcripts and statements of results at a cost prescribed by the Rector at the beginning of the academic year.

24.0 Amendments

Amendments on examinations regulations shall be done from time to time as deemed necessary by the Institute Academic Committee.

CHAPTER SIX

PROFILE OF ACADEMIC DEPARTMENTS

6.1 DEPARTMENT OF CIVIL ENGINEERING

The department offers Ordinary Diploma (OD) at NTA level 6 and Bachelor of Engineering Degree (B.Eng) at NTA Level 8. The department also offers Master degree programme of Engineering in Maintenance Management (NTA 9) by coursework and dissertation. Students admitted for OD may exit at NTA level 4 and 5 with the award of Basic Technician Certificate (BTC) and Technician Certificate (TC), respectively. Successful students who complete Ordinary Diploma course are awarded an Ordinary Diploma at NTA level 6. While those for engineering degree courses may exit at NTA level 7 and awarded a Higher Diploma (HD). Successful students who complete NTA level 8 are awarded Bachelor of Engineering Degree in Civil Engineering while successful students in NTA 9 will be awarded Master of Engineering in Maintenance Management.

To support the above programs, the department possesses adequate physical and human resources this include lecturers, classrooms, laboratories and workshops. It has thirty one (29) qualified teaching staff members and seven (4) technical supporting personnel.

6.1.1 Programs offered by Civil Engineering Department

(a) BASIC TECHNICIAN CERTIFICATE (BTC) IN CIVIL ENGINEERING (NTA LEVEL 4)

Semester I

Module Code	Module Title	Credit
FUNDAMENTAL MODULE		
GST 04111	Algebra	6

GST 04112	Basic Technical Communication Skills	6
ITT 04113	Computer Fundamentals and Basic Information Processing	6
CORE MODULES		
CET 04111	Construction Equipment and Machinery	6
CET 04112	Woodwork and Painting Practices	9
CET 04113	Introduction to Concrete Technology	6
CET 04114	Introduction to Technical Drawing	6
CET 04116	Linear Surveying	9
	Total	**60**

Semester II:

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULE		
GST 04214	Trigonometry, Vectors and Complex Numbers	6
COT 04216	Spreadsheet and Database Fundamentals	6
MET 04218	Arc Welding Processes	9
CORE MODULES		
CET 04211	Basic Building Maintenance	9
CET 04212	Basic Soil Mechanics	9
CET 04213	Introduction to Architectural Drawing	9
CET 04214	Masonry and Plumbing Practices	12
	Total	**60**

Total Credits at NTA Level 4: 120 (Minimum credits required at level 4: 120)

(b) TECHNICIAN CERTIFICATE (TC) IN CIVIL ENGINEERING (NTA LEVEL 5)

Semester I

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULE		
GST 05111	Differentiation and Integration	6
GST05112	Research Methods for Technicians	3
ITT 05114	Programming Fundamentals for Technicians	6
CORE MODULES		
CET 05111	Building and Civil Engineering Materials	6
CET 05112	Buildings Construction	9
CET 05113	Hydraulics and Fluid Mechanics	6

Module Code	Module Title	Credit
CET 05114	Land Surveying	9
CET 05115	Measurement of Building Works	8
CET 05116	Industrial Practical Training	10
	Total	**63**

Semester II

Module Code	Module Title	Credit
FUNDAMENTAL MODULE		
GST 05213	Probability and Statics for Technicians	5
GST 05214	Technical Writing and Presentations	2
CORE MODULES		
CET 05211	Architectural Design and Drawing	9
CET 05212	Project for Survey	9
CET 05213	Road Construction and Maintenance	9
CET 05214	Soil Mechanics	9
CET 05215	Structural Analysis	9
CET 05216	Water Supply and Sanitation	9
	Total	**66**

Total Credits at NTA Level 5: 129 (Minimum credits required at level 5: 120)

(c) ORDINARY DIPLOMA (OD) IN CIVIL ENGINEERING (NTA 6)

Semester I

Module Code	Module Title	Credit
FUNDAMENTAL MODULE		
GST 06101	Conics and Differential Equation	4
GST 06102	Engineering Study Skills	2
GST 06103	Formalizations, Internationalization and E-Business	2
CSET 06101	Basic of Computer Programming	2

Module Code	Module Title	Credit
SLT P 06101	Electromagnetism	2
GST 06102	Engineering Study Skills	2
CORE MODULES		
CET 06101	Building Service and Maintenance	9
CET 06102	Elementary Structure Design	9
CET 06103	Route and Traffic Engineering	9
CET 06104	Structural Steel Design	10
CET 06105	Quantity Survey	9
CET 06106	Labour-Based Technology	9
CET 06107	Project Data Collection	10
CET 06211	Industrial Practical Training	10
	Total	**96**

Semester II

Module Code	Module Title	Credit
FUNDAMENTAL MODULE		
GST 06204	Complex Number, Numerical Methods and Series	4
GST 06205	Technical Writing	2
GST 06206	Business Planning	2
CSET 06201	Computer Programming and Data Structure	2
SLTP 06202	Heat and Thermodynamics	2
CORE MODULES		
CET 06208	Reinforced Concrete Design	10

CET 06209	Soil Mechanics and Foundations	9
CET 06210	Construction Management	9
CET 06211	Structural Timber Design	9
CET 06212	Pavement Design	9
CET 06213	Transportation Engineering	10
CET 06214	Project Data Analysis	10
	Total	**78**

Total Credits at NTA Level 6: 155 (Minimum credits required at level 6: 120)

(d) BASIC TECHNICIAN CERTIFICATE (BTC) IN MINING ENG. (NTA LEVEL 4)

SEMESTER I

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULE		
GST 04111	Algebra	6
GST 04112	Basic Technical Communication Skills	6
GST 04103	Entrepreneurship Concepts and Context	6
CORE MODULES		
MNT 04111	Basics of Mining Engineering	9
MNT 04112	Basics of Geology	9
CET 04116	Mechanics	6
MNT 04114	Drilling Skills Practice	9
CET 04114	Basics of Technical Drawing	6

EET 04111	Electrical Installation and Draughting	6
	Total	**63**

Semester II:

Code	**Module Title**	**Credit**
FUNDAMENTAL MODULE		
GST 04211	Trigonometry, Vectors and Complex numbers	6
ITT 04216	Fundamentals of Spreadsheet and Database	6
CORE MODULES		
MNT 04211	Fundamentals of Structural Geology	9
MNT 04212	Explosive and Blasting Techniques	9
MNT 04213	Basic Surface Mining Practices	9
MNT 04214	Basic of Rock Properties for Drilling and Blasting	9
MNT 04215	Life Skills and Ethics for Miners	6
MNT 04216	Mine safety and Regulations	6
	Total	**60**

Total Credits of the equivalent NTA Level 6: 123 (Minimum credits required at level 6: 120)

(e) TECHNICIAN CERTIFICATE (TC) IN MINING ENGINEERING – NTA LEVEL 5

Semester I

Module Code	**Module Title**	**Credit**
	FUNDAMENTAL MODULE	
GST 05101	Fundamental Rules of Counting, Matrices and Differentiation	5
GST 05102	Business Communication	2
CSET 05101	Presentation and Internet	2

GST 05103	Business Start-up and Management	3
SLT 05101	Strength of Materials and Rotational Dynamics	3
CORE MODULES		
MMT 05101	Introduction to Occupational Health and Safety	5
CET 05103	Measurement of Building Works	8
CET 05104	Building and Civil Engineering Materials	6
MMT 05102	Mining Environment and Ventilation	6
MMT 05103	Mining Techniques Practices	6
CET 05106	Hydraulics and Fluid Mechanics	6
MMT 05104	Industrial Practical Training	10
CET 05101	Land Surveying	9
CET 05105	Structural Analysis	9
ETT 04201	Telecommunication Principles	9
	Total	**89**

Semester II

Module Code	Module Title	Credits
FUNDAMENTAL MODULE		
GST 05204	Integration, Statistics and Probability	5
GST 05205	Communication and Technical Presentations	2
GST 05206	Business Financial Management and Accounting	3
GST 05207	Research Methods for Technicians	3
CORE MODULES		
MMT 05201	Occupational Health and Safety	5
MMT 05202	Surface Mining Survey	9
MMT 05203	Maintenance Management	6
MMT 05204	Mine Supervision	6
MMT 05205	Material Handling & Transportation Systems	9

CET 05208	Architectural Design and Drawing	9
	Total	**60**

Total Credits at NTA Level 5: 133 (Minimum credits required at level 5: 120)

(a) ORDINARY DIPLOMA (OD) IN MINING ENGINEERING – NTA LEVEL 6

Semester I

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06101	Conics and Differential Equation	4
GST 06102	Engineering Study Skill	2
GST 06103	Formalisation, Internationalisation and E- Business	2
CSET 6101	Basics of Computer Programming	2
SLT 06101	Electromagnetism	2
CORE MODULES		
MMT 06101	Underground Mining Methods and Practices	9
MMT 06102	Underground Mining Survey	6
MMT 06103	Principles of Geomechanics	9
CET 06105	Mineral Processing Techniques	9
CET 06104	Structural Steel Design	10
MMT 06104	Project Data Collection	10
MMT 05210	Industrial Practical Training	10
CET 06105	Quantity Survey	9
CET 06105	Elementary Structural Design	9
Total		**93**

Semester II

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06204	Complex Number, Numerical Methods and Series	4

GST 06205	Technical Writing	2
GST 06206	Business Planning	2
CSET 06201	Computer Programming and Data Structure	2
SLT 06201	Heat and Thermodynamics	2
CORE MODULES		
CET 06211	Structural Timber Design	9
MMT 06201	Introduction to Engineering Management	6
MMT 06202	Introduction to Mineral Economics	6
MMT 06203	Environmental Management in Mining	6
MET 06210	Industrial Refrigeration and A/C	9
MMT 06204	Final Project Reporting	10
MMT06205	Geochemical Monitoring	6
ELECTIVE MODULES		
MED 103	Industrial Management and Law	6
CET 309	Road Construction	6
Total		**76**

Total Credit at NTA Level 6: 169 (Minimum credits required at level 6: 120)

(b) HIGHER DIPLOMA (HD) IN CIVIL ENGINEERING (NTA LEVEL 7)

Semester I

Module Code	**Module Title**	**Credits**
FUNDAMENTAL MODULES		
EEU 07112	Electrical Installation and Draughting	9
GST 07111	Basic Technical Communication Skills	6
GST 04103	Computer Basics and Office Application	6
COU 07112	Programming Fundamentals	12

CORE MODULES		
CEU 07111	Linear Surveying	6
CEU 07112	Engineering Drawing	6
CEU 07114	Mechanics	6
CEU 07115	Masonry and Plumbing Practices	9
	Total	**60**

Semester II

Module Code	**Module Title**	**Credits**
FUNDAMENTAL MODULES		
MEU 07215	Welding Fundamentals	9
CORE MODULES		
CEU 07211	Introduction to Architectural Drawing	9
CEU 07212	Road Drainage and Maintenance	6
CEU 07213	Fundamentals of Geotechnical Engineering	6
CEU 07214	Repair and Rehabilitation of Structures	9
CEU 07215	Woodwork and Painting Practices	9
CEU 07217	Industrial Practical Training	12
	Total	**60**

Semester III

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07314	Calculus	6
COU 07313	Computer Programming	9
CORE MODULES		
CEU 07311	Material Sciences and Engineering for Civil Engineers	9
CEU 07312	Building Construction and Services	9
CEU 07313	Engineering Geology	6
CEU 07314	Land Surveying	9
CEU 07315	Strength of Materials	6
CEU 07316	Measurement of Building and Civil Works	6
Total		**60**

Semester IV

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07412	Advanced Engineering Mathematics	9
GSU 07414	Object Oriented Programming	9
CORE MODULES		
CEU 07411	Analysis of Determinate Structures	6
CEU 07412	Building Planning and Drawing	6

Module Code	**Module Title**	**Credit**
CEU 07413	Civil Engineering Materials	6
CEU 07414	Quantity Surveying	6
CEU 07415	Control Surveying	6
CEU 07416	Fluid Mechanics	6
CEU 07417	Construction techniques	6
Total		**60**

Semester V

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULES		
GSU 07516	Numerical Methods and Matrices	6
CORE MODULES		
CEU 07511	Construction Management	6
CEU 07512	Industrial Practical Training	12
CEU 07513	Open Channel Hydraulics	6
CEU 07514	Concrete Technology	6
CEU 07515	Reinforced Concrete Design	6
CEU 07516	Soil Mechanics	6
CEU 07517	Analysis of Indeterminate Structures	6
CEU 07518	Highway Geometric Design	6
Total		**63**

Semester VI

Code	**Module Title**	**Credit**
FUNDAMENTAL MODULES		
GSU 07619	Probability and Statistics for Engineers	6

GSU 07617	Research Methods for Engineers	6
CORE MODULES		
CEU 07611	Highway Engineering materials	9
CEU 07612	Engineering Hydrology	6
CEU 07613	Reinforced Concrete Design and Detailing	6
CEU 07614	Traffic Engineering	6
CEU 07615	Soil Technology	9
CEU 07616	Water Supply	6
CEU 07617	Transportation Engineering	6
	Total	**60**

Total Credits at NTA Level 7 is 243 (Minimum credits required at level 7 is 240)

(c)BACHELOR OF ENGINEERING IN CIVIL ENGINEERING (NTA 8)

Semester I

Module Code	Module Title	Credits
CORE MODULES		
CEU 08101	Bridge Design and Construction	9
CEU 08102	Construction Technology Services	6
CEU 08103	Engineering Economics	9
CEU 08104	Geographical Information System	6
CEU 08105	Highway Engineering Materials	9
CEU 08107	Industrial Practical Training	12
CEU 08108	Project Data Collection	18
	Total	**75**

Semester II

Code	Module Title	Credit
CORE MODULES		
GSU 08201	Entrepreneurship for Engineers	3
CEU 08201	Foundation Engineering	9

CEU 08202	Industrial Building Construction	6
CEU 08204	Masonry and Retaining Wall Design	9
CEU 08207	Project Data Analysis	18
CEU 08208	Structural Timber Design	6
Total		**51**

Total Credits at NTA Level 8 (Structural Engineering) is 126 (Minimum credits required at this level: 120)

(d) HIGHER DIPLOMA IN OIL AND GAS ENGINEERING NTA LEVEL 7

Semester I

Module Code	**Module Title**	**Credit**
CORE MODULES		
GSU 07111	Basics of Technical Communication Skills	6
COU 07111	Computer Basics and Office Application	6
CSEU 07101	Electrical Installation and Draughting	9
CORE MODULES		
OGU 07111	Basics of Geology	9
OGU 07111	Basics of Geology	9
OGU 07112	Basics of Oil and Gas Engineering	12
CEU 07114	Mechanics	6
CEU 07112	Engineering Drawing	6
CEU 07111	Linear Surveying	6
Total		**60**

Semester II

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
MEU 07201	Basic Computer Aided Drafting	9
CORE MODULES		
OGU 07211	Basics of Occupational health and Safety in Oil and Gas	9
OGU 07212	Fundamentals of Drilling Operations	9
OGU 07213	Industrial Practical Training	12
OGU 07214	Oil and Gas Geomechanics	12
CEU 07217	Welding Fundamentals	9
Total		60

Semester III

Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07303	Differential Equations and Complex Variables	6
CORE MODULES		
CMU 07312	Control Surveying	6
CMU 07313	Oil and Gas Pipe Laying and Construction	6
CMU 07314	Oil and Gas Processing Plant Operations	9
CMU 07315	Safety in Oil and Gas Processing Plant	6

CMU 07316	Oil and Gas Distribution System	6
CMU 07317	Inspection and Maintenance of Oil and Gas Processing Facilities	6
CEU 07316	Construction Management	6
CMU 07318	Downstream Operations Practices	6
Total		**57**

Semester IV

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULES		
GSU 07404	Probability and Statistics	6
GSU 07407	Research Methods for Engineers	3
CORE MODULES		
CMU 07419	Intercultural Skills	6
EEU 07408	Electrical Power Plant Systems	9
CMU 07421	Liquefied Natural Gas Plant Operations	6
CMU 07422	Occupational Health and Safety in Oil and Gas	9
CMU 07423	Semester IV Project	6
CMU 07424	Inspection and Maintenance of Downstream Plants	6
CMU 07425	Industrial Practical Training (IPT)	12
	Total	**63**

Total Credits at NTA Level 7: 255 (Minimum credits required at level 7: 240)

(e) BACHELOR DEGREE IN OIL AND GAS ENGINEERING (NTA 8)

Semester I

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULES		
MEU 08103	Laws for Engineers	6
MEU 07303	Finance and Human Resources Management	6
CORE MODULES		
CMU 08101	Industrial Practical Training (IPT)	12
CMU 08102	Petroleum Economics	9

Module Code	Module Title	Credit
CMU 08103	Project Data Collection	18
CMU 08104	Reservoir Engineering	9
CEU 08105	Geographical Information System	6
CSEU 08104	Real Time System Design	6
Total		**72**

Semester II

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 08201	Entrepreneurship for Engineers	6
CORE MODULES		
CMU 08201	Project Data Analysis	18
CMU 08202	Waste Management	6
CEU 08204	Foundation Engineering	9
MEU 07404	Engineering Operations Management	6
EEU 08206	Renewable Energy Technologies	9
Total		**54**

Total Credits at NTA Level 8: 126 (Minimum credits required at level 8: 120)

(f) MASTER OF ENGINEERING IN MAINTENANCE MANAGEMENT (NTA 9)

Semester I

Module Code	Module Title	Credits
CORE MODULES		
MMG 09111	Leadership Principles and Human Resource Management	9
MMG 09112	Maintenance Project Management	12
MMG 09113	Maintenance Organization and Planning	15
CCG 09104	Advanced Research Methodology	12
	Total	**48**
ELECTIVE MODULES		
MMG 09114	Electrical Workshop Maintenance	12
MMG 09115	Building Maintenance Management	12
MMG 09116	Fluid Handling Systems Maintenance	12

Total		**36**

Semester II

Code	**Module Title**	**Credits**
CORE MODULES		
MMG 09211	System Engineering and Life Cycle Management	12
MMG 09212	Computerized Maintenance Management System	12
MMG 09213	Risk and Safety Management	12
	Total	**36**
Elective Modules		
MMG 09214	Energy Management	12
MMG 09215	Power Transmission and Distribution Lines Maintenance	12
MMG 09216	Road Infrastructure Maintenance	12
MMG 09217	Water and Sanitation Infrastructure Maintenance	12
MMG 09218	Power Plant Maintenance	12
MMG 09219	Industrial Equipment Maintenance	12
Total		**60**

Semester III

Code	Module Title	**Credits**
MMG 09311	Dissertation	**60**

Total Credits at NTA 9: 240 (Minimum credits required at NTA 9: 180)

6.1.2 List of Academic Staff in the Department of Civil Engineering Lecturers and Head of Department

Lecturer and Head of Department

Dr. Antony M. Thomas BSc-Civil Eng. (UDSM-Dar), MSc-Water Resources Eng. (UDSM-Dar), PhD-Environmental Eng. (CQU-Chongqing)

Senior Lecturers

A.S. Oberlin, ADE-Public Health Eng. (UCLAS-Dar), MSc-Urban Environmental Mgt. (HIS&WUR-Rotterdam), PhD-Environment Mgt. (WUR-Wageningen)

F.P. Malembeka, BSc-Civil & Water Resources Eng. (UDSM-Dar), MSc. Water Resource Eng. (UDSM-Dar), PhD-Engineering (KU-Kyoto)

Lecturers

J.F. Musagasa, BSc-Civil Eng. (UDSM-Dar), MSc-Highway Eng. (UDSM-Dar), PhD-Environ. Geotechnics (FAMU-FSU-Florida)

A.M. Thomas, BSc-Civil Eng. (UDSM-Dar), MSc-Water Resources Eng. (UDSM-Dar), PhD-Environmental Eng. (CQU-Chongqing)

B.H. Ngayakamo, BSc-Education in Science (SAU-Kilimanjaro), MSc-Material Science and Eng. (NM-AIST, Arusha), PhD-Material Science and Eng. (AUST-Abuja)

P.G. Mzava, BSc-Civil & Water Resource Eng. (UDSM-Dar), MSc-Civil Eng. (KSU-Kansas), PhD Water Resources Eng. (UDSM)

Assistant Lecturers

P.G. Mfaume, BSc-Geology (UDSM-Dar), MSc-Geology (UDSM-Dar)

M.Z. Kaswa, FTC-Civil Eng. (DTC-Dar), ADE-Telecommunication Eng. (DIT-Dar), PGD-Scientific Computing (UDSM-Dar), MSc-GIS (UP-Portsmouth)

J.S. Nyaronyo, BSc-Mineral Processing (UDSM-Dar). MSc-Env. Tech. Mgt (ARU-Dar)

J.Z. Chacha, BEng-Civil Eng. (DIT-Dar), MSc-Civil Structural Eng. (GU-Wales)

S.P. Mbise, BSc-Civil Eng. (UDSM-Dar), MSc-Civil Eng. (UDSM-Dar)

J.A. Tibiika, BSc-Mineral Processing Eng. (UDSM-Dar), MSc-Petroleum Eng. (NTNU-Trondheim)

Z.N. Mkindi, BSc-Mining Eng. (UDSM-Dar), MSc-Petroleum Eng. (NTNU-Trondheim)

A.A. Towo, B-Architecture (ARU-Dar), M-Architecture (ARU-Dar)

A.J. Rujweka, BSc-Civil and Water Resources Eng. (UDSM-Dar), MSc-Water Resources Eng. (KUL&VUB-Leuven & Brussels)

N.A. Cosmas, BSc-Architecture (USTO-MB-Oran), M-Architecture (USTO-MB-Oran)

M.S. Gibishi, B-Architecture (TJU-Tianjin), MEng-Architecture (CQU-Chongqing)

D. E. Hema BSc Civil Eng. (UDSM) Meng Highway and Railway Eng. (Beihang University, China)

Tutorial Assistant

N.B. Mabala, B.Eng-Civil Engineering (MUST-Mbeya)

M.F Kilukibi, B.Eng-Civil Engineering (DIT-Dar)

D.H. Mlingi, B.Eng-Civil Engineering (DIT-Dar)

Chief Instructor 1

G.Y. Bambaza, BSc-Civil Eng. (UDSM-Dar), MSc-Engineering Management (UDSM-Dar)

Principal Instructor II

P.M.C. Njovu, FTC-Civil Eng. (DTC-Dar), BEng-Civil Eng. (MIST-Mbeya)

Instructor II

S.J Kalile, B.Eng-Civil Engineering (DIT-Dar)

R.A Salumu, B.Eng-Civil Engineering (MUST-MBeya)

A.M. Barabara, OD-Mining Eng. (DIT-Dar), BEng-Civil Eng. (DIT-Dar), MSc-Sustainable Energy System Mgt. (Hanze-UAS-Groningen)

Principal Technician II

A.H. Hemed, FTC Civil Eng. (DTC-Dar), AD-Information Technology (BTEC-Soft-Tech-Dar)

Senior Technician I

C.P. James, FTC-Civil Eng. (DIT-Dar)

Laboratory Technicians Grade I

Z.P. Mtunya, OD-Mineral Processing Eng. (MRI-Dodoma)

G.P. Mtenga, OD-Mineral Processing Eng. (MRI-Dodoma)

6.2 DEPARTMENT OF COMPUTER STUDIES

The Department of Computer Studies offers a range of programmes, including Computer Engineering, Information Technology, Multimedia & Film Technology and Industrial Automation Engineering at Ordinary Diploma (NTA Level 4 – 6); Bachelor of Engineering (NTA Level 7 - 8), Master of Computational Science and Engineering, (NTA Level 9), Master of Technology in Computing and Communications (NTA Level 9), Masters of Science in Cybersecurity and Digital Forensics (NTA Level 9) and Masters of Information Systems Engineering and Management (NTA Level 9).

Additionally, the department plays a vital role in providing computer-related modules to other academic departments. The department has a dedicated team of 38 qualified teaching staff members, supported by one technical personnel. The department is committed to continuous improvement, both in terms of its teaching facilities and the qualifications and numbers of its staff, in order to better support the aforementioned programmes.

6.2.1 Programmes Offered by the Department of Computer Studies

(a).BASIC TECHNICIAN CERTIFICATE (BTC) IN COMPUTER ENGINEERING (NTA LEVEL 4)

Semester I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 04111	Algebra	**6**
GST 04112	Technical Communication Skills	**6**
	CORE MODULES	
ITT 04111	Computer Basics and Application	14
ITT 04112	Database Fundamentals	9
COT 04113	Computer Workshop Technology	9
COT 04118	Computer System Maintenance and Repair	9
ETT 04121	Basic Electronics	12

Total Credits	65

Semester II

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 04214	Trigonometry, Vectors and Complex Numbers	6
SLTP 04211	Basic Mechanics	3
GST 05215	Technical Writing and Presentation	6
CORE MODULES		
COT 04214	Computer System Architecture and Organization	9
ITT 04213	Programming Fundamentals	9
COT 04216	Computer Electronics Technology	9
COT 04215	Computer Networking	14
Total Credits		**56**

Total Credits at NTA 4 Computer Engineering: 126. (Minimum credits required at NTA 4: 120)

(b) TECHNICIAN CERTIFICATE (TC) IN COMPUTER ENGINEERING (NTA LEVEL 5)

Semester I

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 05111	Engineering Mathematics for Technicians	9
CORE MODULES		
ITT 05111	Event Driven Programming	12
ITT 05112	Operating Systems	9
COT 05111	Network Administration	12

COT 05112	Peripheral Systems Maintenance and Repair	9
COT 05113	Industrial Practical Training	10
Total Credits		**61**

Semester II

Module Code	**Module Title**	**Credits**
FUNDAMENTAL MODULES		
GST 05214	Statistics and Probability for Technicians	6
CORE MODULES		
COT 05214	Computer Aided Design Fundamentals	10
ITT 05213	Fundamentals of Data Structures and Algorithms	9
COT 05214	Microprocessor Technology	12
ITT 05215	Database Management	12
COT 05216	Fundamentals of Embedded Systems	12
ITT 05216	Fundamental of System Analysis and Design	12
Total Credits		**73**

Total Credits at NTA 5: 134 (Minimum credits required at NTA 5: 120).

(c) ORDINARY DIPLOMA (OD) IN COMPUTER ENGINEERING (NTA LEVEL 6)

Semester I

Module Code	**Module Title**	**Credits**
	FUNDAMENTAL MODULES	
GST 06112	Startups Business Development	6
	CORE MODULES	
COT 06115	Project Conceptualization	10

COT 06111	Software Engineering Fundamentals	9
ITT 06112	Web Application Development & Hosting	12
COT 06118	Machine Learning	6
COT 06112	Automation and Control	9
COT 06113	Mobile Devices Maintenance and Repair	7
COT 06117	Industrial Practical Training	10
Total Credits		**69**

Semester II

Module Code	**Module Title**	**Credits**
	CORE MODULES	
ITT 06218	Cyber Security and Privacy	9
ITT 06214	Mobile Applications Development	9
COT 06210	Industrial Automation System	9
COT 06216	Project Realization	10
COT 06214	Digital Signal Processing	9
COT 06219	Artificial Intelligence	9
GST 06214	Startups Business Management	6
Total Credits		**61**

Total Credits at NTA 6: 130 (Minimum credits required at NTA 5: 120).

(d). BASIC TECHNICIAN CERTIFICATE (BTC) IN INFORMATION TECHNOLOGY (NTA LEVEL 4)

Semester I

Module Code	**Module Title**	**Credits**
FUNDAMENTAL MODULES		
GST 04111	Algebra	6

GST 04112	Technical Communication Skills	6
CORE MODULES		
ITT 04111	Computer Basics and Application	14
ITT 04112	Database Fundamentals	9
COT 04113	Computer Workshop Technology	9
COT 04115	Computer systems Maintenance and Repair	9
ITT 04114	Open Source Operating System Administration	12
Total Credits		**65**

Semester II

Module Code	**Module Title**	**Credits**
FUNDAMENTAL MODULES		
GST 04214	Trigonometry, Vectors and Complex Numbers	6
GST 04215	Technical writing and presentation	6
CORE MODULES		
COT 04215	Computer systems architecture and organization	9
ITT 04213	Programming Fundamentals	9
COT 04211	Computer Networking	14
ITT 04212	Information Technology Project Management	12
Total Credits		**56**

Total Credits at NTA 4 : 121. (Minimum credits required at NTA 4:120)

(e). TECHNICIAN CERTIFICATES (TC) IN INFORMATION TECHNOLOGY (NTA LEVEL 5)

Semester I

Module Code	**Module Title**	**Credits**
FUNDAMENTAL MODULES		
GST 05111	Engineering Mathematics for Technicians	6
CORE MODULES		

ITT 05111	Event Driven Programming	9
ITT 05112	Operating Systems	9
COT 05111	Network Administration	10
MFT 05114	Multimedia Fundamentals	9
ITT 05113	High Performance Computing	9
ITT 05116	Industrial Practical Training	10
Total Credits		**61**

Semester II

Module Code	**Module Title**	**Credits**
FUNDAMENTAL MODULES		
GST 05214	Statistics and Probability for Technicians	6
CORE MODULES		
ITT 05217	Cloud Computing	9
ITT 05213	Fundamentals of Data Structures and Algorithms	9
COT 05214	Computer Aided Design Fundamentals	9
COT 05214	Microprocessor Technology	10
ITT 05215	Database Management	10
ITT 05216	Fundamental of System Analysis and Design	9
Total Credits		**62**

Total Credits at NTA 5: 134 (Minimum credits required at NTA 5: 120).

(f) ORDINARY DIPLOMA PROGRAMME (OD) IN INFORMATION TECHNOLOGY (IT) (NTA LEVEL 6)

Semester I

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 06109	Fundamentals of Accounting Applications	6
	CORE MODULES	
ITT 06111	Project Conceptualization	10
COT 06112	Software Engineering Fundamentals	9
ITT 06112	Web Application Development and Hosting	12
MFT 06117	Multimedia Applications Production	10
ITT 06115	Emerging Technologies	10
ITT 06113	Industrial Practical Training	10

Semester II

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 06214	Startup Business Management	6
	CORE MODULES	
ITT 06214	Mobile Applications Development	9
ITT 06213	Customer Relationship Management	8
ITT 06216	Fundamentals of e-commerce	9
ITT 06217	Project Realization	10
ITT 06218	Cyber Security and Privacy	9
ITT 06219	Surveillance Technologies	10
Total Credits		**61**

Total credits at NTA 6: 133 (Minimum credits required at this level 120)

(g) BASIC TECHNICIAN CERTIFICATE (BTC) IN MULTIMEDIA AND FILM TECHNOLOGY (NTA LEVEL 4)

Semester I

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST04111	Algebra	6
GST 04112	Basic Technical Communication Skills	6
ETT 04114	Basics of Electronics	12
CORE MODULES		
ITT 04111	Computer Basics and Office Applications	14
MFT 04111	Graphics Design	12
MFT 04112	2D Animation	12
ITT 04112	Database Fundamentals	9
Total		**69**

Semester II

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GST 04213	Trigonometry and Vectors	6
GST 04212	Technical Writing and Presentation	6
CORE MODULES		
MFT 04211	3D Animation Fundamentals	12
MFT 04212	Photography and Digital Imaging	9
MFT 04213	Lighting for Multimedia Production	12
ITT 04213	Programming Fundamentals	12
Total		**57**

Total credits at NTA 4: 126 (Minimum credits required at NTA 4:120)

(h) TECHNICIAN CERTIFICATE (TC) IN MULTIMEDIA AND FILM TECHNOLOGY (NTA LEVEL 5)

Semester I

Module Code	Module Title	Credits
CORE MODULES		
ITT 05111	Event Driven Programming	12
MFT 05111	Multimedia Equipment and Devices Maintenance and Repair	9
MFT 05112	Screen Writing and Storyboarding	6
MFT 05113	Advanced 3D Animation	12
ITT 05112	Fundamentals of Operating Systems	12
MFT 05114	Industrial Practical Training	10
Total		**61**

Semester II

Module Code	Module Title	Credits
CORE MODULES		
MFT 05211	Research Methods	10
MFT 05212	Motion Graphics	9
MFT 05213	Sound Production	12
MFT 05214	Video and Film Production	12
MFT 05215	Game Design	12
ITT 05215	Fundamentals of System Analysis and Design	9
Total		**64**

Total credits at NTA 4: 123 (Minimum credits required at NTA 4:120)

(i) ORDINARY DIPLOMA (OD) IN MULTIMEDIA AND FILM TECHNOLOGY (NTA LEVEL 6)

Semester I

Module Code	Module Title	Credits
CORE MODULES		
MFT 06111	Data Communication for Multimedia	12
MFT 06112	Music Production	12
ITT 06214	Mobile Applications Development	9
MFT 06113	Game Development	12
MFT 06115	Project Conceptualization	10
ITT 06112	Web Application Development & Hosting	12
MFT 06116	Industrial Practical Training	10
Total		**77**

Semester II

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06213	Entrepreneurship	6
CORE MODULES		
MFT 06211	Project Realization	10
MFT 06212	Media Law and Ethics	12
MFT 06214	Multimedia Advertisement Production	12
MFT 06114	Visual Effects	12
Total		**52**

Total credits at NTA 6: 122 (Minimum credits required at NTA 6: 120)

(j) BASIC TECHNICIAN CERTIFICATE (BTC) IN INDUSTRIAL AUTOMATION ENGINEERING (NTA LEVEL 4)

Semester I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 04121	Algebra	6
GST 04122	Basic Technical Communication Skills	6
	CORE MODULES	
IAT 04101	Industrial Technical drawing	15
IAT 04102	Computer Basics and application	12
ETT 04111	Basic Electronics	12
ETT 04113	Electrical Circuits and Installation	9
	Total	**60**

Semester II

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 04224	Trigonometry, Vectors and Complex Numbers	6
GST 04225	Technical Writing and Presentation	6
SLT 04211	Basic Mechanics	6
	CORE MODULES	
IAT 04201	Automation Systems maintenance and Repair	12
IAT 04202	Industrial Measurement and Instrumentation	12
IAT 04203	Computer Networking Applications	12
COT 04213	Machine Programming fundamentals	9
IAT 04204	Computer Architecture and organization	12

IAT 04205	Industrial practical Training	10
	Total	**85**

(k) TECHNICIAN CERTIFICATE (TC) IN INDUSTRIAL AUTOMATION ENGINEERING (NTA LEVEL 5)

Semester I

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 05121	Engineering Mathematics	6
GST 05112	Research Methods	3
Core Modules		
IAT 05101	Industrial Control Devices	15
IAT 05102	PLC Programming and Applications	15
IAT 05103	Automation Technologies	12
IAT 05104	Industrial Practical Training	10
	Total	61

Semester II

FUNDAMENTAL MODULE		
GST 05222	Probability and Statistics	6
CORE MODULES		
IAT 05201	Data Acquisition Systems	15
IAT 05202	Industrial Automation Practices	15
IAT 05203	Engineering Ethics and Standards for Technicians	12
COT 05216	Fundamentals of Embedded Systems	12
	Total	**60**

(l) ORDINARY DIPLOMA (OD) IN INDUSTRIAL AUTOMATION ENGINEERING (NTA LEVEL 6)

Semester I

MODULE CODE	MODULE NAME	CREDIT
	FUNDAMENTAL MODULES	
GST 06132	Small Business Development and Management	12
	CORE MODULES	
IAT 06101	Automation System Design	12
IAT 06102	Industrial Safety	6
ETT 06112	Power Electronics	10
IAT 06103	Project Conceptualization	10
IAT 06104	Industrial Practical Training	10
	Total	**60**

Semester II

MODULE CODE	MODULE NAME	CREDIT
	CORE MODULES	
IAT 06201	Project Realization	10
IAT 06202	Industrial Attachment	50
	Total	**60**

(m) HIGHER DIPLOMA IN COMPUTER ENGINEERING NTA LEVEL 7

Semester I

Module Code	Module Title	Credit
	FUNDAMENTALS MODULES	
GSU 07111	Basics of Technical Communication skills	6
ETU 07112	Fundamentals of analogy electronics	9

CORE MODULES		
COU 07101	Computer basics and Office application	9
COU 07102	Programming fundamentals	12
COU 07103	Computer Networking	9
Total Credits		**45**

Semester II

Code	Module Title	Credit
FUNDAMENTALS MODULES		
GSU 07212	Algebra and Application of Integrals	6
ETU 07113	Fundamentals of digital electronics	9
CORE MODULES		
COU 07201	Web Design and hosting	9
COU 07202	Microprocessor Technologies	9
COU 07203	Industrial Practical Training	12
COU 07204	Computer Maintenance and Repair	9
Total Credits		**54**

Semester III

Module Code	Module Title	Credits
FUNDAMENTALS MODULES		
GSU 07314	Calculus	6
GSU 07313	Technical Communication Skills	6
ETU 07321	Analogue Electronics	9
ETU 07323	Instrumentation and Measurements	9
CORE MODULES		
COU 07301	Operating Systems	9
COU 07302	Microprocessor and Computer Architecture	9

COU 07303	Computer Programming	9
COU 07304	Data Communication and Networking	9
ELECTIVE MODULES		
COU 07305	Multimedia Systems	6
COU 07306	Decision Support and expert systems	6
Total Credits		**72**

Semester IV

Module Code	Module Title	Credit
FUNDAMENTALS MODULES		
GSU 07415	Probability and Statistics	6
ETU 07422	Digital Electronics	9
CORE MODULES		
COU 07401	Database Concepts and Design	9
COU 07402	Computer Engineering Drawing	6
COU 07403	System Analysis and Design	9
COU 07404	Object Oriented Programming	9
COU 07405	Geographical Information System	6
COU 07406	Industrial Practical Training	12
ELECTIVE MODULES		
COU 07408	Electronic Commerce	6
COU 07409	Computer Graphic and Visualization	6
Total		**66**

Semester V

Code	Module Title	Credit
FUNDAMENTALS MODULES		
GSU 07516	Numerical methods and matrices	6
ETU 07523	Sensor networks	9
CORE MODULES		
COU 07501	Cyber security	9
COU 07502	Database programming and Administration	9
COU 07503	Web Application Development	9
COU 07504	Data structure and Algorithms	9

COU 07505	Software Engineering	9
COU 07506	Digital Signal Processing	6
	Elective Modules	
EEU 07518	Principles of Electrical Machine	6
COU 07507	Human computer interface and Interactive Devices Design	6
ETU 07508	Electronics design and digital fabrication	6
Total		**72**

Semester VI

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07617	Research Methods for Engineers	6
ETU 07621	Industrial Automation	9
CORE MODULES		
COU 07601	Digital image processing	6
COU 07602	Mobile Application Development	9
COU 07603	Network Management and Administration	9
COU 07604	ICT Project Management	6
COU 07605	Artificial Intelligence and Machine Learning	9
	ELECTIVE MODULES	
COU 07607	Computer Game Design	6
GSU 07618	Accounting for Managers	6
Total		**54**

Total Credits at NTA 7: 300 (Minimum credits required at NTA 7: 240)

(n) BACHELOR OF COMPUTER ENGINEERING (NTA LEVEL 8)

Semester I

Module Code	Module Title	Credits
	FUNDAMENTALS MODULES	
MEU 08107	Industrial Engineering Design	6
	CORE MODULES	
COU 08101	Management Information Systems	8
COU 08102	Embedded Systems Design	9
COU 08103	Real Time System Design	9
COU 08104	Data Mining and Analytics	9
COU 08105	Project Conceptualization	10
COU 08106	Industrial Practical Training	12
Total		**63**

Semester II

Module Code	Module Title	Credits
	FUNDAMENTALS MODULES	
GSU 08203	Entrepreneurship and Innovation Management	6
EEU 08201	Engineering Professionalism and Ethics	6
	CORE MODULES	
COU 08201	High Performance Computing	9
COU 08202	Industrial Robotics	9
COU 08203	Blockchain Technology	9
COU 08204	Project Realization	15
	ELECTIVE MODULES	
EEU 08206	Renewable Energy Technologies	9
ETE 08223	Radar and Navigation Aids Systems	9
Total		**54**

Total Credits at NTA 8: 144 (Minimum credits required at NTA 8: 120)

(o). MASTER OF TECHNOLOGY IN COMPUTING AND COMMUNICATIONS (MTCC) NTA LEVEL 9

Semester I

Module Code	Module Title	Credits
	CORE MODULES	
CCG 09101	Linear Algebra and Computational Statistics	12
CCG 09102	Parallel Computing	12
CCG 09103	Programming for Computational Science and Engineering	12
CCG 09104	Advanced Research Methodology	12
	Total Credits	48

ELECTIVE MODULES

Module Code	Module Title	Credits
CCG 09105	Embedded Systems	12
CCG 09106	Intelligent Systems	12
CCG 09107	Numerical Methods	12
CCG 09108	Optical Broadband Networks and Architecture	12
	Total Credits	**48**

Semester II

Module Code	Module Title	Credits
	CORE MODULES	
CCG 09209	Big Data Analytics	12
CCG 09210	Business Administration	12
	Total Credits	**24**

ELECTIVE MODULES

Module Code	Module Title	Credits
CCG 09211	Automation and Industrial Control	12

CCG 09212	Blockchain Technology	12
CCG 09213	Computational Cyber Forensic	12
CCG 09214	Internet of Things (IoT)	12
CCG 09215	Mathematical Modelling, analysis, and simulation	12
CCG 09216	Wireless and Mobile Broadband Communication Systems	12
	Total Credits	**72**

(p) MASTER IN COMPUTATIONAL SCIENCE AND ENGINEERING (MCSE) NTA LEVEL 9

Semester I

Module Code	Module Title	Credits
	CORE MODULES	
CSG 09101	Leadership and Business Management	9
CSG 09102	Computational Techniques for Science and Engineering	12
CSG 09103	Programming for Computational Science and Engineering	12
CSG 09104	Applied Research Methods	9
Total Credits		**42**

ELECTIVE MODULES

Module Code	Module Title	Credits
CSG 09105	Parallel Programming	9
CSG 09106	Numerical methods for Ordinary Differential Equations	9
CSG 09107	Network Infrastructure Management	9
Total Credits		**27**

Semester II

Module Code	Module Title	Credits
	CORE MODULES	
CSG 09201	Computational Statistics	12
CSG 09202	Mathematical Modelling and Simulations	12
Total Credits		**24**

ELECTIVE MODULES

Module Code	Module Title	Credits
CSG 09203	High Performance Computing	12
CCG 09213	Computational Cyber Forensic	12
CSG 09204	Machine Learning	12
CSG 09205	Computational Intelligence	12
CSG 09206	Computational Finance	12
CSG 09207	Big data Analytics	12
CSG 09208	Computational Fluid Dynamics	12
CSG 09209	Computational Structural Mechanics	12
CSG 09210	Power System Analysis, Operations and Control	12
CSG 09211	Computational Electromagnetics	12
CSG 09212	Molecular Modelling and Visualization	12
CSG 09213	Computational Bioinformatics	12
CSG 09214	Numerical Methods for Partial Differential Equations	12
Total Credits		**156**

Dissertation

Module Code	Module Title	Credits
CSG 09301	Dissertation	60
Sub-Total		**60**

Total credits at this level NTA 9 is 309 (Minimum credits required at this level are 180)

(q) MASTER DEGREE OF INFORMATION SYSTEMS ENGINEERING AND MANAGEMENT (MISEM) NTA LEVEL 9

Core and Fundamental Modules for Semester I

Module Code	Module Name	Credit
ISG 09101	Digital Transformation Planning and Management	9
ISG 09102	Software and Systems Engineering	12
ISG 09103	IT Infrastructure and Cloud Computing	12
ISG 09104	Research Methodology	9
ISG 09105	Artificial Intelligence and Big Data Analytics	9
ISG 09106	Business Strategy and Management	9
	Total	**60**

Core and Fundamental Modules for Semester II

Module Code	Module Name	Credit
ISG 09201	Database Design and Management	12
ISG 09202	Data and Information System Security	9
ISG 09203	Project Management	12
ISG 09204	Entrepreneurship	12
ISG 09205	Financial and Information System Economic Analysis	9
ISG 09206	IoT and Applications	9
	Total	**63**

Dissertation

Module Code	Module Name	Credit
COG 09310	Dissertation	60
	Total	**60**

(r) MASTER DEGREE OF MASTER OF SCIENCE IN CYBER SECURITY AND DIGITAL FORENSICS PROGRAMME (MCSDF) NTA LEVEL 9

Core Modules for Semester I

Module Code	Module Name	Credit
COG 09101	Cryptography	12
COG 09102	Hardware and Software Security	12
COG 09103	Network Security	12
COG 09104	Artificial Intelligence	12
COG 09105	Cyber Security Laws and Policy	6
CSG 09105	Leadership and Business Management	9
	Total	**63**

Core Modules for Semester II

Module Code	Module Name	Credit
COG 09206	Digital Forensics	12
COG 09207	Ethical Hacking and Malware Analysis	15
COG 09208	Information Security Management	12
CCG 09212	Blockchain Technology	12
COG 09209	Research Methods	12
	Sub-Total	**63**

Dissertation

Module Code	Module Name	Credit

COG 09310	Dissertation	60
	Total	**60**

6.2.2 List of Academic Staff in the Department of Computer Studies

Lecturer and Head of Department

G. Tesha, Cert (Music Prod) (Thailand), FTC (Comp.) (DIT), BEng (Telecoms) (DIT), Meng (Comm.) (China), PhD (Info. & Comm. Eng.) (China) Registered Computer hardware Management Professional (ICT Commission)

Senior Lecturers

C. Tongora, Cert (Music Prod) (Thailand), FTC (Comp.) (DIT), BEng (Telecoms) (DIT), Meng (Comm.) (China), PhD (Info. & Comm. Eng.) (China) Registered Computer hardware Management Professional (ICT Commission)

Lecturers

S. M. Wambura, BEng (Comp. Des. & Tech.) (Russia), MEng (Comp. Des. & Tech.) (Russia), PhD (Comp. Sc. & Tech.) (China), Registered Data Scientist Professional (ICT Commission), IEEE & ACM Member, EC-Council Certified Network Security Administrator and Secure Computer User

F. Mwalongo, BSc. (Comp. Sc.) (UDSM), MSc (Comp. Applications) (India), PhD (Comp. Sc.) (Germany), Registered Professional Data Scientist (ICT Commission), IEEE & IEEE Computer Society Member

G. Tesha, Cert (Music Prod) (Thailand), FTC (Comp.) (DIT), BEng (Telecoms) (DIT), Meng (Comm.) (China), PhD (Info. & Comm. Eng.) (China) Registered Computer hardware Management Professional (ICT Commission)

G. S. Sanga, BSc (in Comp. Sc) (UDSM), MEng (Comp. Sc. & Technology) (China), PhD (Comp. Sc. & Tech) (China)

O. O. Mwambe, BSc. (Comp.) (Ukraine), MSc. (Info.Sys)(Japan), PhD(Info. Sys)(Japan)

C. Budoya, BSc (UDSM), MSc (Comp.) (UDSM), PhD (Comp. Sc)(UDSM)

T. Isakwisa, BSc. (Comp.) (UDSM), MEng. (Comp.) (Japan), PhD (Comp) (Japan)

****M. Masoud, Bsc. (Comp. Sc.) (IUA-Sudan), MSc (Comp. Sc.)(UDOM), PhD (Comp. Sc.)(UDOM), OCP, MCT

****N. M. Mwasaga, MSc (Comp.) (Ukraine), PhD (HPC) (Finland)

****J. B. Nyansiro, BSc (Electronics) (UDSM), MSc (IT Mgt) (Australia), PhD (Info. Mgt)(UDSM)

Assistant Lecturers

D.H. Clement, FTC (Comp.) (DIT), BSc. (UDSM), MSc. (China)

N. Maganga, BSc. (Comp.), MSc. (Comp.) (UDSM)

R. Jesse, B.Eng. (Comp) (DIT), MSc (Software Eng.) (China)

N.D. Kimario, Dip. (Comp. Eng) (DIT), BEng. (Comp.) (DIT), MSc (Electrical. Eng & Comp. Sc.) (Japan), Registered Professional Engineer (ERB)

A. Kajirunga, B.Eng. (Comp.) (SJUIT), MSc (ICSE.) (NM-AIST)

R. Israel, Bsc. (Comp. Sc.) (UDSM), MSc (IT & Mgt) (India)

H.D. Shimwela, B. Eng. (Comp.) (Russia), MSc (Comp.) (South Korea)

*J. Diwa, FTC (DIT), BSc(ICT) (OUT), PGDE Dip in Ed (UDSM), MCSE (DIT)

E. Kondela, BEng (Comp.) (Russia), MEng. (China)

M. Mwalimu, Adv. Dip. (Comp Sc.) (IFM), MSc (IT & Mgt) (India)

M. Khalfani, FTC (Comp.) (DIT), B. Eng (Comp.) (DIT), CNSS (HYD-INDIA), MSc. (Info Security) (IAA)

*J. A. Chakumba BSc (Info. Sys & Networking Eng) (SJUIT), PGD-Education (UDSM), MSc (ICT) (OUT)

H. Alexander, B.Eng. (Comp.) (SJUIT), MSc. (Embedded and Mobile Systems) (NM-AIST)

V. E. Kannole, BSc. (Comp.) (IFM), MSc. (IoT)(Rwanda)

R. Angotike, O.Dip (Comp. Eng) (DIT), BEng (Comp. Eng.) (DIT), MSCE (Comp.) (DIT)

E. F. Kazinja, BSc.(Comp)(UDOM),MSc.(Geographical Information Technologies)(Turkey)

S. S Msonde MSc (Info. Security) (IAA) BSc (ICT with Management) (Mzumbe)

R. C. Rajabu BSc (Comp) UDSM, MSc (IT) MUST

J. J. Nnko, BEng&Tech. (Comp.) (Russia), MEng (Comp.) (Russia), MSc. (Info. Sys.) (Russia)

Tutorial Assistants

*J.D. Oyuke, Dip. (Comp. Eng)(DIT), Beng. (Comp)(DIT)

*G. Msigwa, Beng. (Comp. Eng) (DIT)

Senior Instructors

D. Madaha, Adv. Cert. (Comp. Eng) (China), MEng. (Comp. Eng) (China).

H. F. Msechu, B.Tech (IT) (SJCET), PGD (Adv. Computing) (Pune-India)

H. Mohamed, FTC (Comp Eng) (DIT), Adv. Cert. (Comp. Eng) (China), MEng. (Comp. Eng) (China).

L. Champuku, BSc. (Comp. Sc.) (IFM), PGD (Adv. Computing) (Pune-India), MCSE. (Comp.) (DIT), OCP (Oracle), ITIL (IBM)

Instructor II

*S. K. Salim, BEng. (Comp) (UDOM)

M. Yustin, BEng. (Comp)(DIT).

Technicians

** R. Mndeme, Bsc. (Comp. Sc) (SJUIT)

* On study leave

** On contract

**** On secondment

6.3 DEPARTMENT OF ELECTRICAL ENGINEERING

The department offers NTA Ordinary Diploma (level 4-6) in Electrical Engineering, Biomedical Equipment Engineering, and Renewable Energy Technology. It also offers (NTA level 7-8) Bachelor of Engineering programme. The department has adequate resources which include laboratory and teaching facilities, seventeen (17) qualified teaching staff members with various qualifications and one (1) competent and experienced technician. Details of the courses are provided below.

6.3.1. Programmes Offered by the Department of Electrical Engineering

(a). BASIC TECHNICIAN CERTIFICATE IN ELECTRICAL ENGINEERING-(NTA LEVEL 4)

Semester I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 04111	Algebra	6
GST 04112	Basic Technical Communication Skills	6
COT 04114	Computer Fundamentals and Basic Information Processing	12
	CORE MODULES	
MET 04111	Basic Technical Drawing	9
ETT 04111	Basic Electronics	9
EET 04111	Electrical Installation and Draughting	12
EET 04112	Principles of DC Networks	9
	Total Credits	**63**

Semester II

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 04214	Trigonometry, Vectors and Complex Numbers	6
SLT 04216	Basic Mechanics	3
	CORE MODULES	
EET 04211	Analogue Electronic Control Circuits	12
EET 04212	DC Machines	9
EET 04213	Electrical Engineering Materials	9
EET 04214	Electrical Measurement and Instrumentation	9
EET 04215	Principles of AC Networks	9
	Total Credits	**57**

Total Credits at NTA 4: 120 Minimum credits required at NTA 4: 120

(b). TECHNICIAN CERTIFICATE IN ELECTRICAL ENGINEERING (NTA LEVEL 5)

Semester I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 05111	Differentiation and Integration	6
GST 05112	Research Methods for Technicians	3
COT 05117	Programming Fundamentals for Technicians	6
SLT 05117	Applied Mechanics	3
	CORE MODULES	
EET 05111	Computer Aided Electrical Drawing	6
EET 05112	Digital Electronic Control Circuits	9

EET 05113	Industrial Practical Training	10
EET 05114	Electrical Power Generation	6
EET 05115	Sensors and Transducers	9
EET 05116	Transformers and Induction Machines	9
	Total Credits	**67**

Semester II

Module Code	**Module Title**	**Credits**
	FUNDAMENTAL MODULES	
GST 05213	Statistics and Probability for Technicians	6
GST 05214	Technical Writing and Presentations	6
COT 05213	Fundamental Data Structures and Algorithms for Technicians	6
	CORE MODULES	
EET 05211	Control Engineering	9
COT 05214	Microprocessor Technology	9
EET 05213	Electrical Power Utilization	9
EET 05214	Industrial Electronics	9
EET 05215	Special Electrical Machines	9
	Total Credits	**63**

Total Credits at NTA 5: 130 Minimum credits required at NTA 5: 120

(c). DIPLOMA IN ELECTRICAL ENGINEERING NTA (LEVEL 6)

Semester I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06111	Conics and Differential Equations	6
GST 06112	Small Business Development	6
	CORE MODULES	
EET 06111	Electric Drives	9
EET 06112	Electrical Machines Re-winding	9
EET 06113	Electrical Systems Simulation	9
EET 06114	Industrial Practical Training	10
EET 06115	Power Transmissions and Distribution	6
EET 06116	Project Conceptualization	10
	Total Credits	**65**

Semester II

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06213	Series and Numerical Methods	6
GST 06214	Business Financial Management	6
	CORE MODULES	
COT 06211	Industrial automation System	12
EET 06211	Electrical Maintenance Management	6
EET 06212	Power Systems Protection	6
EET 06213	Project Realization	10
EET 06214	Renewable Energy Systems	6
EET 06215	Professional Ethics	6
	Total Credits	**58**

Total Credits at NTA 6: 123 Minimum credits required at NTA 6: 120

(d). BASIC TECHINICIAN CERTIFICATE IN BIOMEDICAL EQUIPMENT ENGINEERING (NTA LEVEL 4)

Semester I

Module Code	**Module Title**	**Credits**
	FUNDAMENTAL MODULES	
GST 04111	Algebra	6
GST 04112	Basic Technical Communication Skills	6
COT 04114	Computer Fundamentals and Basic Information Processing	12
	CORE MODULES	
ETT 04111	Basic Electronics	9
MET 04111	Basic Technical Drawing	9
EET 04111	Electrical Installation and Draughting	9
EET 04112	Principles of DC Networks	9
BET 04111	Human anatomy and Physiology	6
BET 04112	Introduction to Biomedical Engineering and Hospital Safety	3
	Total Credits	**69**

Semester II

Module Code	**Module Title**	**Credits**
	FUNDAMENTAL MODULES	
GST 04214	Trigonometry, Vectors and Complex Numbers	6
SLT 04216	Basic Mechanics	3
	CORE MODULES	
EET 04211	Analogue Electronic Control Circuits	12
EET 04212	DC Machines	9
EET 04214	Electrical Measurement and Instrumentation	9
EET 04215	Principles of AC Networks	9

BET 04211	Diagnostic Medical Equipment	6
BET 04212	Laboratory Medical Equipment	6
	Total Credits	**60**

Total Credits at NTA 4: 132 Minimum credits required at NTA 4: 120

(e). TECHNICIAN CERTIFICATE IN BIOMEDICAL EQUIPMENT ENGINEERING (NTA LEVEL 5)

Semester I

Module Code	**Module Title**	**Credits**
	FUNDAMENTAL MODULES	
GST 05111	Differentiation and Integration	6
GST 05112	Research Methods for Technicians	3
COT 05117	Programming Fundamentals for Technicians	6
SLT 05117	Applied Mechanics	3
	CORE MODULES	
EET 05112	Digital Electronic Control Circuits	9
EET 05116	Transformers and Induction Machines	9
BET 05111	Biomedical Sensors and Transducers	9
BET 05112	Industrial Practical Training	10
BET 05113	Intensive Care Unit Equipment	6
BET 05114	Optician and Dentistry Equipment	6
	Total Credits	**67**

Semester II

Module Code	**Module Title**	**Credits**
	FUNDAMENTAL MODULES	
GST 05213	Statistics and Probability for Technicians	6
GST 05214	Technical Writing and Presentations	6
COT 05213	Fundamental Data Structures and Algorithms for Technicians	6

	CORE MODULES	
COT 05214	Microprocessor Technology	12
EET 05212	Electrical Power Utilization	9
EET 05213	Industrial Electronics	9
EET 05211	Control Engineering	9
BET 05211	Theatre Medical Equipment	3
	Total Credits	**60**

Total Credits at NTA 6: 127 Minimum credits required at NTA 5: 120

(f). DIPLOMA IN BIOMEDICAL EQUIPMENT ENGINEERING (NTA LEVEL 6)

Semester I

Module Code	**Module Title**	**Credits**
	FUNDAMENTAL MODULES	
GST 06111	Conics and Differential Equations	6
GST 06112	Small Business Development	6
	CORE MODULES	
EET 06113	Electrical Systems Simulation	9
MET 06111	HVAC & Refrigeration Machinery	9
BET 06111	Industrial Practical Training	10
BET 06112	Medical Imaging Equipment	9
BET 06113	Radiotherapy, Lithotripter and Dialysis Machines	6
BET 06114	Project Conceptualization	10
	Total Credits	**65**

Semester II

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06213	Series and Numerical Methods	6
GST 06214	Business Financial Management	6
	CORE MODULES	
EET 06215	Professional Ethics	6
BET 06211	Biomedical Computer Networks and Data Communications	9
BET 06212	Biomedical Equipment Maintenance Management	9
BET 06213	Medical Device Standards	9
BET 06214	Project Realization	10
	Total Credits	**55**

Total Credits at NTA 6: 120 Minimum credits required at NTA 6: 120

(g). BASIC TECHNICIAN PROGRAMME IN ELECTRICAL AND RENEWABLE ENERGY ENGINEERING (NTA –Level 4)

Semester I Modules

S/N	Module code	Module Name	Class	Credits
1	GST 04111	Algebra	Fundamental	6
2	GST 04112	Basic Technical Communication Skills	Fundamental	6
3	ITT 04113	Computer Fundamentals and Basic Information Processing	Fundamental	12
4	MET 04111	Basics of Technical Drawing	Core	9
5	ETT 04111	Basic Electronics	Core	12
6	EET 04111	Electrical Installation and Draughting	Core	9
7	EET 04112	Principles of DC Networks	Core	9
8	ERT 04111	Energy Systems and Sustainability	Core	6

Total Credits				**69**

Semester II Modules

S/N	Module code	Module Name	Class	Credits
1	GST 04214	Trigonometry, Vectors and Complex Numbers	Fundamental	6
2	SLT 04216	Basic Mechanics	Fundamental	3
3	EET 04212	DC Machines	Core	9
4	EET 04213	Electrical Engineering Materials	Core	9
5	EET 04214	Electrical Measurement and Instrumentation	Core	9
6	EET 04215	Principles of AC Networks	Core	9
7	ERT 04211	Basic Thermodynamics for Energy Systems	Core	6
8	ERT 04212	Hydroelectric Power Plants	Core	6
Total Credits				**57**

Total credits at NTA 4 are 126, Minimum credits required at NTA 4 is 120.

(h). TECHNICIAN PROGRAMME IN ELECTRICAL AND RENEWABLE ENERGY ENGINEERING (NTA –Level 5)

Semester I Modules

S/N	Module code	Module Name	Class	Credits
1	GST 05111	Differentiation and Integration	Fundamental	6
2	GST 05112	Research Methods for Technicians	Fundamental	6
3	COT 05117	Programming Fundamentals for Technicians	Fundamental	12
4	EET 05111	Computer Aided Electrical Drawing	Core	6
5	EET 05115	Sensors and Transducers	Core	9
6	EET 05116	Transformers and Induction Machines	Core	9
7	ERT 05111	Energy Storage	Core	6
8	ERT 05112	Industrial Practical Training	Core	10
9	ERT 05113	Solar PV Systems	Core	9
Total Credits				**73**

Semester II Modules

S/N	Module code	Module Name	Class	Credits
1	GST 05213	Statistics and Probability for Technicians	Fundamental	6
2	GST 05214	Technical Writing and Presentations	Fundamental	6
3	COT 05213	Fundamentals of Data Structures and Algorithm for Technicians	Fundamental	6
4	EET 05211	Control Engineering	Core	9
5	EET 05213	Electrical Power Utilization	Core	9
6	EET 05214	Industrial Electronics	Core	9
7	ERT 05211	Bioenergy Technologies	Core	9
8	ERT 05212	Solar Thermal Systems	Core	6
Total Credits				**60**

Total credits at NTA 5 are 133, Minimum credits required at NTA 5 is 120.

(i). ORDINARY DIPLOMA PROGRAMME IN ELECTRICAL AND RENEWABLE ENERGY ENGINEERING (NTA –Level 6)

Semester I Modules

S/N	Module code	Module Name	Class	Credits
1	GST 06111	Conics and Differential Equations	Fundamental	6
2	GST 06112	Small Business Development	Fundamental	6
3	EET 06113	Electrical Systems Simulation	Core	9
4	EET 06115	Power Transmission and Distribution	Core	6
5	ERT 06110	Industrial Practical Training	Core	10
6	ERT 06111	Ocean and Geothermal Energy Systems	Core	6
7	ERT 06112	Project Conceptualization	Core	10
8	ERT 06113	Wind Energy Systems	Core	12
Total Credits				**65**

Semester II Modules

S/N	Module code	Module Name	Class	Credits
1	GST 06213	Series and Numerical Methods	Fundamental	6
2	ERT 06211	Energy Management	Core	9
3	ERT 06212	Hybrid Renewable Energy Systems	Core	12
4	ERT 06213	Renewable Energy Systems Maintenance Management	Core	12
5	ERT 06214	Project Realization	Core	10
6	ERT 06215	Engineering Professional Ethics	Core	9
Total Credits				**58**

Total credits at NTA 6 are 123, Minimum credits required at NTA 6 is 120.

(j). GENERAL COURSE PROGRAMME FOR BENG (ELECTRICAL ENGINEERING)

Semester I

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST G6107	Algebra and Application of Integrals	4
CSET G4101	Computer Basics and Word Processing	2
	CORE MODULES	
MET G4104	Workshop Technology	9
MET G4101	Basic Technical Drawing	9
EET G4104	Electrical Installation and Draughting	12
EET G4202	Principles of AC Networks	9
EET G5203	Electrical Measurements and Measuring Instruments	12
EET G5102	Industrial Electronics	9
	Total Credits	**66**

Semester II

Module Code	Module Title	Credit
	CORE MODULES	
EET G5202	Electronic Control Circuits	9
EET G5204	Electrical Instrumentation	9
EET G5206	Computer Aided Electrical Drawing	3
EET G6105	Control Engineering	12
EET G6205	Electrical Maintenance and Repair	6
EET G5200	Industrial Practical Training	10
	Total Credits	**49**

(k). HIGHER DIPLOMA IN ELECTRICAL ENGINEERING-NTA 7

Semester I

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GSU 07101	Calculus	6
CSEU 07102	Computer Programming Fundamentals	9
GSU 07106	Technical Communication Skills	6
	CORE MODULES	
ETU 07101	Analogue Electronics	9
ETU 07104	Instrumentation and Measurements	9
EEU 07101	Electrical Circuit Analysis	9
EEU 07102	Electrical Engineering Drawing	9
EEU 07103	Electrical Power Plants	6
EEU 07104	Principles of Electrical Machines	6
	Total Credits	**69**

Semester II

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GSU 07202	Advanced Calculus	6
CSEU 07203	Microprocessors	9
CSEU 07205	Object Oriented Programming	12
MEU 07204	Industrial Management	6
CORE MODULES		
EEU 07201	Control Engineering Analogue Analysis	6
EEU 07202	DC Machines	12
EEU 07203	Electrical Engineering Materials	6
EEU 07204	Electrical Networks and Transients	9
EEU 07205	Electrical Power Transmission and Distribution	6
	Total Credits	**72**

Semester III

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GSU 07303	Differential Equations and Complex Variables	6
MEU 07303	Finance and Human Resource Management	6
CSEU 07303	Data Structure and Computer Programming	12
	CORE MODULES	
ETU 07103	Digital Electronics	9
EEU 07301	A. C. Machines	12
EEU 07302	Electrical Power Systems Modelling	6
EEU 07303	Engineering Electromagnetics	6
EEU 07304	Industrial Practical Training	12
EEU 07305	Power Electronics Devices	9
	Total Credits	**78**

Semester IV

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GSU 07404	Probability and Statistics	6
MEU 07404	Engineering Operations Management	6
GSU 07407	Research Methods for Engineers	6
	CORE MODULES	
CSEU 07402	Industrial automation	9
EEU 07401	Active and Passive Filter Design	6
EEU 07402	Control Engineering Analogue Design	9
EEU 07403	Fault Analysis and Power Systems Stability	9
EEU 07404	Special Electrical Machines	9
	Total Credits	**60**

Total Credits at NTA 7: 279. Minimum credits required at NTA 7: 240.

(I). BACHELOR OF ENGINEERING IN ELECTRICAL ENGINEERING (NTA 8)

Semester I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
CSEU 08104	Real Time System Design	6
EEU 08106	Engineering Project Management	6
	CORE MODULES	
EEU 08101	Control Engineering Digital Analysis	6
EEU 08102	Electric Drives	12
EEU 08103	Industrial Practical Training	12
EEU 08104	Power Electronics Design	9
EEU 08105	Project Conceptualization	18
	Total Credits	**69**

Semester II

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GSU 08201	Entrepreneurship for Engineers	3
EEU 08201	Engineering Professionalism and Ethics	6
	CORE MODULES	
EEU 08202	Control Engineering Digital Design	9
EEU 08203	High Voltage Engineering	6
EEU 08204	Power System Protection	9
EEU 08205	Project Realization	18
	Total Credits	**51**
	ELECTIVE MODULES	
CSEU 08201	Embedded System Design	9
EEU 08206	Renewable Energy Technologies	9
	Total Credits	**18**

Total Credits at NTA 8: 129; Minimum credits required at NTA 8: 120

(m). HIGHER DIPLOMA OF ENGINEERING IN BIOMEDICAL ENGINEERING (NTA 7)

Semester I Modules

S/N	Module code	Module Name	Class	Credits
1.	GSU 07111	Communication Skills	Fundamental	6
2.	COU 07101	Computer Basics and Office Application	Fundamental	6
3.	MEU 07111	Basics of Engineering Drawing	Fundamental	9
4.	ETU 07112	Fundamentals of Analog Electronics	Core	9
5.	COU 07102	Programming Fundamentals	Core	12
6.	BEU 07111	Biomedical Engineering Workshop Practice	Core	9
7.	EEU 07111	Principles of Electrical Engineering	Core	9
Total Credits				**60**

Semester 2 Modules

S/N	Module code	Module Name	Class	Credits
1.	GSU 07212	Algebra and Application of Integrals	Fundamental	6
2.	ETU 07224	Fundamentals of Digital Electronics	Fundamental	9
3.	COU 07202	Microprocessor Technologies	Fundamental	9
4.	EEU 07212	Electrical System Design and Installation	Core	12
5.	BEU 07211	Medical Equipment Technologies	Core	6
6.	BEU 07212	Fundamentals of Biomedical Engineering	Core	9
7.	BEU 07213	Industrial Practical Training	Core	10
Total Credits				**61**

Semester 3 Modules

S/N	Module	Module Name	Class	Credits
1.	GSU 07314	Calculus	Fundamental	6
2.	COU 07303	Computer Programming	Fundamental	9
3.	ETU 07321	Analogue Electronics	Core	12
4.	ETU 07323	Measurements and Measurements	Core	9
5.	EEU 07308	Principles of Electrical Machines	Core	6
6.	EEU 07311	Electrical Circuit Analysis	Core	9
7.	BEU 07312	Medical Equipment Maintenance and Repair	Core	6
8.	BEU 07313	Computer Aided Drawing	Core	6
Total Credits				**63**

Semester 4 Modules

S/N	Module code	Module Name	Class	Credits
1.	GSU 07412	Advanced Engineering Mathematics	Fundamental	9
2.	COU 07404	Object Oriented Programming	Fundamental	9
3.	ETU 07422	Digital Electronics	Core	9
4.	BEU 07411	Biomedical Instrumentation	Core	6
5.	BEU 07412	Biomedical Engineering Design	Core	6
6.	BEU 07413	Materials for Biomedical Engineering	Core	9
7.	BEU 07414	Thermodynamics and Kinetics	Core	6

8.	BEU 07311	Basic Human Anatomy and Physiology	Core	6
Total Credits				**60**

Semester 5 Modules

S/N	Module code	Module Name	Class	Credits
1.	GSU 07516	Numerical methods and Matrices	Fundamental	6
2.	COU 07504	Data structure and Algorithms	Fundamental	9
3.	COU 07506	Digital Signal Processing	Core	9
4.	EEU 07513	Engineering Electromagnetics	Core	6
5.	BEU 07511	Fluid Mechanics and Mass Transfer	Core	9
6.	BEU 07512	Industrial Practical Training	Core	12
7.	BEU 07513	Biomolecular Engineering	Elective	9
8.	BEU 07514	Newborn Health Technologies	Elective	9
Total Credits				**69**

Semester 6 Modules

S/N	Module code	Module Name	Class	Credits
1.	GSU 07619	Probability and Statistics for Biomedical Engineers	Fundamental	6
2.	GSU 07617	Research Methods for Engineers	Fundamental	6
3.	BEU 07611	Biomedical Control Systems	Core	9
4.	BEU 07612	Basics of Biomechanics	Core	9
5.	BEU 07613	Biomedical Signals and Systems	Core	9
6.	BEU 07614	Power Electronics Circuits	Core	12
7.	BEU 07615	Fundamentals of Tissue Engineering	Elective	9
8.	BEU 07616	Basics of Machine Learning and Bioinformatics	Elective	9
Total Credits				**69**

Total Credits at NTA 7: 382; Minimum Credits Required at NTA 7: 240 or 360, depending on the entry semester.

(n). BACHELOR OF ENGINEERING IN BIOMEDICAL ENGINEERING (NTA 8)

Semester I Modules

S/N	Module code	Module Name	Class	Credits
1.	CSEU 08104	Real Time System Design	Fundamental	6
2.	EEU 08106	Engineering Project Management	Fundamental	6
3.	BEU 08111	Biomedical Engineering Project Conceptualization	Core	18
4.	BEU 08112	Industrial Practical Training	Core	12
5.	BEU 08113	Principles of Medical Imaging and Diagnostics	Core	9
6.	BEU 08114	Telemedicine Technologies	Core	6
7.	BEU 08115	Fundamentals of Rehabilitation Engineering	Elective	6
8.	BEU 08116	Biomedical Microsystems	Elective	6
Total Credits				**69**

Semester 2 Modules

S/N	Module code	Module Name	Class	Credits
1.	GSU 08211	Entrepreneurship and Innovation Management	Fundamental	6
2.	EEU 08211	Engineering Professionalism and Ethics	Fundamental	6
3.	BEU 08211	Biomedical Engineering Project Realization	Core	18
4.	BEU 08212	Digital Control Systems	Core	6
5.	BEU 08213	Healthcare Technology Management	Core	9
6.	BEU 08214	Medical Devices Standards	Core	9
7.	BEU 08215	Refrigeration and AC Systems	Elective	9
8.	EEU 08216	Solar Energy Technologies	Elective	9
Total Credits				**72**

Total Credits at NTA 8: 141; Minimum credits required at NTA 8: 120

(o). MASTER OF ENGINEERING IN SUSTAINABLE ENERGY ENGINEERING (MENGSEE) (NTA 9)

Semester I

Module Code	Module Title	Credits
	CORE MODULES	
CSCG 09311	Advanced Research Methods	6
SLSG 09101	Modern Energy Services	6
EESG 09101	Sustainable Conventional Energy Systems	12
EESG 09102	Sustainable Energy Technologies and Management	6
CEMG 09101	Leadership Principles and Human Resource Management	9
CEMG 09112	Financial Management	6
	Total Credits	**45**
	ELECTIVE MODULES	
MESG 09101	Natural Gas Power Plants	9
EESG 09103	Advanced Power Electronics	9
	Total Credits	**18**

Semester II

Module Code	Module Title	Credits
	CORE MODULES	
SLSG 09201	Energy and Environment	6
EESG 09201	Energy Efficiency	9
EESG 09202	Energy Storage Systems	6
ETSG 09201	ICT for Sustainable Energy Systems	9
GSCG 09204	Mathematical Models, Analysis and Simulation	6
	Total Credits	**36**
	ELECTIVE MODULES	
EESG 09203	Geothermal Energy Systems	6

EESG 09204	Power System Analysis, Operation and Control	9
	Total Credits	**15**

Semester III

Module Code	Module Title	Credits
	CORE MODULES	
MESG 09301	Integrated Energy Resources and Project Management	9
EESG 09301	Integrated Renewable Energy Systems	9
EESG 09302	Solar Energy Systems	6
EESG 09303	Wind Energy Systems	6
	Total Credits	**30**
	ELECTIVE MODULES	
CESG 09301	Hydro Power Plants	9
EESG 09304	Power Systems Dynamics and Stability	9
	Total Credits	**18**

Dissertation

EESG 09305	Dissertation	50
	Total Credits	**50**

6.3.2 List of Academic Staff in the Department of Electrical Engineering

Lecturer and Head of Department

M. I. Juma, B.Eng. (DIT), MSc. EE (Chongqing University-China), PhD. EE (UDSM)

Senior Lecturers

R. C. Kiiza, BSc. Eng. (UDSM), MSc Eng (UDSM), PhD (KTH - Sweden), P. Eng. (T)

**M. A. Kusekwa, MSc, Eng. (Sofia), PhD. Electrical Power Eng. (RSA) P. Eng (T) C Eng.

(T), MIET

Lecturers

S.F.M. Karugaba, BSc. Eng (UDSM), MS Electrical Eng. (USA), PhD Eng. (USA), G. Eng (T), MIEEE (USA)

D. A. Kisinga, BSc (UDSM), MSc (UDSM), PhD. Eng (Sheffield-USA)

Assistant Lecturers

A. Liwondo, ADE (DIT), MEng. MM (DIT)

H. Libani, FTC Electrical Eng. (ATC), B. Eng (DIT), MSc. (UDSM)

*E. Michael, FTC Electrical Eng. (MTC), B. Eng Electrical (DIT), P. Eng (T), MEng. MM (DIT)

*D. A. Kisinga, BSc (UDSM), MSc (UDSM)

*E. Machiwa, BENG. (London-UK), MENG. (Ottawa-Canada)

S. H. Ndola, FTC Electrical Eng. (MTC), BSc Electrical & Electronics Eng. (SJUIT), MSc. Power System and High Voltage (UDSM)

E. Lazaro Shange, B.Sc (UDSM), MESEE (DIT)

U. Busanya, B.Eng in electronics and communication (SJUIT), MT Biomedical Eng. (SRMIST)-India

Tutorial Assistants

S. S. Tumaini, BEng. (DIT)

H. Manga, BEng Electrical and Biomedical Eng. (ATC)

A. Lema, BEng Electrical and Biomedical Eng. (ATC)

A. Sanzagi B. Eng Electrical &Electronics Eng. (MUST)

A. Njambilo, B. Eng (DIT)

R. Salimu, B. Eng Electrical &Electronics Eng. (MUST)

Instructor I

S. Matobo, B. Eng Electrical Eng. (MUST)

Senior Instructor II

F. Joseph, B.Sc. Eng. (UDSM), MSc, (UDSM)

D. Bahebe, FTC (Electrical Eng.) (DIT), B. Eng (DIT)

N. S. Nassoro, Dip Electrical Eng. (MUST), B. Eng Electrical Eng. (DIT)

M. John, B. Eng (SJUIT)

Principal Instructor II

**O. A. Zongo, B.Eng. (DIT), M.Eng. EE (Suranaree University of Technology-Thailand), PhD EE (Suranaree University of Technology-Thailand)

Artson

S. Khamis, VETA

Technician
Z.Mshalu, FTC Electrical Eng. (MTC)
*On study Leave
**Contract

6.4 DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

The department offers Ordinary Diploma (OD) in Electronics and Telecommunications Engineering (NTA level 4-6), Ordinary Diploma in Communication System Technology (NTA level 4-6), Bachelor of Engineering (BEng) in Electronics and Telecommunications Engineering (NTA level 7-8), and Master of Engineering (MEng) in Telecommunication Systems and Networks (NTA level 9). The department has adequate resources to run its programmes, which include well-equipped laboratories and classrooms, 30 teaching staff and 1 technical support staff members.

6.4.1 Programmes offered by the department of Electronics & Telecommunications Engineering.

(a) BASIC TECHNICIAN CERTIFICATE IN ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING (NTA LEVEL 4)

Semester I

Module Code	Module Title	Credits
	CORE MODULES	
ETT 04111	Basic Electronics	12
ETT 04112	Electronics Drawing	9
ETT 04113	Electrical Circuits and Installation	9
ITT 04111	Computer Basics and Application	14
	FUNDAMENTALS MODULES	
GST 04121	Algebra	6

GST 04122	Basic Technical Communication Skills	6
MET 04121	Basics of Technical Drawing	9
Total		**65**

Semester II

Code	**Module Title**	Credits
CORE MODULES		
ETT 04213	Electronic Workshop Practice	10
ETT 04214	Electronics Measurements	12
ITT 04213	Programming Fundamentals	9
COT 04215	Computer Networking	14
FUNDAMENTALS MODULES		
GST 04224	Trigonometry, Vectors and Complex Numbers	6
GST 04212	Technical Writing and Presentation	6
SLTP 04216	Basic Mechanics	3
Total		**60**

(b) TECHNICIAN CERTIFICATE IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING (NTA LEVEL 5)

Semester I

Module Code	**Module Title**	**Credits**
CORE MODULES		
ETT 05111	Radio Transmission Systems	12
ETT 05112	Electromagnetics	6
ETT 05113	Practical Electronic Circuits	12
ETT 05114	Fundamentals of Analogue Electronics	10

ETT 05115	Industrial Practical Training	10
FUNDAMENTALS MODULES		
GST 05121	Engineering Mathematics for Technicians	9
Total		**59**

Semester II

Module Code	Module Title	Credits
CORE MODULES		
ETT 05211	Telecommunication Practice	12
CST 05212	Fiber Optic Communications	12
ETT 05212	Electronic Systems Repair	12
ETT 05213	Fundamentals of Digital Electronics	10
ETT 05214	Radar and Navigation Aids	9
FUNDAMENTALS MODULES		
GST 05212	Statistics and Probability for Technicians	6
Total		**61**

(c) ORDINARY DIPLOMA IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING (NTA LEVEL 6)

Semester I

Module Code	Module Title	Credits
CORE MODULES		
ETT 06111	Electronics Products Fabrication	12
ETT 06112	Power Electronics	10
ETT 06113	Project Conceptualization	10
ETT 06114	Television and Video Technology	12
ETT 06115	Industrial Practical Training	10
FUNDAMENTAL MODULE		

GST 06111	Small Business Development	6
Total		**60**

Semester II

Module Code	Module Title	Credits
CORE MODULES		
ETT 06211	Electronic Communications Laboratory	12
ETT 06212	Control Systems and Automation	12
ETT 06213	Project Realization	10
ETT 06214	Satellite Communication Systems	12
ITT 06218	Cyber Security and Privacy	9
FUNDAMENTAL MODULES		
GST 06211	Business Financial Management	6
Total		**61**

(d) BASIC TECHNICIAN CERTIFICATE IN COMMUNICATION SYSTEM TECHNOLOGY (CST) (NTA LEVEL 4)

Semester I

Module Code	Module Title	Credits
CORE MODULES		
ETT 04111	Basic Electronics	12
ETT 04113	Electrical Circuits and Installation	9
ITT 04111	Computer Basics and Applications	14
FUNDAMENTALS MODULES		

GST 04121	Algebra	6
GST 04122	Basic Technical Communication Skills	6
ITT 04112	Database Fundamentals	9
MET 04121	Basics of Technical Drawing	9
Total		**65**

Semester II

Module Code	**Module Title**	**Credits**
CORE MODULES		
CST 04211	Fundamentals of Communication Systems	9
CST 04212	Electronic Measurements	12
CST 04213	Electronics Workshop Technology	10
FUNDAMENTALS MODULES		
SLT 04216	Basic Mechanics	3
GST 04212	Technical Writing and presentation	6
GST 04211	Trigonometry, Vectors and Complex Numbers	6
ITT 04213	Programming Fundamentals	9
Total		**55**

(e) TECHNICIAN CERTIFICATE IN COMMUNICATION SYSTEM TECHNOLOGY (CST) (NTA LEVEL 5)

Semester I

Module Code	Module Title	Credits
Core Modules		
CST 05111	Wireless Communications	12
CST 05112	Industrial Practical Training	10

ETT 05112	Electromagnetics	6
ETT 05114	Fundamentals of Analogue Electronics	10
CST 05113	Electronics Equipment Repair & Maintenance	12
Fundamentals Modules		
GST 05121	Engineering Mathematics for Technicians	9
Total		**59**

Semester II

Module Code	Module Title	Credits
CORE MODULES		
CST 05211	Communication Systems Laboratory	12
CST 05212	Fiber Optic Communications	12
CST 05213	Industrial Automation	12
ETT 05213	Fundamentals of Digital Electronics	10
FUNDAMENTALS MODULES		
GST 05212	Statistics and Probability for Technicians	6
ITT 05215	Database Management	12
Total		**64**

(f) ORDINARY DIPLOMA IN COMMUNICATION SYSTEM TECHNOLOGY (CST) (NTA LEVEL 6)

Semester I

Module Code	Module Title	Credits
CORE MODULES		
CST 06111	Data Communication and Networking	12
CST 06112	Project-Conceptualization	10
CST 06113	Industrial Practical Training	10

CST 06114	Audio and Video Systems	12
FUNDAMENTALS MODULES		
ITT 06112	Web Application Development and Hosting	12
GST 06122	Small Business Development	6
Total		**62**

Semester II

Module Code	**Module Title**	**Credits**
CORE MODULES		
CST 06211	Cellular Mobile Communication Systems	12
ITT 06218	Cyber Security and Privacy	9
CST 06212	Project Realization	10
ETT 06215	Satellite Communication Systems	12
FUNDAMENTALS MODULES		
ITT 06214	Mobile Applications Development	9
GST 06224	Business Financial Management	6
Total		**58**

(g) HIGHER DIPLOMA IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING (NTA LEVEL 7)

Semester I

Module Code	**Module Title**	**Credits**
CORE MODULES		
ETU 07121	Practical Electronic Circuits	12
ETU 07122	Fundamentals of Analogue Electronics	10
ETU 07123	Electronics Product Fabrication	12

ETU 07124	Power Electronics	10
FUNDAMENTALS MODULES		
COU 07101	Computer Basics and Office Application	~~9~~ 6
GSU 07111	Basics of Technical Communication skills	6
COU 07102	Programming Fundamentals	12
	Total	**68**

Semester II

Code	Module Title	Credits
CORE MODULES		
ETU 07221	Electronics Measurements	9
ETU 07222	Fundamentals of Communication Systems	9
ETU 07223	Telecommunications Practice	9
ETU 07224	Fundamentals of Digital Electronics	9
ETU 07225	Electronic Communications Laboratory	12
ETU 07226	Industrial Practical Training	10
Total		**58**

Semester III

Code	Module Title	Credits
CORE MODULES		
ETU 07321	Analogue Electronics	12
ETU 07322	Digital Electronics	12
ETU 07323	Instrumentation and Measurements	9
FUNDAMENTAL MODULES		
GSU 07312	Engineering Mathematics	9
COU 07303	Computer Programming	9

GSU 07313	Technical Communication Skills	6
EEU 07308	Principles of Electrical Machines	6
Total		**63**

Semester IV

Code	**Module Title**	**Credits**
CORE MODULES		
ETU 07421	Nano Electronics	9
ETU 07422	Wave propagation and Antenna	9
ETU 07423	Communication Switching Systems	9
ETU 07424	Data Communications and Computer Networking	9
FUNDAMENTAL MODULES		
COU 07401	Database Concepts and Design	9
GSU 07412	Advanced Engineering Mathematics	9
ELECTIVE MODULES		
COU 07404	Object Oriented Programming	9
COU 07405	Geographical Information System	6
Total		**60**

Note: The total number of credits includes only one elective module which is mandatory for students.

Semester V

Module Code	Module Title	Credits
CORE MODULES		
ETU 07521	Electronic Design and Fabrication	12
ETU 07522	Engineering Electromagnetics	12
ETU 07523	Industrial Practical Training	12
COU 07506	Digital Signal Processing	~~6~~ 9

FUNDAMENTAL MODULES		
GSU 07512	Business Management in ICT	6
GSU 07504	Probability and Statistics	6
ELECTIVE MODULES		
COU 07503	Web Application Development	9
COU 07501	Cyber security	9
Total		**~~63~~ 66**

Note: The total number of credits includes only one elective module which is mandatory for students.

Semester VI

Module Code	**Module Title**	**Credits**
CORE MODULES		
ETU 07621	Industrial Automation	12
COU 07605	Artificial Intelligence and Machine Learning	9
ETU 07622	Television Engineering	9
ETU 07623	Sensor Networks	12
ETU 07624	Very Large-Scale Integration (VLSI)	9
FUNDAMENTAL MODULE		
GSU 07616	Research Methods for Engineers	6
Total		**57**

(h) BACHELOR OF ENGINEERING IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING (NTA LEVEL 8)

Semester I

Code	**Module Title**	**Credits**
FUNDAMENTAL MODULES		

ETU 08121	Engineering Laws and Standards	6
CORE MODULES		
ETU 08122	Cellular and Mobile Communication	9
ETU 08123	Fibre Optics Communication and Sensing	9
ETU 08124	Industrial Practical Training	12
ETU 08125	Project Conceptualization	12
COU 08102	Embedded Systems Design	9
ELECTIVE MODULES		
COU 08104	Data Mining and Analytics	9
COU 08103	Real Time System Design	9
Total		**~~66~~ 75**

Note: The total number of credits includes only one elective module which is mandatory for students.

Semester II

Code	Module Title	Credits
FUNDAMENTAL MODULES		
GSU 08211	Entrepreneurship and Innovation Management	6
CORE MODULES		
ETU08221	Project Realization	12
ETU08222	Radar and Navigation Aids Systems	9
ETU08223	Broadcasting Engineering and Acoustics	9
ETU 08224	Satellite Communication Technology	9
COU 08202	Industrial Robotics	9
Total		**54**

(i) MASTER DEGREE OF ENGINEERING IN TELECOMMUNICATION SYSTEMS AND NETWORKS (NTA LEVEL 9)

Semester I

Code	Module Title	Credits
	CORE MODULES	
TNG 09101	Applied Research Methodology	9
GSG 09101	Mathematical techniques for optimization and digital error control	9
GSG 09102	Mathematical Models, Analysis and Simulations	9
CFG 09103	Network Security	12
TNG 09102	Data communication and Networking	12
	ELECTIVE MODULES	
GSG 09103	Fundamentals of Statistics	6
TNG 09103	Machine Learning	12
GSG 09104	Probability – The Science of Uncertainty and Data	6
TNG 09104	Emerging Technologies in Telecommunication Networks	12
TNG 09105	Broadband Communication Systems	12
	Total	**99**

Semester II

Code	Module Title	Credits
	CORE MODULES	
GSG 09204	Entrepreneurship and Innovation Management	6
TNG 09206	Network Management and Optimization	12
TNG 09207	Telecommunications Regulation and Standards	6
TNG 09208	Advanced digital communication systems	12
TNG 09209	Advanced Digital Signal Processing Techniques	12

ELECTIVE MODULES		
TNG 09210	Optical systems and Networks	12
TNG 09211	Radar communication and systems technology	12
TNG 09212	Satellite communications	12
TNG 09213	Next Generation Networks (NGNs)	12
TNG 09214	Wireless Sensor Networks	12
GSG 09212	Data analysis: Statistical Modelling and Computational applications	9
GSG 09213	Data Analysis in Social Science	9
Total		**126**

6.4.2 List of Academic Staff in the Department of Electronics and Telecommunications Engineering

Associate Professor and Head of Department

K.A. Greyson, ADE Electronics and Telecom. Eng. (DIT), PGD Data Communication Systems (USA), MSc. Telecom. Eng. (UDSM), PhD Electrical Engineering (Thailand), ICT Professional (Electronics), IEEE Member.

Senior Lecturer

A. Manyele, Dip. TV & VCR tech. (Canada), BSc. Applied Physics (UDSM), MSc. Seismology (Norway), PhD (UDSM)

Lecturers

P.F. Mmbaga, ADE. Electronics and Telecom. Eng. (DIT, Tanzania), MSc. Comm. and Information Systems (China), PhD in Eng. Optical Comm. (UK), Certified Fibre Optic Technician (USA), IEEE Member

G. Rugumira, ADE Electronics and Telecom. Eng. (DIT), MEng-Communication and Information Systems (China), PhD-Information and Communication Engineering (China)

P.E. Pesha, BSc. Electronic Science & Comm. (UDSM), MSc. Eng. Electronics (RSA), PhD Eng. (RSA), Registered ICT Professional (NAS), IEEE Member

J.A. Msumba, ADE Electrical Eng. (DIT), BSc. (Hons), Electronics (RSA), MSc. Electronics (RSA), PhD Electronic Eng. (RSA), Certificate in Wireless Telephone - RSA

J.W. Matiko, BEng Electronics and Telecom. Eng. (DIT), MSc. (Sweden), PhD, (UK)

M.E. Mkiramweni, BEng. Electronic Information (China), MEng. Information & Telecom. (China), PhD in Eng. Information & Comm. (China)

P. Haule, BEng. Electronics and Telecom. Eng. (DIT), MSc. Comm. (UK), PhD in Telecom Eng. (UDSM)

P. Haule, BEng. Electronics and Telecom. Eng. (DIT), MSc. Comm. (UK), PhD in Telecom Eng. (UDSM), P Eng. (T)

J. Hossea, BEng. Electronics and Telecom. Eng. (SJUIT), MEng. Electronic and Photonic (Thailand), PhD in Electrical Eng. (Thailand)

R. Lihakanga, BEng. Electronics and Telecom. Eng. (DIT), MSc. Electronic Products Design (UK), PhD Civil Engineering Sensors and Systems (UK) Grad. Eng. (T) Grad IET

J. Lyimo, ADE Electronics and Telecom. Eng. (DIT), PGD Electronics Engineering and information Technology (UDSM), MSc Electronics Engineering and Information Technology (UDSM)

Assistant Lecturers

J. Ally, BSc Electronic Science & Comm. (UDSM), MSc Telecom Eng. (China)

A.O. Mfinanga, ADE Electronics and Telecom. Eng. (DIT), PGD (UDSM), MSc. (UDSM)

*A.J. Mohamed BEng. Electronics and Telecom. Eng. (DIT), MSc. Telecom. Eng. (UDSM)

*I. Kamanga, BSc. Telecom. Eng. (UDSM), MSc (China)

N. Ignasi, BEng Electronics and Telecom. Eng. (DIT), MSc. Nanotechnologies and Microsystems Technology (Russia)

J. Mashurano, BEng (SJUIT), MSc (China)

*F. Lello, BEng Electronics and Telecom. Eng. (DIT), MSc (China), Graduate Eng. (T)

*M.J. Shundi, BEng Electronics & Telecom (DIT), MEng. Information & Communication Engineering (China), P Eng.(T)

*M.P. Masele, BSc Informatics (SUA), ME in Information and Communication Engineering (China)

*J. N. Bakunda, BSc. Telecom UDSM, MEng. Electrical Eng. (Thailand)

*F. Kulwa, BEng Electronic & Telecom. (DIT), MSc. (China)

*A. G. Philipo, BSc. Telecommunications Eng. (UDOM), MSc in Cyber Security (UK)

E. Kajange, BEng Electronics and Telecom. Eng. (DIT), MSc in Cyber Security (UK)

Justiner J. Mkumbi, BEng Electronics and Telecom Eng. (SJUIT). MSc. Signal and Information Processing Eng (China)

E. Rweyemamu, BEng. Electronics and Telecom Eng. (SJUIT), Masters in Internet of Things (Rwanda)

Tutorial Assistants

H. A. Hashim, BEng. Electronics and Telecom. Eng. (DIT)

S. J. Mukama, BEng. Electronics and Telecom Eng. (SJUIT)

G.K. Speratus, BSc. Telecom. Eng. (UDOM)

P.S. Urassa, BEng Electronics and Telecom. Eng. (DIT), Graduate Eng. (T)

F.C. Salala, BEng. Electronics and Telecom. Eng. (DIT)

Senior Instructor II

D. Urassa, ADE Electronics and Telecom. Eng. (DIT), PGD (UDSM), Grad Eng. (T)

A.S. Yusufu, BEng Electronics and Telecom. Eng. (DIT), Master of Comm. Management (Rwanda), P Eng. (T)

Instructor I

*M.D. Shirima, BEng. Electronics and Telecom. Eng. (DIT)

Instructor II

E.M. Kamanija, BSc. Telecom. Eng. (UDOM)

Laboratory Technicians II

N. Isaack, OD ETE (DIT)

* On study leave

** Contract

6.5 DEPARTMENT OF MECHANICAL ENGINEERING

Mechanical engineering is the prime mover of any nation development. Nothing can be manufactured without the involvement of mechanical engineering. Due to fast increase of manufacturing, mining and gas industries, the well qualified technicians and engineers are highly needed. These personnel can be obtained from Dar es Salaam Institute of Technology at the department of mechanical engineering.

The department offers Ordinary Diploma and Bachelor of Engineering (NTA level 4-8) in mechanical engineering. The department has adequate physical resources to include classrooms, laboratories and workshops. In addition, the department has 25 teaching staff and 5 technical supporting staff.

6.5.1 Programmes offered by Mechanical Engineering Department

(a). BASIC-TECHNICIAN CERTIFICATE IN MECHANICAL ENGINEERING- NTA LEVEL 4

Semester I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 04111	Algebra	6
ITT 04113	Computer Fundamentals and Basic Information	12

	Processing	
GST 04112	Basic Technical Communication skills	6
CORE MODULES		
MET 04111	Basics of Technical Drawing	9
MET 04112	Gas Welding Processes	9
MET 04113	Statics	6
MET 04114	Thermodynamics and Power Plant	6
MET 04115	Workshop Technology	9
Total		**63**

Semester II

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 04214	Trigonometry, Vectors and Complex Numbers	6
CORE MODULES		
MET 04211	Arc Welding Processes	12
MET 04212	Dynamics	6
MET 04213	Fundamentals of Engineering Drawing	6
MET 04214	Metal Cutting and Machine Tools	12
MET 04215	Petrol/Gas Engine	12
EET 04219	Principles of DC and AC Networks	9
Total		**63**

Total Credits at NTA 4: 126 (Minimum credits required at NTA 4: 120)

(b). TECHNICIAN CERTIFICATE IN MECHANICAL ENGINEERING NTA LEVEL 5

Semester I

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 05111	Differentiation and Integration	6
GST 05112	Research Methods for Technicians	3
CORE MODULES		
MET 05111	Basic Machine Elements	6
MET 05112	Computerized Engineering Drawing	9
MET 05113	Diesel Engine	6
MET 05114	Engineering Measurements and Instrumentation	6
MET 05115	Industrial Practical Training: Artisan Level	10
MET 05116	Materials Technology	6
MET 05117	Strength of Materials	6
EET 05117	Principles of DC and AC Machines	6
Total		**64**

Semester II

Module	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 05213	Probability and Statistics for Technicians	6
GST 05214	Technical Writing and Presentations	6
	CORE MODULES	
MET 05211	Automotive Electricity, Electronics and Diagnosis	9
MET 05212	Automotive Transmission and Suspension	6
MET 05213	Computer Aided Design	9
MET 05214	Fluid Mechanics	6
MET 05215	Machining Elements	6
MET 05216	Machining Process	9
MET 05217	Metal Forming	9
	Total	**66**

Total Credits at NTA 5: _130 Minimum credits required at NTA 5: 120

(c). NTA LEVEL 6 DIPLOMA IN MECHANICAL ENGINEERING

Semester I:

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06111	Conics and Differential Equations	6
GST 06112	Small Business Development	6
GST 06115	Algebra and Application of Integrals	4
	CORE MODULES	
MET 06111	HVAC and Refrigeration Machinery	9
MET 06112	Pneumatics, Hydraulics and Automation	12
MET 06113	Production Technology	9

MET 06114	Project Conceptualization	12
MET 06115	Industrial Practical Training: Technician Level	10
Total		**68**

Semester II

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06213	Series and Numerical Methods	6
GST 06214	Business Financial Management	6
CORE MODULES		
MET 06211	Code of Conduct and Ethics	6
MET 06212	Foundry Technology	12
MET 06213	Industrial Control Systems	9
MET 06214	Operations, Maintenance and Safety	9
MET 06215	Project Realization	12
Total		**60**

Total Credits at NTA 6: 128 Minimum credits required at NTA 6: 120

(d). GENERAL COURSE PROGRAMME IN MECHANICAL ENGINEERING

Semester I

Module Code	Module Title	Credits
ITT G 4111	Computer Basics & Applications	12
MET G 4111	Basics of Technical Drawing	9
MET G4113	Statics	6
MET G4112	Gas Welding Processes	9
MET G4115	Workshop Technology	9
MET G4215	Petrol/Gas Engine	12

MET G4212	Dynamics	6
MET G5114	Engineering Measurements and Instrumentation	6
MET G6214	Operations, Maintenance and Safety	9
	Total	**84**

Semester II

Module Code	Module Title	Credits
MET 05112	Computerized Engineering Drawing	9
MET 05116	Materials Technology	6
MET 05216	Machining Process	9
MET 05117	Strength of Materials	6
MET 05212	Automotive Transmission and Suspension System	6
MET 05215	Machine Element	6
MET 04114	Thermodynamics and Power Plant	6
MET 04211	Arc Welding Processes	12
MET 04215	Industrial Practical Training	10
Total		**73**

Total Credit at GCP: 157 (Minimum credits required at GCP:120)

(e). HIGHER DIPLOMA IN MECHANICAL ENGINEERING – NTA LEVEL 7

Semester I

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
ETU 07101	Analogue Electronics	9
GSU 07101	Calculus	6
CSEU 07102	Computer Programming Fundamentals	9
GSU 07105	Computing using Mathematical Software	6
EEU 07101	Electrical Circuit Analysis	9
EEU 07104	Principles of Electrical Machines	6
GSU 07106	Technical Communication Skills	6
CORE MODULES		
MEU 07101	Engineering Drawing	6
MEU 07102	Materials Technology	6

MEU 07103	Strength of Materials	6
MEU 07104	Systems Reliability and Plant Maintenance	6
Total		**75**

Semester II

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07202	Advanced Calculus	6
ETU 07103	Digital Electronics	9
CORE MODULES		
MEU 07201	Basic Computer Aided Drafting	9
MEU 07202	Engineering Thermodynamics	6
MEU 07203	Fluid Mechanics	6
MEU 07204	Industrial Management	6
MEU 07205	Machine Elements Design	6
MEU 07206	Mechanics of Machines	6
MEU 07207	Metal Cutting Processes	6
MEU 07208	Welding Technology and Powder Metallurgy	9
Total		**69**

Semester III

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07303	Differential Equations and Complex Variables	6
CORE MODULES		
MEU 07301	Computer Aided Drafting Application	9
MEU 07302	Engineering Vibrations	6
MEU 07303	Finance and Human Resources Management	6
MEU 07304	Industrial Energy Management	6

MEU 07305	Industrial Practical Training	12
MEU 07306	Material Handling Design	9
MEU 07307	Solid Mechanics	9
Total		**63**

Semester IV

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07404	Probability and Statistics	6
GSU 07407	Research Methods for Engineers	6
CORE MODULES		
MEU 07401	Automotive Engineering	6
MEU 07402	Computer Aided Design (CAD)	6
MEU 07403	Dynamics of Mechanical Structure	6
MEU 07404	Engineering Operations Management	6
MEU 07405	Fluid Power and Control	6
MEU 07406	Heat Transfer	6
MEU 07407	Industrial Design Engineering	6
MEU 07408	Principles of Engineering Design	6
Total		**63**

Total Credits at NTA7: 270 Minimum credits required at NTA 7: 240

(f). BACHELOR OF MECHANICAL ENGINEERING – NTA LEVEL 8

Semester I

Module Code	Module Title	Credit
MEU 08101	Computer Aided Engineering	6
MEU 08102	Industrial Practical Training	12
MEU 08103	Laws for Engineers	6

MEU 08104	Power Plant	6
MEU 08105	Production Engineering	6
MEU 08106	Project Conceptualization	18
MEU 08108	System and Control Engineering	6
Total		**60**
ELECTIVE MODULES		
MEU 08107	Refrigeration and Air Conditioning	6
MEU 08109	Renewable Energy Technologies	6
EEU 08107	Power Electronics	6
Total		**78**

NB: *Student must select at least one elective module*

Semester II:

Module Code	Module Title	Credit
	FUNDAMENTAL MODULE	
GSU 08201	Entrepreneurship for Engineers	3
	CORE MODULES	
MEU 08201	Automation and Robotics	6
MEU 08202	Computer Aided Manufacturing (CAM)	6
MEU 08203	Engine Technology	9
MEU 08204	Foundry and Forming Technology	9
MEU 08205	Project Realization	18
MEU 08206	Quality Assurance and Control	6
Total		**57**

Total Credits at NTA 8: 135 (Minimum credits required at NTA 8: 120)

6.5.2 List of Academic Staff in the Department of Mechanical Engineering

Lecturer and Head of Department

E.A. Nyari, BSc. Mech Eng. (UDSM), MSc. Prod. Eng. (UDSM), PhD, Sustainable Energy Science and Eng. (SESE) (NM-AIST)

Associate Professors

**C. Mgonja, FTC Eng. (TCA), Msc. Eng., and PhD in Welding Techn. (Russia)

Senior Lecturers

**Eng. F. Sanga, BSc. Mech Eng., MSc. Mechanical Eng. (UDSM), PhD in Eng Innovation (SUA)

Lecturers

***F. Lujaji, BSc. Mech. Eng. (UDSM) Masters of Technology in Mechanical Engineering (M.Tech) (RSA), PhD, Sustainable Energy Science and Eng. (SESE) (NM-AIST)

Assistant Lecturers

*A. Kisioki, FTC (TCA), Beng Mech, (DIT), MSc Renewable Energy (UDSM)

E.L. Munuo, Cert. Mechatronics) (Japan), FTC Eng (DTC), ADE (DIT). MEng. Maintenance Management (DIT)

S. Loibangut, FTC (ATC), Beng Mech (DIT), MEng. Maintenance Management (DIT)

*M. A. Masanja, BSc. Mech (UDSM), MSc Energy for Society, Hanze University of Applied Science, Groningen, (Netherlands)

*G. Mduma, BSc. Mech (UDSM), MSc. Mechatronics (China)

A. G. Mtunguja, BSc. Mech. (China), MSc. Mechanical Engineering (China)

G. G. Mabala, Beng Mech (MUST), MSc Material Science and Eng. (NM-AIST)

G. Bosinge, FTC Mech (DIT), Beng Mech (DIT), MEng. In Energy Technology and Management (Thailand)

**D. Mbunga, FTC (TCA), MSc. Eng (FRG)

Tutorial Assistants

*P. E. Maguha, Ordinary Diploma (NIT), BEng. Mech (NIT)

E. M. Mashauri, BEng. Mech (DIT).

E. R. Lymo, BEng. Mech (DIT)

A. S. Kagina, Ordinary Diploma (DIT), BEng. Mech (DIT)

D. Amani, BEng. Mech (DIT)

Chief Instructor
**Y. J. Msigala, FTC DTE (DTC), ADE (DTC), PGD Eng. (UDSM), MSc. Prod Eng. (UDSM)

Chief Instructor II
**R.S. Nzumbi, FTC (DTC), MSc. Eng (USSR)

Senior Instructor II
H. Rashid, FTC (MTC) BEng Mech (DIT)

Instructor I
*R. M. Nshatsi, BSc. Mech Eng (UDSM)
M.H. Lymo, FTC (DIT) BEng Mech (DIT), MEng. Sustainable Energy Engineering (DIT)

Instructor II
**A. H. Katani, BSc Eng. (UDSM)
L. O. Sijenyingi, Beng. Mech (NIT)
O. C. Mwaya, Beng. Mech (MUST)
D. Robert, BSc. Mech (UDSM)

Principal Technician II
**K. M. Salira, FTC Eng. (DTC)

Senior Technician I
O. Mustara, OD Automobile Eng (NIT) Automobile Engineering

Technician I
** A. B. Mgimwa OD Mech. Eng. (DIT)
Lisa John, OD Mech (St. Joseph College of Eng and Tech)

Principal Artisan
**B. Bwire, Trade Test Grade I (NVTC)
A.R. Gurti, Trade test Grade II (NVTC)
F. D. Kiwale, Trade Test II in Welding & Metal Fabrication (VETA)

Artisan I
**L. Namkoloma, Trade Test II in El. Installation (NVTC), Trade Test I in Refr & Air Cond.

(VETA)
P.A. Luhanda NVTA III in Welding & Metal Fabrication (VETA)

Artisan II
J. M. Ngassa, NVA III in Motor Vehicle Mechanics (VETA)
N. J. Mainda, NVA III in Fitter Mechanics (VETA)
R. M. Ramadhani, NVA III in Welding (VETA)

* On study leave
** On contract

***Appointment

6.6 DEPARTMENT OF SCIENCE AND LABORATORY TECHNOLOGY

Department provides services to all academic departments in teaching physical science modules. The department has adequate classrooms and laboratory facilities. In addition, it has 32 academic staff members who are supported by 4 technicians. The department of Science & Laboratory Technology has four (4) training programmes leading to the following qualifications;

(a) Ordinary Diploma in Science and Laboratory Technology (NTA 4-6)

(b) Ordinary Diploma in Food Science and Technology (NTA 4-6)

(c) Ordinary Diploma in Biotechnology (NTA 4-6)

(d) Bachelor of Technology in Laboratory Sciences (NTA 7-8).

(a). BASIC TECHNICIAN CERTIFICATE IN SCIENCE AND LABORATORY TECHNOLOGY- NTA LEVEL 4 (reviewed 2020).

Semester 1

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GST 04111	Algebra	6
GST 04112	Basic Technical Communication Skills	6
ITT 04116	Computer Basics and Work Processing	6
CORE MODULES		
SLT 04111	Introduction to Basic Principles of Physics	6
SLT 04112	Basic Experimental Chemistry	6
SLT 04113	Laboratory Equipment Maintenance	9
SLT 04114	Basic Biology Instrumentation	6

SLT 04115	Solutions and Bench Reagents	6
SLT04116	Basic Biological Principles	9
SLT 04117	Laboratory Safety	6
	Total	**66**

Semester II

Module Code	**Module Title**	**Credit**
	FUNDAMENTAL MODULES	
GST 04213	Trigonometry, Vectors and Complex numbers	6
ITT 04215	Spreadsheets and Database	6
	CORE MODULES	
SLT 04211	Qualitative Analytical Chemistry	12
SLT 04212	Basic Electronics for Instrumentation	9
SLT 04213	Basic Biological Experiments	12
SLT 04214	Introduction to General Chemistry	6
SLT 04215	Principles of Physics	6
	Total	**57**

Total credits at NTA 4: 123 (Minimum credits required at NTA 4: 120)

(b). TECHNICIAN CERTIFICATE IN SCIENCE AND LABORATORY TECHNOLOGY (NTA LEVEL 5)

Semester 1

Module Code	**Module Title**	**Credit**
	FUNDAMENTAL MODULES	
GST 05111	Differentiation and Integration	6
GST 05112	Research Methods for Technicians	3
	CORE MODULES	
SLT 05111	Analytical measurements and Instrumentation	6

SLT 05112	Electrostatics & Current Electricity	9
SLT 05113	Inorganic chemistry Practical	12
SLT 05114	Applied Mechanics	6
SLT 05115	Plants and Animal Taxonomy	9
SLT 05116	Lab Layout and organization	9
SLT 05117	Industrial Practical Training	10
	Total	**70**

Semester II

Module Code	**Module Title**	**Credit**
	FUNDAMENTAL MODULES	
GST 05213	Probability and Statistics for Technicians	6
GST 05214	Technical Writing and Presentations	6
	CORE MODULES	
SLT 05211	Magnetism and AC Theory	9
SLT 05212	Introduction to Physical Chemistry	9
SLT 05213	Applied Optics	6
SLT 05214	Biological Specimen Management	9
SLT 05216	Basic Environmental Management	6
	Total	**51**

Total credits at NTA 5: 121 (Minimum credits required at NTA 5: 120)

(c). ORDINARY DIPLOMA TECHNICIAN CERTIFICATE IN SCIENCE AND LABORATORY TECHNOLOGY (NTA LEVEL 6)

Semester I

Module Code	**Module Title**	**Credit**
	FUNDAMENTAL MODULES	
GST 06111	Conics and Differential Equation	6
GST 06112	Small Business Development	6

CORE MODULES		
SLT 06111	Advanced Experimental Physics	9
SLT 06112	Modern Nuclear Physics	9
SLT 06113	Physical Chemistry	9
SLT 06114	Microbiology	9
SLT 06115	Physical Chemistry Practical	12
SLT 06116	Project Conceptualization	10
SLT 06117	Industrial Practical Training	10
	Total	**80**

Semester II

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULES		
GST 06213	Numerical Methods and Series	6
GST 06214	Business Planning	6
CORE MODULES		
SLT 06211	Basic Electronics	6
SLT 06212	Applied Experimental Physics	9
SLT 06214	Applied Organic Chemistry	9
SLT 06215	Project Realization	10
SLT 06216	Molecular Biology and Genetics	9
	Total	**55**

Total credits at NTA 6: 135 (Minimum credits required at NTA 6: 120)

(d) BASIC TECHNICIAN CERTIFICATE IN FOOD SCIENCE AND TECHNOLOGY- NTA LEVEL 4

Semester 1

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 04111	Algebra	6
GST 04112	Basic Technical Communication Skills	6
ITT 04116	Computer Basics and Word Processing	6
	CORE MODULES	
FST 04101	Food Science	12
SLT 04112	Basic Experimental Chemistry	6
FST 04103	Food Microbiology	12
SLT 04115	Solutions and bench Reagents	6
SLT 04117	Laboratory Safety	6
	Total	**60**

Semester II

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 04213	Trigonometry, Vectors and Complex numbers	6
ITT 04215	Spread Sheets and Database	6
	CORE MODULES	
SLT 04201	Human Nutrition	12
SLT 04202	Food Chemistry	12
SLT 04203	Fruits and Vegetable Processing Technology	12
SLT 04211	Qualitative Analytical Chemistry	12
	Total	**60**

Total credits at NTA 4: 120 (Minimum credits required at NTA 4: 120)

(e) TECHNICIAN CERTIFICATE IN FOOD SCIENCE AND TECHNOLOGY- NTA LEVEL 5

Semester I

Module	Module Title	Credit

Code		
FUNDAMENTAL MODULES		
GST 05111	Differentiation and Integration	6
GST 05112	Research Methods for Technicians	3
CORE MODULES		
FST 05101	Biotechnology	12
FST 05102	Principles of Food Technology	12
FST 05103	Industrial Practical Training	10
FST 05104	Cereals and Legumes Processing Technology	12
FST 05105	Food Engineering	12
	Total	**67**

Semester II

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULES		
GST 05213	Probability and Statistics for Technicians	6
GST 05214	Technical Writing and Presentations	6
CORE MODULES		
FST 05201	Food Analysis and Instrumentation	12
FST 05202	Food Hygiene	12
FST 05203	Roots and Tuber processing Technology	12
SLT 05216	Basic Environmental Management	6
	Total	**54**

Total credits at NTA 5: 121 (Minimum credits required at NTA 5: 120)

(f) ORDINARY DIPLOMA IN FOOD SCIENCE AND TECHNOLOGY -NTA LEVEL 6

Semester I

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 06111	Conics and Differential equation	6
GST 06112	Small Business Development	6
	CORE MODULES	
FST 06101	Fish, Meat and Poultry Processing Technology	12
FST 06102	Food Packaging Technology	12
FST 06103	Food Quality Assurance	12
FST 06104	Project Conceptualization	10
FST 06105	Industrial Practical Training	10
	Total	**68**

Semester II

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 06213	Numerical methods and Series	6
GST 06214	Business Planning	6
	CORE MODULES	
FST 06201	Forensic Sciences	9
FST 06202	Beverage Processing Technology	12
FST 06203	Diary Processing Technology	12
FST 06204	Project Realization	10
	Total	**55**

Total credits at NTA 6: 123 (Minimum credits required at NTA 6: 120)

(g) BASIC TECHNICIAN CERTIFICATE IN BIOTECHNOLOGY - NTA LEVEL 4

Semester I

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 04101	Algebra	6
GST 04102	Basic Technical Communication skills	6
CSET 04101	Computer Basics and Word processing	6
	CORE MODULES	
BIT 04101	Molecular Biology and Genetics	12
BIT 04102	Basic Cell Biology	12
SLT 04104	Laboratory Equipment Maintenance	9
SLT 04115	Solutions and Bench Reagents	6
SLT 04117	Laboratory Safety	6
	Total	**63**

Semester II

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
ITT 4215	Spreadsheet and Database	6
	CORE MODULES	
BIT 04201	Microbiology Techniques	12
BIT 04202	Instrumentation and Measurement in Biotechnology	12
BIT 04204	Basic Organic Chemistry	9
SLT 04211	Qualitative Analytical Chemistry	12
SLT 04213	Basic Biological Experiments	12
	Total	**63**

Total credits at NTA 4: 120 (Minimum credits required at NTA 4: 120)

(h) TECHNICIAN CERTIFICATE IN BIOTECHNOLOGY - NTA LEVEL 5 [OLD CURRICULUM]

Semester I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 05111	Differentiation and Integration	6
GST 05112	Research methods for Technicians	3
	CORE MODULES	
BIT 05101	Molecular Biology Techniques	9
BIT 05102	Physical Chemistry	9
BIT 05104	Tissue culture	9
SLT 05115	Plants and Animal Taxonomy	9
SLT05116	Laboratory Layout and Organization	9
SLBT 051O3	Industrial Practical Training	10
	Total	**64**

Semester II

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 05215	Technical Writing and Presentation	6
	CORE MODULES	
BIT 05201	Industrial Biotechnology	12

BIT 05202	Environmental Biotechnology	12
BIT 05203	Biochemistry	9
BIT 05204	Agricultural Biotechnology	9
SLT 05214	Biological Specimen Management	9
	Total	**57**

Total credits at NTA 5: 124 (Minimum credits required at NTA 5: 120)

(i) ORDINARY DIPLOMA IN BIOTECHNOLOGY -NTA LEVEL 6 [OLD CURRICULAM]

Semester 1

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06101	Conic and Differential Equation	4
GST 06102	Engineering Study Skills	2
GST 06103	Formalization, Internationalization and E-Business	2
CSET 06101	Basic Computer Programming	2
	CORE MODULES	
SLBT 06101	Tissue Culture	12
SLBT 06102	Biostatistics	9
SLBT 06103	Proteomics	9
SLBT 06104	Research Techniques	9
SLBT 06105	Project Data collection	10
SLT 06108	Industrial Practical Training II	10
	Total	**69**

Semester II

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 06204	Complex number, Numerical methods and series	4
GST 06205	Technical writing	2

GST 06206	Business Planning	2
CSET 06201	Computer programming and Data structure	2
CORE MODULES		
SLT 06206	Molecular Biology and Genetics	9
SLBT 06207	Biotechnology and Genomics	9
SLFT 06203	Forensic Science	9
SLBT 06209	Project Report	10
	Total	**53**

Total credits at NTA 6: 122 (Minimum credits required at NTA 6: 120)

(j) HIGHER DIPLOMA OF TECHNOLOGY IN LABORATORY SCIENCES - NTA LEVEL 7 [NEW CURRICULUM – FORM VI ENTRANCE]

Semester 1

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07111	Basics of Technical Communication Skills	3
COU 07101	Computer Basics and Office Application	9
CORE MODULES		
LSU 07101	Laboratory Instrumentation	9
LSU 07102	Principles of Physics	12
LSU 07103	Laboratory layout and Organization	9
LSU 07104	Laboratory Safety	9
LSU 07105	Solutions and Bench Reagents	12
Total		**63**

Semester2

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07212	Algebra and Application of Integrals	6

CORE MODULES		
LSU 07201	Analytical Measurements and Instrumentation	9
LSU 07202	Applied Experimental Physics	9
LSU 07203	Biological Experiments	9
LSU 07204	Experimental Chemistry	6
LSU 07205	Biological Specimen Management	9
LSU 07206	Industrial Practical Training	10
Total		**58**

Semester 3 [NEW CURRICULUM – NTA 6 ENTRANCE]

Module Code	**Module Title**	**Credit**
FUNDAMENTAL MODULES		
GSU 07312	Engineering Mathematics	9
GSU 07313	Technical Communication	6
CORE MODULES		
LSU 07301	Applied Principles of Physics	12
LSU 07302	Applied Cell Biology	9
LSU 07303	Laboratory Quality Management Systems	9
LSU 07304	Analytical Separation Techniques	12
Total		**57**

Semester 4

Module Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07415	Probability and Statistics	6
CORE MODULES		

LSU 07401	Microbiology Techniques	12
LSU 07402	Advanced Organic Chemistry	12
LSU 07403	Molecular Biology Techniques	12
LSU 07404	Applied Organic Spectroscopy	12
LSU 07405	Industrial Practical Training	10
	Total	**64**

Semester 5

Code	**Module Title**	**Credit**
	FUNDAMENTAL MODULES	
MEU 07503	Finance and Human Resource Management	6
	CORE MODULES	
LSU 07501	Advanced Physical Chemistry	12
LSU 07502	Applied Organic Chemistry Practical	12
LSU 07503	Applied Electronics	9
LSU 07504	Applied Material Science	12
LSU 07505	Research Methods for Scientist	6
	Total	**57**

Semester 6

	CORE MODULES	
LSU 07601	Laboratory Equipment Maintenance, Repair and Installations	9
LSU 07602	Industrial Chemistry	9
LSU 07603	Applied Nuclear Physics	6
LSU 07604	Applied Biochemistry	9

LSU 07605	Biotechnology	9
LSU 07606	Applied Biostatistics	6
SLU 07607	Industrial Practical Training	10
	Elective Modules	
LSU 07608	Lubricant Chemistry	**6**
LSU 07609	Food Biotechnology	**9**
	Total	**73**

Total credits at NTA 7: 372 (Minimum credits required at NTA 7: 360)

(k) BACHELOR OF TECHNOLOGY IN LABORATORY SCIENCES- NTA LEVEL 8 [OLD CURRICULUM]

Semester 1

Module Code	Module Title	Credit
	FUNDAMENTAL MODULES	
MEU 08106	Law for Engineers	6
	CORE MODULES	
SLU 08101	Thermal and Condensed Matter Physics	6
SLU 08102	Ecology	9
SLU 08103	Instrumental Analytical Chemistry and Quality Control	9
SLU 08104	Soil and Water Testing	6
SLU 08105	Project – Data Collection	18
SLU 08106	Industrial Practical Training	12
	Total	**66**
	ELECTIVE MODULES	
CSEU 07302	Microprocessors	9
SLU 08108	Automation in the Laboratory	3

Semester II

Module Code	Module Title	Credit

FUNDAMENTAL MODULE		
GSU 08201	Entrepreneurship for Engineers	3
CORE MODULES		
SLU 08201	Applied Biochemistry	9
SLU 08202	Synthetic Organic Chemistry	9
SLU 08203	Environmental Pollution and Mitigations	6
SLU 08204	Applied Electromagnetism	9
SLU 08205	Project	18
	Total	**54**
ELECTIVE MODULES		
SLU 08206	Lubricants Chemistry	3
SLU 08207	Explosive and Propellants	3
SLU 08208	Wave Mechanics	3
EEU 08201	Renewable energy Technologies	6

Total credits at NTA 8: 137 (Minimum credits required at NTA 8: 120)

6.6.2 List of Academic Staff in the Department of Science and Laboratory Technology

6.6.2 List of Academic Staff in the Department of Science and Laboratory Technology

Lecturer and Head of Department

Dr. Ismail M. Suleiman, BSc. Biotechnology and Laboratory Sciences (SUA), MSc. Epidemiology and Laboratory Management (MUHAS), PhD in Microbiology (SWU-China).

Associate Professors

Ezekiel M. Amri, BSc. Ed., MSc. Bot. (UDSM), PhD Bot (UDSM)

Patrick D. Nsimama, BSc. Ed., MSc (Physics) (UDSM), PhD (Physics), University of the Free State, Bloemfontein, South Africa, Postdoctoral visit, Ilmenau Technical University, Germany.

Lecturers

Dr. Kilaza S. Mwaikono, FTC (DIT), BSc – Food Science and Technology (SUA), MSc – Quality in Analytical Laboratories (University of Algarve – Portugal and University of Cadiz-Spain), PhD - Health and Biomedical Sciences (NM-AIST), Post Doc. Microbiome - Bioinformatics (University of Cape Town)

J. A. Mwakosya, Diploma Ed. Science (Kleruu); BSc Ed. Biology and Chemistry (St John University of Tanzania), MSc. Ed. Biology (UDSM), PhD Molecular Biology and Biotechnology (UDSM)

U. Mtaita, BSc. Ed., MSc. Ed - Chemistry (UDSM)

C. S. Tarimo; BSc. Microbiology (UDSM), MSc. Epidemiology and Applied Biostatistics (KCMUCo), PhD Epidemiology and Biostatistics (Zhengzhou University, Henan, China)

A. Ndabigaye, BSc. Molecular Biology & Biotechnology (UDSM), MSc. Life Sciences and Bioengineering (NM-AIST), PhD in Biomedical Sciences (University of Tasmania, Tasmania, Australia)

G. Maeda, BSc. Ed. Chem. & Biology (UDSM), MSc. Chem (UDSM & Gothenburg University-Sweden), PhD Chem. (UDSM & Uppsala University-Sweden)

I. M. Suleiman, BSc. Biotechnology and Laboratory Sciences (SUA), MSc. Epidemiology and Laboratory Management (MUHAS), PhD in Microbiology (SWU-China).

Assistant Lecturers

*M. M. Magage, BSc. Ed (UDSM), MSc. Climate Change and Sustainable Development (UDSM)

*V. R. Siwalima BSc. Ed. (SUA), MSc. Chemistry (UDSM)

S. J. Dadi, BSc Ed (UDSM-MUCE), MSc. Ed - Chemistry (UDSM)

E. Haule, BSc. Food Science and Technology (SUA), MSc Quality in Analytical Laboratories (University of Gdansk- Poland & University of Algarve- Portugal)

P. Francis, BSc. Biotechnology and Laboratory Sciences (SUA), MSc. Traditional Medicine Development (MUHAS)

L. S. Juma, BSc. Biotechnology and Laboratory (SUA), MSc. Traditional Medicine Development (MUHAS)

*O. Mwakasyuka, Ordinary Dip Lab Tech. (DIT), BMLS (MUHAS), MMLS (MUHAS)

L. O. Mosha, BSc. Ed. (UDSM), MSc. Physics (UDSM)

*F. K. Nyanda, BSc. Ed. (SUA), MSc. (UDSM)

Y. M. Chenyambuga, BSc. Ed Biology and Chemistry (UDSM), MSc. Traditional Medicine Development (MUHAS)

M. P. Msoka, BSc. Ed (UDSM), MSc. Biochemistry (UDSM)

S. H. Kilosa, Diploma Ed. Science (Kleruu), BEd. Science (MWUCE), MSc. Bioethics (MUHAS)

J. M. Kitosi; BSc. Ed (UDSM), MSc. Chemistry (UDSM)

N. G. Kilenga, BSc. Food Science and Technology (SUA), MSc. Food Science and Technology (UDSM)

N. Laini, Ordinary Diploma in Science Laboratory Technology (DIT), B. Tech Laboratory Sciences (DIT), MSc. Environmental Biology (UDSM)

F. J. Kalago, BSc. Ed. Chemistry and Biology (MWECAU), MSc. Chemistry (UDSM)

F. S. Estomini, BSc. Ed. Biology & Chemistry (UDSM), MSc. Ed. Biology (UDSM)

A. F. Nhohozi; Dip Ed (DSM TC), BEd. Sc (UDSM), MSc. Biodiversity Conservation (UDSM)

Tutorial Assistants

*M. H. Sarwat, BSc. Human Nutrition (SUA)

O. A. Ahmed, Ordinary Diploma in Science and Laboratory Technology (DIT), Bachelor of Technology in Laboratory Sciences (DIT).

J. I. Bakari; Diploma Ed. (Kleruu); BSc. Ed. – ICT (UDOM)

J. Gegea, Ordinary Diploma in Science and Laboratory Technology (DIT), BSc. Ed Physics and Chemistry (SJUT)

D. P. Chale, Ordinary Diploma in Science and Laboratory Technology (Arusha Tech), Bachelor of Technology in Laboratory Sciences (DIT)

*N. P. Kitunga, BSc. Food Science and Technology (SUA)

L. Y. Luka, BSc. Ed. Chemistry and Biology (UDSM)

Instructors

F. Mwaimu, BSc Ed. (UDSM)

H. T. Ngulika FTC. Science and Laboratory Technology (DIT), BSc. Biotechnology and Laboratory Sciences (SUA), MSc. Entomology (MUHAS)

V. R. Mwesiga, Senior Instructor, BSc. Ed. Physics and Chemistry (UDSM), MSc. Physics (UDSM)

K. B. Masasi, BSc. Ed., MSc. Physics (UDSM)

J. Y. Mallapo, Diploma in Ed. (Kleruu Teacher's college) and BSc. Ed. (St John's university of Tanzania)

Laboratory Technicians

G. Damas, FTC Lab Tech. (DIT)

* On study leave

6.7 DEPARTMENT OF GENERAL STUDIES

This is an academic department that provides teaching services to all other academic departments in areas of Applied Mathematics, Research Methods, Communication Skills and Entrepreneurship. The department has 38 teaching staff members on full time basis.

6.7.1 Modules offered by General Studies Department

(a) BASIC TECHNICIANS CERTIFICATE (NTA LEVEL 4)

NON-ICT RELATED DEPARTMENTS (CE, EE, ME & LT)

	Module Code	Module Title	Credits
Semester I	GST 04111	Algebra	6
	GST 04112	Basic Technical Communication Skills	6
Semester II	GST 04214	Trigonometry Vectors and Complex Numbers	6

ICT RELATED DEPARTMENTS (CS & ETE)

	Module Code	Module Title	Credits
Semester I	GST 04121	Algebra	6
	GST 04122	Basic Technical Communication Skills	6

Semester II	GST 04224	Trigonometry Vectors and Complex Numbers	6

(b) TECHNICIAN CERTIFICATE (NTA LEVEL 5)

NON-ICT RELATED DEPARTMENTS (CE, EE, ME & LT)

	Module Code	**Module Title**	**Credits**
Semester I	GST 05111	Differentiation and Integration	6
	GST 05112	Research Methods for Technicians	3
Semester II	GST 05213	Statistics and Probability	6
	GST 05205	Technical Writing Presentations	6

ICT-RELATED DEPARTMENTS (CS & ETE)

	Module Code	**Module Title**	**Credits**
Semester I	GST 05121	Differentiation and Integration	6
	GST 05122	Research Methods for Technicians	3
Semester II	GST 05223	Statistics and Probability	6
	GST 05224	Technical Writing Presentations	6

(c) ORDINARY DIPLOMA IN ENGINEERING NTA LEVEL 6

NON-ICT RELATED DEPARTMENTS (CE, EE, ME & LT)

	Module Code	**Module Title**	**Credits**
Semester I	GST 06111	Conics and Differential Equation	6
	GST 06112	Small Business Development	6
	GST 06115	Algebra and Application of Integrals	6

Semester II	GST 06213	Series and Numerical methods	6
	GST 06206	Business Financial Management	6

ICT-RELATED DEPARTMENTS (CS & ETE)

	Module Code	**Module Title**	**Credits**
Semester I	GST 06121	Conics and Differential Equation	4
	GST 06122	Small Business Development	6
Semester II	GST 06213	Series and Numerical methods	6
	GST 06214	Business Financial Management	6
	GST 06129	Fundamentals of Accounting Applications	6

(d) HIGHER DIPLOMA IN ENGINEERING NTA LEVEL 7

NON-ICT RELATED DEPARTMENTS (CE, EE, ME & LT)

	Module Code	**Module Title**	**Credits**
Semester I	GSU 07101	Calculus	6
	GSU 07105	Computing using Mathematical software	6
	GSU 07106	Technical Communication Skills	6
Semester II	GSU 07202	Advanced Calculus	6
Semester III	GSU 07303	Differential Equations and Complex Variables	6
Semester IV	GSU 07404	Probability and Statistics	6
	GSU 07407	Research Methods for Engineers	6

ICT-RELATED DEPARTMENTS (CS & ETE)

	Module Code	**Module Title**	**Credits**
Semester I	GSU 07111	Basics of Technical Communication Skills	6
Semester II	GSU 07212	Algebra and Applications of Integrals	6
Semester III	GSU 07312	Engineering Mathematics	9
	GSU 07313	Technical Communication Skills	6
	GSU 07314	Calculus	6
Semester IV	GSU 07404	Advanced Engineering Mathematics	6
	GSU 07415	Probability and Statistics	6
Semester V	GSU 07516	Numerical Methods and Matrices	6
Semester VI	GSU 07616	Research Methods for Engineers	6

(e) BACHELOR OF ENGINEERING (NTA LEVEL 8)

NON-ICT RELATED DEPARTMENTS (CE, EE,ME & LT)

Semester II	**Module Code**	**Module Title**	**Credit**
	GSU 08201	Entrepreneurship for Engineers	3

ICT-RELATED DEPARTMENTS (CS & ETE)

Semester I	**Module Code**	**Module Title**	**Credit**
	GSU 08111	Engineering Economics	9
	GSU 08112	Engineering Professionalism and Ethics	6
Semester II	**Module Code**	**Module Title**	**Credit**
	GSU 08211	Entrepreneurship and Innovation Management	6

(f) MASTER OF ENGINEERING (NTA LEVEL 9)

SEMESTER I

Module Code	Module Title	Credit
GSMG 9101	Statistics in Maintenance Management	12

(g) MASTER OF TECHNOLOGY IN COMPUTING AND COMMUNICATIONS (NTA LEVEL 9)

SEMESTER I

Module Code	Module Title	Credit
CCG 09101	Linear Algebra and Computational Statistics	12
CCG 09104	Advanced Research Methodology	12
CCG 09107	Numerical Methods	12

SEMESTER II

Module Code	Module Title	Credit
CCG 09215	Mathematical Modelling, Analysis and Simulation	**12**

6.7.2 List of Academic Staff in the Department of General Studies

Lecturer and Head of Department

Dr. Geomira G. Sanga, BSc. Ed.(UDSM), MSc (Math) (Stellenbosch, RSA), PhD (Maths) UDSM

Senior Lecturer(s)

E.C. Rutalebwa, BSc.Ed. (UDSM), MSc. Math (UDSM), MSc. Statistics (K.U. Leuven, Belgium), PhD Statistics (K.U. Leuven, Belgium)

Lecturer(s)

E. Mtisi, BSc. Ed.(UDSM), MSc Math (UDSM) , MS Appl. Biostatistics (Harvard), PhD Math (UDSM),MBA-CM, Mzumbe

T. Ngailo , Bed (Maths) (Tumaini), MSc. Maths (UDSM) , PhD (Maths) UDSM

G. Sanga, BSc. Ed.(UDSM), MSc (Math) (Stellenbosch, RSA) , PhD (Maths) UDSM

L. Gerson, BA Ed. (UDSM), MA Linguistics (UDSM),PhD (Linguistics) UDSM

H. Seleman BA Ed.(UDSM), MA (Linguistics) UDSM ,PhD (Linguistics) UDSM

B. D. Rioba, BA Ed.(UDSM), MA (Linguistics) UDSM,PhD (Linguistics) UDSM

A. Mnabe, BA Statistics. (UDSM), MA (Statistics) UDSM ,PhD (Statistics) UDSM
F. Elias, BSc. Ed. (UDSM), PGD Comp. Sc (UDSM), MSc (Maths) UDSM ,PhD (Maths) UDSM
P. Mwita, Bed (Maths) MWUCE-SAUT, MA (Ed) (SAUT), MSc (NM-AIST),PhD (Maths) UDSM
T. A.Mboko. Bed (Maths) (Tumaini), MSc (Ed) (UDSM),PhD (Environmental Sciences) UDSM
I. R. Kapungu, BED(Maths) (Tumaini), MCSE(DIT), PhD(Maths) UDSM
CPA Dr. Amos Japhet Nsanganzelu; PhD (Business Management-Finance and Accounting) (Ug); MBA (Finance and Strategic Management) Maastricht, The Netherlands); Bachelor of Commerce (Accounting) Honours, UDSM; Advanced Diploma in Transport & Logistics Management, Dar (First Class Honours); Advanced Certificate in Logistics and Supply Chain Management (Dresden, Germany); Certificate in Financial Management (Germany); ACPA 2471; CPA; FCILTA.

Assistant Lecturers

Msangi, BA Ed.(UDSM), MA Linguistics (UDSM)
M. Mihayo, BA Ed.(UDSM) MA (Linguistics) UDSM
M. Ryoba, B Sc (Ed) (UDSM), MSc. Maths (China)
B. Malisa, BSc (Ed) (UDSM), MSc. Maths (China)
S. K. Ndawia, Bed (Linguistics) (MMU), MA (Ed) (UDOM)
I. Mangula, BA (Ed) (SAUT) MA (Linguistics) (UDOM)
U. Mwinuka, BA (Finance) IRDP), MEED (Mzumbe)
J. Chiwinga, Bed Math (Tumaini), MSc(Maths) (UDSM)

R.R. Mungula, B.A Economics (MNMA), MEED (UDSM)
M. Mgendi BSc Bsc(Ed)- UDSM, Msc Math sciences (AIMS), Msc Math Modelling (UDSM)
M. Majogoro, BA. (CBE), MSc (Applied Economics and Business) (Mzumbe, Tz and CMR,
F. Kileo, Diploma (Education) (Monduli Teachers college), Bed(Math)(Iringa University), Msc. Education(Math)-UDSM
N. Macha, BA(Ed) (UDSM), MA (Development Studies) (UDSM)
*N. Honda BSc. (Ed) (UDSM), Msc (Math) (Hungary)

F. I. Ngwembe Dip (Ed) (Korogwe), BEd (Maths), MSc (Maths) (Ruaha C.U),MSc (Computational) (DIT)
D. Rutechura BA (Ed) (UDSM),MA Lingustics (UDSM)
*B. Elisamehe, Bsc. Education (UDSM), Msc. Mathematical Modelling (UDSM
T.S.Sabini BSc. (Ed) (SUA), Msc (Applied Maths) (Nelson Mandela)

R. J. Nzobo, BSc (Math) (Udom), MSc (Math) (AIMS-South Africa) MSc (Computational Math) (PAUSTI-Kenya)

A. H. Ally, Bed(Mathematics) OUT, MSc (Mathematical Science) AIMS Tanzania

J.S. Mlenga, BSc.Ed(SUA), MSc(Math)(AIMS-SOUTH AFRICA)

A. S. Mgabe, BSC (mathematics and statistics)(MWECAU), MSC (Math) (UDSM)

N. K. Bazigiza, B.Ed(Sc) Maths & IT (NIT), Msc. Applied Maths (NM-AIST)

M. Sabuni John BAED (UDSM), MAED (UDSM)

Chief Instrucor II
R.R. Elineema, BSc. Ed.(UDSM), MSc. Operational Research (Mexico)
Instructor I
F. I. Ngwembe Dip (Ed) (Korogwe), BEd (Maths)(UNIVERSITY OF IRINGA), M(Ed)Dip(Ed Maths-korogwe TTC),Bed(Maths)-Iringa University, Med(Curriculum and Instruction)-RUCU, Ms(Computional sc engineering)-DIT
G. Mwampiki BA (Ed)(UDSM)
Cuthbert Barakael Mrema ,BEd (Mathematics) (SAUT)

Tutorial Assistants
Z. Salawa BSc Ed. (UDSM)

M. Masanga Bed(Linguistics) (UDSM)
M.Machera, BAME (UoI)

Instructor II

C. Mrema, BEd (Maths) (Mwenge-SAUT)

W. Bega W. Bega,BEd (Maths) (Tumaini)

* On Study Leave

6.8 E-LEARNING PROGRAMME

(a) Objective of the E-Learning Programme

E-Learning programme at the Dar es Salaam Institute of Technology was established to:

- Provide flexible, innovative and high quality learning.
- Open access to Tanzania about worldwide eLearning courses.
- Encourage lifelong learning using World Wide Web.
- Designing and developing all DIT courses online.

(b) Courses and Services

To achieve these objectives of providing a wide range of services to Tanzanians and its partner organizations, the department plans to provide:

- Course Design and Development
- Virtual Campus
- Virtual Learning Space
- E-Community
- Research
- Staff Development

(a) Programme Coordinator

e-Learning Coordinator: Vacant

CHAPTER SEVEN

PROFILES OF ACADEMIC RELATED DIRECTORATES, DEPARTMENTS OR UNITS

7.1 RESEARCH AND PUBLICATION

The unit of research and publications was established purposely in order to implement the policy for research and publications at the Institute. The overall objective of the DIT research and publication unit is to put in place a clear and comprehensive institutional framework, which is conducive for stimulating and sustaining research and publication activities. Specifically, the unit has been established with the following objectives.

a) To put in place an appropriate and comprehensive framework for executing, promoting and sustaining research and publication activities at the Institute
b) To promote research, innovations, technology development and publication activities among members of DIT.
c) To increase and effectively coordinate research and publication activities at the Institute.
d) To create mechanism for staff motivation, rewarding and development of confidence so that each member participates actively in research and publications.
e) To facilitate the development of the culture of job creation (entrepreneurship development).
f) To co-operate/collaborate with other Institutions in undertaking research activities.
g) To have in place a functional mechanism for promoting research and monitoring the progress of research and publication activities at the DIT.

h) To develop research acquisition strategic plan.
i) To enhance dissemination of knowledge.
j) To establish research and business links with public and private sector.
k) To conduct workshops, conferences, etc.
l) To be custodians of research reports and disseminate these reports, where appropriate, for academic and other use.
m) To coordinate acquisition of resources needed to conduct research.
n) To establish means to coordinate research resources and activities.
o) To establish mechanism for monitoring research funding and disbursement from different sources.
p) To develop and enhance research capability.
q) To develop intellectual property right policy and be custodian of patents and copyrights at the Institute
r) To promote and support students' innovative ideas/projects to create more DIT graduates –based start-ups, and SMEs.

7.2 POSTGRADUATE STUDIES

The objectives of Postgraduate Studies are:

i) To Enhance the existing as well as develop new educational links with other institutions of higher education within and outside the country
ii) To coordinate the establishment of postgraduate programmes in Civil Engineering, Mechanical Engineering, Electrical Engineering, Laboratory Technology, Electronics and Telecommunication Engineering, Computer Studies and such other disciplines as the Institute shall implement as per strategic plan.
iii) To coordinate teaching, examination and research carried out at postgraduate level.
iv) To promote implementation of research for postgraduate students

v) To collaborate with the quality control department of the institute to ensure a quality delivery of postgraduate programmes.

7.3 THE INSTITUTE CONSULTANCY BUREAU (DIT ICB)

The Institute Consultancy Bureau (ICB) was established/transformed from former Research and Consultancy Bureau (RCB) to administer and coordinate consultancy carried out by DIT. the institute and hence generate revenue for the institute and its staff.

7.3.1. Specific objectives of the Consultancy Bureau (DIT ICB)

i) Promote and administer the implementation of consultancy policies and procedures for all commercial activities in the institute that fall under its jurisdiction.

ii) Enhance the capability of DIT to contribute effectively in the industrial development of Tanzania through the provision of consultancy, expert professional services and professional advancement (or development engineers and technologists.

iii) Enable the institute to generate funds to subsidies grants from the government and other donors for the institute to meet its financial needs.

iv) Enables the staff in DIT to supplement their income thus enhancing staff retention.

v) Optimize the use of DIT expertise and resource to solve engineering technology and related problems.

vi) Provide means for academic and other DIT staff to gain professional experience that shall be transferred to students and thereby improve quality of outputs

vii) Make available DIT training facilities to the general public through short term and medium course for the purpose of ensuring that engineers keep abreast with the rapidly advancing technology

viii) Acquire knowledge on new development and needs in the trade and adjust curriculum accordingly

ix) Provide expert technical support to existing industry operations and to facilities developments of new industries and their products.

x) Establish and offer regular professional development programmes for the

advancement of local engineering personnel in the industry.

xi) Facilitate establishment and enhancement of contracts and relations between DIT staff and industries.

xii) Provide a platform through which DIT staff can transfer their knowledge and skills to industry and

xiii) Assist DIT staff to develop competencies in soliciting for jobs and in preparing winning proposals for consultancies and services

Available Courses for 2024/2025

The following short-term courses have been planned for the academic year **2024/2025**. However, the list is not exhaustive as other pertinent tailor made courses can be designed to suit individual groups whenever need arises.

Laboratory Technology

Course Title	Course Contents	Duration	Tuition Fee (Tshs)
Advance Level Secondary School Practical(s)	Practical work in Physics, Chemistry and Biology	6 Weeks 2hrs/day	30,000/=
Ordinary Level Secondary School Practical(s)	Practical work in Physics, Chemistry and Biology.	6 Weeks 2hrs/day	25,000/=
Laboratory Organization and Management.	Introduction to laboratory organization and management, Laboratory inspection, Laboratory maintenance, stores and chemical storing, Laboratory safety and first aid, preparation of chemistry and biology bench reagent, General knowledge of all equipment and apparatus.	10 weeks 2hrs/day	260,000/=

Laboratory Instrumentation and Maintenance	Instrumentation, Maintenance and repair of scientific equipment, introduction to computer – Aided experiments and Analysis	10 weeks 2hrs/day	195,000/=
Chemistry Techniques	Mole concepts and its practical application, calculations of the mole concept, Standard solution, preparation of the standard solution from standard reagent	10 weeks 2hrs/day	234,000/=
Biology Techniques	Introduction to biology practical work, preparation of biological reagent, collection, preservatives and preservation of biological specimens, Microscopes: types, care and maintenance, Temporary and permanent preparation of hand cut section of plants, examination of prepared slides under microscopes, Practical on food test, Report writing.	10 weeks 2hrs/day	195,000/=
Physics Techniques	Experimental skills, experiment in mechanics, experiments in properties of matter, experiment in light, experiment in heat, experiment in electricity, report writing.	10 weeks 2hrs/day	169,000/=

Mechanical Engineering

Course Title	Course Contents	Duration	Tuition Fee (Tshs)

Course Title	**Course Contents**	**Duration**	**Tuition Fee (Tshs)**
Introduction to Computer Aided Drafting (AutoCAD)	Starting the program Use of Drawing tools Modification of features Preparation of layers Preparation of Technical Drawing Dimensioning, Scaling, title block and plotting	4 Weeks 2hrs/day	120,000/=
Computer Aided Design (Modelling; Solid works, Pro Engineering, etc)	History, definition, field of applications Introduction to parametric software Modelling of parts Modelling of assembly Technical drawing from a model Animation and analysis Plotting	6 Weeks 2hrs/day	200,000/=
Advanced Computer aided Design (Solid Work, Cosmo works) (For Engineers and Project Managers)	Review of parts, assembly and drawing concepts Complete design exercise -Idea, Concept, Optimization -Analysis of developed model -Drawings	8 Weeks 2hrs/day	300,000/=

Course Title	**Course Contents**	**Duration**	**Tuition Fee (Tshs)**
Project Management (MS Project)	Basic Introduction to Project Management Concept Defining a Project Defining a time line Resource, Assignment & Costs Tracking the work Assignment & Tutorials	8 Weeks 2hrs/day	300,000/=
Basic welding technology & Practice	Fundamental of Metallurgy, Basic Electrical principles, Manual metal arc welding	6 weeks 3hrs/day	240,000/=
Intermediate welding technology	Workshop safety, Welding Science, Metallurgy, Oxy-acetylene welding, Arc-welding Process, Arc-welding Practice, Oxy-acetylene welding practice.	9 weeks 3hrs/day	320,000/=
Modern welding	Modern welding Welding processes: Welding hazards & prevention. Welding Techniques Simple weld estimates	6 weeks 3hrs/day	200,000/=
Basic foundry technology	Tools and equipment for moulding, patterns and core. Casting techniques and finishing operations.	6 Weeks 3hrs/day	200,000/=

Course Title	Course Contents	Duration	Tuition Fee (Tshs)
Industrial energy management	Data gathering and analysis, Electrical metering and tariffs, Insulation, Plant survey, Refrigeration and heat pump systems, Fuel fired equipment, Steam generation and	3 Weeks 3hrs/day	90,000/=
Advanced refrigeration and air condition	Advanced Psychometric, Central A/Conditioning System-Design, Construction and Maintenance. Duct design and construction, Cold room design and construction	6 weeks 3hrs/day	190,000/=
Intermediate refrigeration and air conditioning	Refrigeration systems, parts and construction repair of refrigerators and freezers Maintenance of refrigerators and system Psychometric Principles of operation of air conditioners Repair and service air conditioners	12 weeks 3hrs/day	280,000/=
Motor Vehicle Mechanics (General)	Engines – (Internal Combustion engine) Petrol, Transmission System (manual), Suspension System, Basic Auto-electrics (Simple)	12 weeks 3hrs/day	300,000/=
Auto-Electric	Battery Systems. Ignition system Charging System Starting, Light etc System Simple car Electronics Other accessories	6Weeks 3hrs/day	240,000/=
Electronic Fuel Injection	Basic electronics, Principles of Petrol fuel injection. Electronic fuel injection. ECU. Sensors and their function.	6 Weeks 3hrs/day	240,000/=

Course Title	**Course Contents**	**Duration**	**Tuition Fee (Tshs)**
Diesel Engine (CIE)	Principles of operations. Injector pumps. Injector Nozzles. Governors. Phasing and calibration.	4 Weeks 3hrs/day	240,000/=

Electronics and Telecommunications Engineering

Course Title	Course Contents	Duration	Tuition Fee (Tshs)
Basic Electronics	Passive Electronic components: - Resistors, capacitors, inductors Active Electronic Components: - Diodes, transistors, Integrated circuits, diacs, triacs, thyristors	4 Weeks (60 hours)	250,000/=
Digital Electronics	Number systems, Logic gates and logic expressions, sequential logic circuits, logic families, Memories, Design and troubleshooting of digital circuits and systems	4 Weeks (60 hours)	200,000/=
Practical electronics	Direct and alternating current (DC and AC), Resistors (types, values and colour coding), capacitive and inductive Networks, Resistivity and conductivity, Semi-conductor diodes and their applications, Transistors and their applications, IC application, Amplifiers and oscillators, Common emitter, Field Effect transistors, logical fault finding	8 Weeks 2hrs/day	250,000/=

Course Title	Course Contents	Duration	Tuition Fee (Tshs)
Television and radio repair	Basic electricity and Electronics, Devices and measuring Instruments, A.C circuit and tuned circuit, Radio waves propagation and bands, Amplifiers, Radio receiver operation principles, TV camera and picture tube operation, Principles of Audio and Video tape recording, Service equipment and application, Troubleshooting exercises in TV and Radio	12 Weeks 3hrs/day	400,000/=
Satellite Dish Design and Construction		4 Weeks (60 hours)	340,000/=
Maintenance of Electronic equipment and Instrument use	Voltmeter usage, Ammeter usage, ohmmeter usage, Oscilloscope usage, Diode testing, Transistor testing, IC testing, Amplifier trouble shooting.	10 Weeks (96 hours)	400,000/=
Communication System Design(CSD)	Integrated network design (Fibre, VSAT and WiFi Technology), Site knowledge/survey, Site implementation device and tools, Network implementation, Network maintenance, Field work.	4 Weeks (96 hours)	500,000/=
Electronic & Electrical equipment maintenance & repair	PA systems, Audio equipment, motors, ac, dc, TV systems, gymnastic equipment	4 weeks (96 hrs)	300,000/=

Course Title	Course Contents	Duration	Tuition Fee (Tshs)
CCTV Camera Installation, Monitoring and Servicing	Analogy CCTV, IP CCTV and wireless CCTV installation and configuration, CCTV monitoring CCTV system repair and servicing	3 weeks 2hrs/day	350,000/=

Electrical Engineering

Course Title	Course Contents	Duration	Tuition Fee (Tshs)
Renewable Energy	Voltage size nomination, Load calculation, Switch gear choice, Solar module selection, Battery sizing, Installation procedures, Cost estimation, Analysis of different seasons of the year, Charge controllers, Inverters and TBS specifications for solar PV system.	3 months 3hrs/day	550,000/=
Maintenance of Electric Equipment and Industrial Instrumentation	Introduction to electrical system(AC, DC, 3Φ, 1Φ) Introduction to an electrical equipment, Introduction to an electrical maintenance, Basic electricity, AC Circuit and DC circuit, IEE Regulations, Electrical design	9 weeks 2hrs/day	300,000/=
Winding of Electrical Machine	Basic concept of winding. A.C windings. -Single phase winding -Three phase winding D.C winding.	3 months 3hrs/day	400,000/=

Course Title	Course Contents	Duration	Tuition Fee (Tshs)
Electrical Installation (domestic and Industrials)	Single phase installations (various). Three phase installations (Various).	8 Weeks 3hrs/day)	400,000/=
Industrial Process Control	Control loop theory. Control modes. Process gain and dynamics. Nonlinear adaptive control.	3 months 3 hrs/day	320,000/=
Digital circuits and converters.	Combination and sequential logics design, Analogue to digital and Digital to analogue converters	Months 2hrs/day	350,000/=

Building and Civil Engineering

Courses Offered	Duration	Tuition Fee (Tshs)
Supervision of construction works	3weeks	450,000.00
Building construction and maintenance	3 weeks	450,000.00
Quality control – testing of engineering soils, Aggregates and bituminous materials	3 weeks	450,000.00
Quality control – testing of engineering soils, Aggregates and bituminous materials	2 weeks	450,000.00
Civil engineering computer applications part I	4 weeks	250,000.00
Surveying for civil engineering and building Technicians and engineers	3 weeks	450,000.00
Construction and maintenance of low cost highway structures	3weeks	450,000.00
Safety on highway work zones	2 weeks	300,000.00
AutoCAD for architectural design	4 weeks	350,000.00

Courses Offered	**Duration**	**Tuition Fee (Tshs)**
Entrepreneurship/business management	4weeks	200,000.00
Design of low cost water supply projects	3 weeks	450,000.00
Labour based road maintenance for earth roads	4 weeks	450,000.00
Highway Structures maintenance	3weeks	450,000.00
Fire safety in building structures	2 weeks	300,000.00
Contract administration	3 weeks	450,000.00
Site management (general)	4weeks	600,000.00
Health and safety in construction sites	4weeks	600,000.00
Map 5 – traffic safety analysis	4weeks	600,000.00
Solid waste management	4weeks	450,000.00

Note:

1. Starting date is every 1st Monday of the Month
2. Time for course teaching and learning is 4.00 – 6.00 pm every day of the course

GENERAL STUDIES DEPARTMENT SHORT COURSES

Course Title	**Course Content**	**Duration**	**Time**	**Starting Date**	**Tuition Fee (Tshs)**
Revisions on Basic Mathematics	Fractions, Decimals and percentages. Compounding, Discounting and Amity,	6 Weeks	4:30- 6:30 pm	Every first date of the month	250,000/=

	Applied Calculus. Matrix operations. Time value of money. Cost Revenue and Profit				
Introduction to statistics	Data collection. Statistical measure. Regression and correlations. Time series analysis Index number Probability Theory	6 weeks	6:30-8:30 pm	Every first date of the month	300,000/=
Applied statistics	Basic Review on probability Theory. Statistical Inferences. Hypothesis Testing. Correction and Regression. Forecasting. Time series.	6 weeks	4:30-6:30 pm	Every first date of the month	400,000/=

Operations research	Inventory control Queuing Theory Simulations Linear programming Transportation and assignment Network analysis Sequence	6 weeks	4:30-6:30 pm	Every first date of the month	400,000/=
Introduction to research methods and data analysis	Introduction to research. The research process. Data analysis process. Hypothesis Testing. Technical of Data analysis. Data Interpretation.	8 weeks	6:30-8:30	Every first date of a month	400,000/=

7.4 DEPARTMENT OF INDUSTRIAL LIAISON AND CAREER GUIDANCE (ILCG)

7.4.1 The main objective of the department is to provide guidance for efficient and effective coordination of industrial practical training (IPT), career counselling for the Institute's students, job placement and follow up of Institutes graduates.

To accommodate the objectives, the department has two functional sections mainly:

- IPT Coordination
- Career Counselling

The main link between the ILCG department and other academic departments is through the Departmental IPT and Career Guidance Coordinators.

(a) IPT Coordination section deals with:

i. Soliciting IPT placements for all students at the Institute
ii. Planning and coordinating IPT supervision
iii. Coordinating study visits for students and staff to industries and companies
iv. Coordinating study visits for students and staff from other Institutions
v. Coordinating professional lectures for students in and outside the Institute
vi. Coordinating staff professional attachments to industries and companies
vii. Coordinating employment opportunities for the Institute's graduates

(b) Career counselling section are:

i. identifying and providing solutions to existing potential recruitment problems for the graduates
ii. identifying, coordinating and streamlining professional requirements against industry employer's needs and demands
iii. organizing and coordinating job placements and career guidance services
iv. organizing and managing database on DIT graduates
v. locating the whereabouts of the DIT graduates in the industry

vi. soliciting feedback information on DIT graduate's performance at their respective work stations and establishing a benchmarking system

vii. coordinating matters related to facilities in exhibitions and publicity

7.4.2 Industrial Practical Training (IPT)

IPT is one of the modules included in all academic programmes at the Institute. It is therefore an essential integral part of the entire training. The main objective is to provide an opportunity to students to merge theory and practice.

Industrial practical training (IPT) Structure

IPT module has specific credit values realized in specified time as shown in the table below.

IPT MODULE	Qualification level	Recommended Timing of IPT	Credit	Duration
IPT I	NTA level 5 (First Semester)	End of Semester of NTA Level 4	10	10 weeks
IPT II	NTA level 6 (First Semester)	End of 2nd Semester of NTA Level 5	10	10 weeks
IPT I (For Form VI candidates)	NTA level 7 (Third Semester)	End of 2nd Semester of NTA Level 7	12	9 weeks
IPT II (For Form VI candidates)	NTA level 7 (Fifth Semester)	End of 4th Semester of NTA Level 7	12	9 weeks
IPT III (For Form VI candidates)	NTA level 8 (First Semester)	End of 6th Semester of NTA Level 7	12	9 weeks
IPT III (For OD candidates)	NTA level 7 (Third Semester)	End of 2nd Semester of NTA Level 7	12	9 weeks
IPT IV (For OD candidates)	NTA level 8 (First Semester)	End of 4th Semester of NTA Level 7	12	9 weeks

IPT Modules are treated as courses of succeeding year for all OD and Undergraduate Programmes

7.5 LIBRARY SERVICES

One of the major aspirations of the DIT is to continuously expand its library services in order to foster learning skills of its students and improve professional working conditions of staff. The Institute has, at present, a library whose collection is primarily geared towards providing materials and documentation services to support teaching and learning activities. The collections include materials for major courses in the fields of Electrical Engineering, Civil Engineering, Mechanical Engineering, Electronics and Telecommunications Engineering, Laboratory Technology and Computer studies. Also, it offers materials for supporting subjects such as Mathematics, Communication Skills, Development Studies, Labour Law and Engineering Management. According to the statistics of the previous stocktaking the library has a total number of 3,727 documents. These include up-to-date textbooks, professional journals, theses, manuals, bibliographies, reports, research papers, and handbooks.

Membership: Any person attending a course or working at DIT is entitled to the use of the library services, and therefore allowed to register him/ herself as a member. The library facilities are available to all students with valid identity cards. However, for students, a token membership fee of ten thousand shillings (10,000/=) annually is contributed.

Every student shall enjoy the services of the Institute's library except for those students who for any good cause; have been banned from use of such services and those services shall be available to students at such hours as the management may prescribe. Any student borrowing books, periodicals, magazines or any document from the library shall personally be responsible for their care, safety and shall return them to the issuing offices or librarian on the specified date for their return.

Opening Hours

Monday – Friday	0900 -2000 hrs
Saturday	0900 -1300 hrs
Public Holidays and Sunday	Closed

The library management aims to automate its library information materials to create easy and quick access. In line with that, it will create access to CD – ROM titles, E-books, E-journals, Internet searching and e-mail communication within the library.

List of Staff in the Library

Lecturer and Head of Library

Dr. A. Mnabe, BA Statistics. (UDSM), MA (Statistics) UDSM ,PhD (Statistics) UDSM

Senior Library officer II

C. A. Komba, B. A in Librarianship (Tumaini Makumira University)

Library Officer I

O.O. Ndimbo, B. A in Librarianship (Tumaini Makumira University)

B. Kamtawa, B. A in Librarianship (Tumaini Makumira University)

Library Officer II

A. M. Sebure, B. A in Librarianship (Mzumbe University)

Senior Library Assistant II

H. Ndoto, Cert & Dip. Librarian (SLADS Bagamoyo)

Senior Library Assistant I

A. Nyenze, Cert & Dip. Librarian (SLADS Bagamoyo)

A. S. Msofe, Cert & Dip. Librarian (SLADS Bagamoyo)

F. Memba, Cert & Dip. Librarian (SLADS Bagamoyo)

7.6 DIRECTORATE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

The Directorate engages actively with the Institute community, soliciting its current and changing requirements in support of the vision and strategy in order to:

- Meet users' expectation and needs for high quality service in ICT, Information resources and print;

- Deliver ICT services effectively, efficiently and responsively;
- Develop and enhance close partnership with departments and other institute so as to encourage the best working practice;
- Plan ahead cooperatively to keep pace with change in it providing leadership for innovation in ICT;
- Deploy with economy and efficiency its resource of people, money, space and equipment.

7.6.1 The Key Objectives of the ICT Directorate

(a) To implement strategies for improving ICT infrastructure and for support to teaching staff involve the department's staff in developing the new culture in ICT;

(b) To play a leading role in developing and implementing the Institute's ICT/information strategy

(c) To exploit the opportunities for the future learning resource centre to improve support for teaching, learning and research;

(d) To contribute to and enhance institute initiatives in open and distance learning, lifelong learning, regional development and other outreach services

(e) To improve service quality to students (e.g. inter-library loans, enquiry handling, registration for ICT services etc.

(f) To improve robustness, resilience of ICT systems in the institutes.

7.6.2 List of Staff in the ICT Directorate

Director of ICT

O. Mnzava, Adv Dipl. Comp Science, MSc IT and Mgt. (IFM)

Web Master

Ibrahim Jumanne, BSc. (Computer Science) (UDSM)

Instructors

E. Bebwa, Cert. Electrical Installation (VETA), Adv Dipl Comp Science (Macmaine School of Computing), MSc. Software Engineering (Beijing Institute of Technology China)

* R. Nyangusi Dipl. Comp. Eng(DIT), Beng. Comp. Eng(DIT), MSc Comp. Eng (China)

ICT Officers

B. Sonzogo, FTC, Comp. Eng (DIT), Higher Diploma ETE (DIT), MSc. Biomedical Eng (China)

A. Kasigara, OD ETE (DIT), BSc. Telecom Eng (UDSM)

M. Mlanzi, Cert. in journalism (Tanzania school of Journalism), Diploma in Computer Engineering (New Harrison), Advanced Diploma in Embedded System Design (India), BSc. in Animation and Graphic Design (Indian)

*Daniel Maduhu, OD (Computer Eng) (DIT), BSc. (Computer Science) (UDSM)

W. Rwegasira BSc. (ICT with Business), (Mzumbe)

J. Makunguru OD (Information and Computing Technology), (KITM)

J. Ibrahim Cert. in ICT DIT)

* On study leave

CHAPTER EIGHT

OTHER DIT CAMPUSES

8.1 MWANZA CAMPUS

Message from the Director Dr. John Msumba

DIT Mwanza campus continues to serve societal needs and excel in academics, research and consultancy. In the new academic year 2024/25, I am pleased to inform you that, we have four new Diploma programmes, namely, Fashion and Design Technology, Textile Technology, Agro-Post Harvest Technology and Agro-Bioprocess Technology leading to a National Technical Award (NTA Level 6). This adds up to the existing leather-based programme, Ordinary Diploma in Leather Products Technology, Leather Processing Technology, Ordinary Diploma in Science and Laboratory Technology, Food Processing Technology and short courses, to mention a few, Leather Tanning, Basic Shoe Making, Leather Goods Making, and Information and Communication Technology (ICT).

To further spearhead realization of Tanzania industry economy, DIT Mwanza campus continue to offer National Vocational Education Trainings in Footwear and Leather Goods Technology, Laboratory Assistant and ICT, leading to National Vocational Awards (NVA Levels 1 - 3). All courses have been revolutionised by adopting a teaching factory approach, whereby training is interactively linked to real life factory businesses. In addition to that, we continue to support the Tanzanian hides and skins derived industries to leather products development and manufacturing.

Furthermore, in the new academic year, DIT Mwanza Campus will commission its new infrastructures, including, modern scientific and testing laboratories, lecture theatres and classrooms, library, Teaching tannery, Leather Manufacturing workshops to mention a few as part of the improvement of learning environments.

With these achievements and more to come, we thank all developing partners and collaborators, with whom we have continue to implement a memorandum of understanding (MoU) for skills development training to youths in leather industry, including the Kilimanjaro International Leather Industries Company Limited in Kilimanjaro region, Tanzania Bureau of

Standards, The Kisumu National Polytechnic, Yogyakarta Polytechnic of Indonesia and Federal TVET Institute of Addis Ababa, Ethiopia, Africa Leather and Leather Products Institute (ALLPI) of Ethiopia with whom we have signed MoU for skill-upgrading trainings and technology transfer. We are optimistic to realize our vision and mission.

"A GOOD DEED IS NEVER LOST"

Courses offered by DIT Mwanza Campus

Mwanza campus has a teaching tanneries, footwear and leather goods workshops , lecture theatres, classrooms, scientific laboratories and computer laboratories. In addition, it has 30 academic staff and 24 supporting staff members. The campus offers the following programmes:

Ordinary Diploma

(a) Ordinary Diploma in Science and Laboratory Technology (NTA Level 4-6)

(This programme is the same as the one offered at Dar es Salaam campus)

(b) Basic Technician Certificate in Leather Products Technology (NTA Level 4)

(c) Technician Certificate in Leather Products Technology (NTA level 5)

(d) Ordinary Diploma in Leather Products Technology (NTA level 6)

(e) Basic Technician Certificate in Food Processing Technology (NTA level 4)

(f) Technician Certificate in Food Processing Technology (NTA level 5)

(g) Ordinary Diploma in Food Processing Technology (NTA level 6)

(h) Basic Technician Certificate in Leather Processing Technology (NTA level 4)

(i) Technician Certificate in Leather Processing Technology (NTA level 5)

(j) Ordinary Diploma in Leather Processing Technology (NTA level 6)

(k) Ordinary Diploma in Fashion and Design Technology (NTA level 4 – 6)

(l) Ordinary Diploma in Textile Technology (NTA level 4 – 6)

(m) Ordinary Diploma in Agro Post Harvest Technology (NTA level 4 -6)

(n) Ordinary Diploma in Agro Bio Process Technology (NTA level 4 – 6)

Bachelor Degree

Bachelor of Science and Laboratory Technology (NTA Level 7-8)

National Vocational Awards (NVA level 1 – 3) programmes

(a)Footwear and Leather Goods

(b) Laboratory Assistant and

(c) Information and Communication Technology

(a) BASIC TECHNICIAN CERTIFICATE IN LEATHER PRODUCTS TECHNOLOGY (NTA LEVEL 4)

SEMESTER I

Code	Module title	Credits
	FUNDAMENTAL MODULES	
GST 04111	Algebra	6
GST 04112	Basic Technical Communication skills	6
ITT 04116	Computer Basic and word Processing	6
	Sub Total	**18**
	CORE MODULES	
LPT 0411	Footwear Design and Pattern Engineering	12
LPT 0412	Leather Products Materials	09
LPT 0413	Fundamental of Footwear Technology	12
LPT 0414	Fundamental of Leather Goods Technology	12
	Sub Total	**45**
	Total	**63**

SEMESTER II

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
COT04216	Spread Sheet and Database	6
	Sub Total	**6**
	CORE MODULES	
LPT 0421	Tools and Machine maintenance in Leather Products Technology	09
LPT 0422	Leather Marketing	09
LPT 0423	Advance Footwear Technology	12
LPT 0424	Advance Leather Goods Technology	12
	Sub Total	**42**
	Total	**58**

(b) TECHNICIAN CERTIFICATE IN LEATHER PRODUCTS TECHNOLOGY (NTA LEVEL 5)

SEMISTER I

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 05112	Research methods for Technicians	3
GST 05111	Differentiation and Integration	6
	Sub Total	**9**
	CORE MODULES	
LPT 05101	Process of Leather Manufacture	15
LPT 05102	Polymeric Materials	12
LPT 05103	Leather Products Machinery	15
LPT 05104	Industrial Practical Training I	10

	Sub-Total	**52**
Total		**61**

SEMISTER II

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 05213	Probability and Statistics for Technicians	6
GST 05215	Technical Writing and Presentations	6
	Sub Total	**12**
CORE MODULES		
LPT 05201	Design Trends in Leather Products Manufacture	15
LPT 05202	Application of CAD in Leather Products Design and Manufacturing	15
LPT 05203	Sports Leather Goods Technology	15
LPT 05201	Footwear Performance and Customer Care	12
	Sub Total	**57**
Total		**69**

(c) ORDINARY DIPLOMA IN LEATHER PRODUCTS TECHNOLOGY (NTA 6)

SEMISTER I

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06112	Small Business Development	6
	Sub Total	**6**
CORE MODULES		
LPT 06101	Basic Orthopaedic Footwear	12
LPT 06102	Ladies Leather Products Manufacture	6
LPT 06103	Safety in Leather Products Industry	12
LPT 06104	Heavy Boots Manufacturing Technology	10

LPT 06105	Project Data collection	10
LPT 06106	Industrial Practical Training II	10
	Sub Total	**60**
Total		**66**

SEMESTER II

Module Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06214	Business Planning	6
	Sub Total	**6**
CORE MODULES		
LPT 06201	Quality Control and Standards for Leather Products	12
LPT 06203	Industrial Organization and Management	6
LPT 06204	Leather Garments Technology	12
LPT 06205	Fancy Leather Goods Technology	12
LPT 06206	Project – Data Analysis and Reporting	10
	Sub Total	**52**
Total		**56**

(d) BASIC TECHNICIAN CERTIFICATE IN LEATHER PROCESSING TECHNOLOGY (NTA LEVEL4)

SEMESTER I

Module code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 04111	Algebra	6
GST 04112	Basic Technical Communication Skills	6
ITT 04116	Computer Basics and Word Processing	6
	Sub Total	**18**

CORE MODULES		
LTT 04101	Introduction to Hides and Skins Preservations and Grading	12
LTT 04102	Introduction to Biochemistry of Leather Processing	12
LTT 04103	Fundamental of Inorganic Chemistry	6
LTT 04104	Physical Chemistry	9
LTT 04105	Leather Processing Machines and Occupational Health and Safety	6
	Sub Total	**45**
Total		**63**

SEMESTER II

Module code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 04214	Trigonometry, Vectors and Complex Numbers	6
ITT 04215	Spread Sheets and Database	6
	Sub Total	**12**
CORE MODULES		
LTT 04201	Basic Leather Processing Technology	15
LTT 04202	Leather Marketing	6
LTT 04203	Fundamental of Organic Chemistry	6
LTT 04204	Biotechnology of Leather Manufacture	9
LTT 04205	Introductory to Tannery Practice	9
	Sub Total	**45**

Total	**57**

(e) TECHNICIAN CERTIFICATE IN LEATHER PROCESSING TECHNOLOGY (NTA LEVEL 5)

SEMESTER I

Module code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 05112	Research Methods for Technician	3
	Sub Total	**3**
	CORE MODULES	
LTT 05101	Principle of Pre-tannage	9
LTT 05102	Unit Operation	9
LTT 05103	Tannery Engineering	9
LTT 05104	Principle of Inorganic Tanning	12
LTT 05105	Production of Leather Varieties	6
LTT 05106	Industrial Practical Training	10
	Sub Total	**55**
	Total	**58**

SEMESTER II

Module code	Module Title	Credits
	FUNDAMENTAL MODULES	

GST 05215	Technical Writing and Presentations	6
GST 05213	Probability and Statistics for Technicians	6
	Sub Total	**12**
CORE MODULES		
LTT 05201	Principle of Organic Tanning	12
LTT 05202	Analytical Chemistry of Tanning Materials	9
LTT 05203	Post-tanning Processes	9
LTT 05204	Leather Finishing	9
LTT 05205	Basic Tannery Practice	12
	Sub Total	**51**
Total		**63**

(f) ORDINARY DIPLOMA IN LEATHER PROCESSING TECHNOLOGY (NTA LEVEL 6)

SEMESTER I

Module code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06112	Small business development	6
	Sub Total	**6**
CORE MODULES		
LTT 06101	Environmental Waste Management in Leather Processing	12
LTT 06102	Material Testing of Leather	12
LTT 06103	Tannery Practice	12
LTT 06104	Development of Project Proposal	10
LTT 06105	Material Evaluation and Analysis	9

LTT 06106	Industrial Practical Training	10
	Sub Total	65
Total		**71**

SEMESTER II

Module code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06214	Business Planning	6
	Sub Total	**6**
CORE MODULES		
LTT 06201	Emerging Leather Technology	12
1LTT 06202	Leather History and Ethics	9
LTT 06203	Technology of footwear Manufacture and by-products	12
LTT 06204	Project Implementation	10
	Sub Total	**43**
Total		**49**

(g) BASIC TECHNICIAN CERTIFICATE IN FOOD PROCESSING TECHNOLOGY (NTA LEVEL 4)

SEMESTER I

Module code	Module Title	Credits

FUNDAMENTAL MODULES		
GST 04112	Basic Technical Communication Skills	6
GST 04111	Algebra	6
ITT 04116	Computer Basics and Word Processing	6
	Sub total	**18**
CORE MODULES		
FPT 04101	Food Microbiology	12
FPT 04104	Solutions and Bench Reagents	6
FPT 04105	Laboratory Safety	6
FPT 04103	Fruits Processing Technology	12
FPT04102	Fundamentals of Food Processing	12
	Sub total	**48**
TOTAL		**66**

SEMESTER II

Module code	Module Title	Credits
FUNDAMENTAL MODULES		
ITT 04215	Spreadsheet and Database	6
CORE MODULES		
FPT 04209	Human Nutrition	12
FPT04208	Vegetable Processing Technology	12
FPT 04206	Fish Processing Technology	15
FPT 04207	Food Chemistry	12

	Sub total	**51**
Total		**57**

(h) TECHNICIAN CERTIFICATE IN FOOD PROCESSING TECHNOLOGY

(NTA LEVEL 5)

SEMESTER I

Module code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 05112	Research Methods for Technicians	3
CORE MODULES		
FPT 05105	Industrial Practical Training	10
FPT 05104	Legumes Processing Technology	15
FPT 05103	Cereals Processing Technology	15
FPT 05102	Principles of Food Technology	9
FPT 05101	Food Biotechnology	12
	Sub total	**61**
Total		**64**

SEMESTER II

Module code	Module Title	Credits

FUNDAMENTAL MODULES		
GST 05213	Probability and Statistics for Technicians	6
GST 05215	Technical Writing and Presentations	6
	Sub total	**12**
CORE MODULES		
FPT 05201	Food Analysis and Instrumentation	12
FPT 05202	Food Hygiene and Safety	12
FPT 05203	Roots and Tuber Processing Technology	15
FPT 05204	Basic Environmental Management	6
	Sub total	**45**
Total		**57**

(i) ORDINARY DIPLOMA IN FOOD PROCESSING TECHNOLOGY (NTA 6)

SEMESTER I

Module code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06112	Small Business Development	6
CORE MODULES		
FPT 06105	Industrial Practical Training	10
FPT 06101	Meat Processing Technology	15
FPT 06102	Food Packaging Technology	12
FPT 06103	Food Quality Assurance	12

FPT 06104	Development of Research Project Proposal	10
	Sub total	**59**
	Total	**68**

SEMESTER II

Module code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06214	Business Planning	6
	CORE MODULES	
FPT 06201	Beverage Processing Technology	15
FPT 06202	Diary Processing Technology	12
FPT 06203	Spices Processing Technology	12
FPT 06204	Project Implementation	10
	Sub total	**49**
	Total	**55**

MAJOR CONTACT ADDRESSES

Campus Contact Addresses:

Box: P.O. Box 2525

Mobile phones +255738204060

Emails: dirctor@mwanzacampus.dit.ac.tz and info@mwanzacampus.dit.ac.tz

Website: http://www.ditmwanzacampus.ac.tz

List of Staff Members

Director

Dr. John A. Msumba, FTC Eng (DTC), ADE (DIT), BSc. (Hons)- Electronics (University of Pretoria), MSc – Electronics (University of Pretoria- RSA), PhD Electronic Eng. (University of Kwazulu- Natal- RSA), Certificate in Wireless Telephone- UP-Motorola- RSA

Department of Science and Laboratory Technology (Mwanza Campus)

Mr. Juma M. Magambo, BSc. (Chemistry & Biology) (SUA), MSc. (Food Quality & Safety) (SUA)

Department of Leather Products Technology (Mwanza Campus)

Mr. William S. Lohay, BSc Ed (UDSM), MIEM (UDSM), MSc. Leather Technology, (University of Northampton, UK)

Lecturers

Dr. Raymond Mukulasi Charles, BSc. Education (SUA), MSc. - Mathematics (UDOM), PhD - Mathematics (UDOM)

Assistant Lecturers

Aidan Telesphory Clavery, BSc. (Hons) - Molecular Biology & Biotechnology (UDSM), Masters in Life Science – Health and Biomedical Sciences (NM-AIST)

Dickson Dawson Katendele, Dip. - Comp.Eng. (DIT); B.Eng. - Information System & Network Eng. (SJUT), Master - information Security, (IAA)

Baraka Peter Sanjito, BSc. Ed. (Hons) (UDSM), Med (Assessment & Evaluation) (University of Iringa)

Valensi Mugolozi Grevazi, BSc. Ed. (Geography & Mathematics), (SUA), MSc. (Mathematical

Sciences) (AIMS – Rwanda)
Eng. Sharif Zuberi Mwangi, BSc. - Bioprocess and Post-Harvest Engineering (SUA), MSc. - Postharvest Technology & Management (SUA)
Rutigadius Rumanyika Benedicto, BSc. Ed. (Hons) (UDSM), MSc. (Chemistry) (UDSM)
Anna Venance Mwinami, BA.Ed. (Hons) (UDSM), MA Ed. (MAED), (UDSM)
Eng. Daniel Joseph Simtowe, Bachelor Degree in Mechanical Engineering, (MUST), Master of Design (Footwear Design and Production) (FDDI – NOIDA (India))
Eng. Shadrack Mabunde Shemu, Dip. - Agromechanization, (MATI), BSc. - Bioprocess and Post Harvesting Engineering (SUA), MSc. - Leather Technology (University of Northampton, UK)
Fredrick Nyanda Lucas, BSc. Ed. (Chemistry & Biology), (UDSM), MSc. (Chemistry), (UDSM)
Job Agrey Mbwilo, BSc – Food, Nutrition and Dietetics (OUT), MSc. - Nutritional Epidemiology (MUHAS)
Eng. Manyama Mazubu Makankila, OD – Mechanical Engineering (DIT), Bachelor of Engineering – Mechanical Engineering (DIT), Master of Engineering – Maintenance Management (DIT)

Tutorial Assistants
Sosten Reuben Kyando, BSc. Ed. - Physics & Mathematics, (SJUT)
Johane Johari Mkunga, Bachelor of Food Science and Technology, (SUA)
Anna Paul Ben, BSc. (Hons) - Textile Design and Technology, (UDSM)
Kashinje Salamba Mayanda, BSc. Ed. (Hons) - Physics & Mathematics (UDSM)
Kaduma Charles Mwalusito, BSc. - Food Science Technology, (SUA)

Senior Instructors
Issa Lupakisyo Mwangosi, BSc (Hons) – Chemical & Processing Engineering (UDSM), MBA - Marketing (OUT)
Moukhtar Ali Ahmed, BSc. Ed. (Hons) (UDSM), MBA - Retail & Fashion Merchandise, (FDDI, India)

Instructors
Remigius Rweyemamu Scarion, BSc. Ed. (UDSM)
Azaria M. Chongeri, BSc. Ed. (Hons) (UDSM), MSc. Leather Technology, (University of Northampton, UK), MSc. - Project planning and Management (IAA)
Vincent D. Mwakapola, BSc. - Textile & Technology (UDSM)
George Laurent Kashindye, BSc - Textile Engineering, (UDSM)
Fredrick Teranya Mphubusa, OD - Mechanical Engineering (ATC), Beng. - Mechanical Engineering (MUST), MSc. in Leather Product Design Engineering (Ethiopia Institute of Textile and Fashion Technology Bahir Dar University)

Richard John Mashauri, Diploma in Agromechanization, (MATI), BSc.Bioprocess and post-Harvest Engineering, (SUA)
Mkumbukwa Hatibu Nyomolelo, Diploma in Agromechanization, (MATI), BSc. in Bioprocess and Post-Harvest Engineering, (SUA)

Technicians
Michael M. Joseph, Dip. (Lab. Tech.) (ATC), BSc. Biotechnology (SUA)
Richard Lyaganda, Dip. (Lab. Tech) (DIT)
Fatuma Shaban Samata, OD - Science & Laboratory Technology (SUA), BSc. – Biotechnology & Laboratory Science (SUA)
Devotha Joseph Warioba, OD - Science & Laboratory Technology (DIT)
Leonard Prosper Mayunga, OD - Leather Products Technology (DIT)
Bakari Mohamed Hamis, OD - Leather Products Technology (DIT)
Evason Salvatory Santa, OD. - Leather Products Technology (DIT)
Jackson Peter Janga, OD - Leather Products Technology (DIT)

Principal Human Resource and Administrative Officer I
Alice Ackim Mwasyoge, Dip. - Business Management & Administration (Cambridge Tutorial College, Botswana), Dip. - Computer science (Association of Computer Professional (UK)) BBA (Hons) (UDSM), MSc. - HRM (MU), PHR (TPSC)

Records Management Officer I
Elia Mwambugu Mwakapande, Bachelor of Public Administration (Records Management) (MU), Master of Public Administration (MU)

Records Management Assistant II
Aneth Bernard Massawe, Ordinary Diploma (Records, Archives and Information Management), (MNMA)

Accountant II
Herieth Yohane Mwampashi, BA - Accountancy and Finance (TIA), CPA (T)

Accounts Officer I
Salimu Omary King'oso Bachelor of Accountancy (TIA)

Internal Auditor I
Grace Nicolaus Tambo, ADA (SAUT), PGD-Accounts & Finance (SAUT), CPA (T), MSc (Accounts & Finance) (MU)

Senior Estates Officer II
Dorice Nalbert Ngogo, BSc. - Building Survey, (ARU)

Estate Officer II
Francisca Gerald Shayo BSc. - Housing and Infrastructure Planning (UDSM)

Artisans
Hosea Abraham Urio, NVA Grade I - Electrical (VETA)
Fredrick Athuman Njaga - NVA Grade I – Monsory (VETA)
Lameck Obadia Chitanda - NVA Grade I (Plumbing) (VETA)

Public Relation Officer II
Joshua Lucas Kasase BA - Mass Communication (TUDACO)

Admission Officer II
Kevin Amani Mwamtobe, BSc. - Applied Statistics (MU)

Examination Officer II
Antony Bedson Mtalima, BA. Ed. (SJUT)

Procurement Officer II
Willium Charles Matiko, Bachelor - Procurement and Logistics Management (TIA)

Information & Communication Officer II
Amani Pauline Kasigara, BSc. (Telecommunication Engineering) (UDSM)

Warden I
Hildeltha Fulgence Lwejuna, BA (Sociology) (ISW)
Joseph Yona Katale, BA. Ed. (UDSM)

Warden II
Annastazia Godfrey Mnaku, Dip. Ed., (Butimba), BA – Sociology (SAUT)

Executive Secretary II
Jane E. Magori, Dip. - Secretarial (TPSC)

Driver II
Steven N. Mianga, Cert. – VIP Driving (NIT)
Hamis Kilindo, Cert. – VIP Driving (NIT)
Zachariah Pallangyo, Cert - VIP Driving (NIT)

8.2 SONGWE CAMPUS

Message from the Director, Eng. Dr. Frank C. Lujaji

Welcome to DIT Songwe Campus, located in the beautiful Songwe Region. We are an inclusive training center dedicated to sharing DIT's vision of becoming a leading technical education institution focused on societal needs.

Our highly committed staff work hand-in-hand with each student, fostering an environment where excellence isn't just a goal; it's an expectation. I am thrilled to announce the introduction of our new Diploma Programme in Civil Engineering (NTA Levels 4 to 6), a program designed to meet industry demands. In addition, we offer a National Vocational Award (NVA) programmes in Information technology and Plumbing & Pipe fitting, accredited by the National Council for Technical and Vocational Education and Training (NACTVET).

We're proud that our efforts are aligned with the national vision of creating a skilled and adaptable workforce. Our unique "Teaching Factory" approach goes beyond the traditional classroom, linking training to real-life industrial settings. This ensures that our students gain practical skills that not only enrich their lives but also contribute to societal progress.

We invite you to become part of our vibrant campus community. Your feedback and opinions are invaluable to us. Feel free to reach out through head@songwecampus.dit.ac.tz for any concerns or suggestions you may have.

For our students, remember: success is built on a foundation of ambition, clear goals, discipline, and hard work. At DIT Songwe Campus, we provide the tools to help you build that success.

Programme offered at DIT Songwe campus

Songwe campus has a computer laboratory and a registered soil laboratory among other facilities. In addition, it has 12, energetic staff members. The campus is running a Civil engineering programme (NTA 4 to 6) which is running parallel with that offered at DIT Main Campus in Dar es salaam.

The campus has two (2) academic programme leading to the qualification of certificate in information and communication technology and Plumbing & Pipe fitting (NVA Level 1-3 and 1-2, respectively).

NVA Programmes Offered at DIT Songwe Campus

(a) CERTIFICATE IN INFORMATION AND COMMUNICATION TECHNOLOGY (NVA LEVEL 1)

No.	Module Code	Module Titles
1	ICT - 01	Information Communication Technology
2	CM 01 - 03	Computer Mathematics
3	EC 01 - 02	English and Communication Skills
4	ES 01 - 02	Engineering Science
5	TD 01 - 03	Technical Drawing
6	EET 01 - 03	Entrepreneurship
7	LS 01 - 08	Life Skills

(b) CERTIFICATE IN INFORMATION AND COMMUNICATION TECHNOLOGY (NVA LEVEL 2)

No.	Module Code	Module Titles
1	ICT - 02	Information Communication Technology

2	CM 04 - 07	Computer Mathematics
3	EC 03 - 06	English and Communication Skills
4	ES 03 - 08	Engineering Science
5	TD 04 - 08	Technical Drawing
6	EET 04 - 04	Entrepreneurship
7	CAD 01 - 02	Computer Aided Design

(c) CERTIFICATE IN INFORMATION AND COMMUNICATION TECHNOLOGY (NVA LEVEL 3)

No.	Module Code	Module Titles
1	ICT - 03	Information Communication Technology
2	CM 08 - 11	Computer Mathematics
3	EC 07	English and Communication Skills
4	TD 08 - 10	Technical Drawing
5	CAD 03	Computer Aided Design

(d) CERTIFICATE IN PLUMBING AND PIPE FITTING (NVA LEVEL 1)

No.	Module Code	Module Titles
1	PPF-01	Plumbing and pipe fitting
2	CM01-03	Computer Mathematics
3	EC 01-02	English and Communication Skills
4	ES 01-02	Engineering Science
5	TD 01-03	Technical Drawing
6	EET 01-03	Entrepreneurship
7	LS 01-08	Life Skills

(e) CERTIFICATE IN PLUMBING AND PIPE FITTING (NVA LEVEL 2)

No.	Module Code	Module Titles
1	PPF - 02	Plumbing and pipe fitting
2	CM 04-07	Mathematics for engineering
3	EC 03-06	English and Communication Skills
4	ES 03-08	Engineering Science
5	TD 04-08	Technical Drawing
6	EET 04-04	Entrepreneurship
7	CA 01-02	Computer application with CAD

NTA Programmes offered at DIT Songwe Campus

(a) BASIC TECHNICIAN CERTIFICATE (BTC) IN CIVIL ENGINEERING (NTA LEVEL 4)

Semester I

Module Code	**Module Title**	**Credit**
	FUNDAMENTAL MODULE	
GST 04111	Algebra	6
GST 04112	Basic Technical Communication skills	6
COT 04114	Computer Fundamentals and Basic Information Processing	6
CET 04115	Mechanics	6
	CORE MODULES	
CET 04111	Construction Equipment and Machinery	6
CET 04112	Carpentry and Painting Practices	9
CET 04113	Introduction to Concrete Technology	6
CET 04114	Introduction to Technical Drawing	6
CET 04105	Linear Surveying	9
	Total	**60**

Semester II:

Module Code	**Module Title**	**Credit**
	FUNDAMENTAL MODULE	
GST 04214	Trigonometry, Vectors and Complex numbers	6

Module Code	Module Title	Credit
COT 04216	Spreadsheet and Database Fundamentals	6
MET 04218	Arc Welding Processes	9
CORE MODULES		
CET 04211	Basic building maintenance	9
CET 04212	Basic Soil Mechanics	9
CET 04213	Introduction to Architectural Drawing	9
CET 04214	Masonry and Plumbing Practices	12
CET 04215	Mechanics	6
	Total	**66**

Total Credits at NTA Level 4: 126 (Minimum credits required at level 4: 120)

(b) TECHNICIAN CERTIFICATE (TC) IN CIVIL ENGINEERING (NTA LEVEL 5)

Semester I

Module Code	Module Title	Credit
FUNDAMENTAL MODULE		
GST 05101	Fundamental Rule of Counting, matrices and Differentiation	5
GST 05102	Business Communication	2
CSET 05101	Presentation and Internet	2
GST 05103	Business Startup and Management	3
SLTP 05101	Strength of Materials and Rotational Dynamic	3
CORE MODULES		
CET 05101	Land Surveying	9
CET 05102	Building Construction	9
CET 05103	Measurement of Building Works	8
CET 05104	Building and Civil Engineering Materials	6
CET 05105	Structural Analysis	9

Module Code	Module Title	Credit
CET 05106	Hydraulics and Fluid Mechanics	6
CET 05212	Industrial Practical Training	10
	Total	**72**

Semester II

Module Code	Module Title	Credit
	FUNDAMENTAL MODULE	
GST 05204	Integration, Statistics and Probability	5
GST 05205	Communication and Technical Presentations	2
GST 05206	Business Financial Management and Accounting	3
GST 05207	Research Methods for Technicians	3
SLTP 05202	Fluid Mechanics	3
	CORE MODULES	
CET 05207	Hydrology, Water Supply and Sanitation	9
CET 05208	Architectural Design and Drawing	9
CET 05209	Road Construction and Maintenance	9
CET 05210	Soil Mechanics	9
CET 05211	Project for Survey	9
	Total	**61**

Total Credits at NTA Level 5: 133 (Minimum credits required at level 5: 120)

(c) ORDINARY DIPLOMA (OD) IN CIVIL ENGINEERING (NTA LEVEL 6)

Semester I

Module Code	Module Title	Credit

Module Code	Module Title	Credit
FUNDAMENTAL MODULE		
GST 06101	Conics and Differential Equation	4
GST 06102	Engineering Study Skills	2
GST 06103	Formalizations, Internationalization and E-Business	2
CSET 06101	Basic of Computer Programming	2
SLT P 06101	Electromagnetism	2
GST 06102	Engineering study skills	2
CORE MODULES		
CET 06101	Building Service and Maintenance	9
CET 06102	Elementary Structure Design	9
CET 06103	Route and Traffic Engineering	9
CET 06104	Structural Steel Design	10
CET 06105	Quantity Survey	9
CET 06106	Labour Based Technology	9
CET 06107	Project Data Collection	10
CET 06211	Industrial Practical Training	10
	Total	**96**

Semester II

Module Code	Module Title	Credit
FUNDAMENTAL MODULE		
GST 06204	Complex Number, Numerical methods and series	4
GST 06205	Technical Writing	2
GST 06206	Business Planning	2
CSET 06201	Computer programming and Data structure	2
SLTP 06202	Heat and Thermodynamics	2
CORE MODULES		
CET 06208	Reinforced Concrete design	10

CET 06209	Soil Mechanics and Foundations	9
CET 06210	Construction Management	9
CET 06211	Structural Timber Design	9
CET 06212	Pavement Design	9
CET 06213	Transportation Engineering	10
CET 06214	Project Data Analysis	10
	Total	**78**

Total Credits at NTA Level 6: 155 (Minimum credits required at level 6: 120

MAJOR CONTACT ADDRESSES

Director DIT Songwe Campus, Box: P.O. Box 367, Tunduma, Songwe.

Mobile phones +255 739 928 544

Emails: head@songwecampus.dit.ac.tz,

Website: http://www.dit.ac.tz

List of Staff Members

Director of DIT Songwe Campus
Eng. Dr. Frank C. Lujaji, BSc. Mech. Eng. (UDSM: Dar es Salaam), B-Tech. Mech. Eng. (Rep. South Africa), PhD (NMIST: Arusha).

Head of Department Civil Engineering
Mr. J.L. Kato, BSc-Civil Eng. (ARU-Dar), MSc-Structural Eng. (UDSM-Dar)

Assistant Lecturer: Civil Engineering Department
Mr. Flavius M. Matata, BSc-Civil and Transportation Eng. (UDSM-Dar), MSc-Civil Eng. (UNF-Florida)

Instructor: Civil Engineering Department
Mr. George B. Kiruwa

Technician Civil Engineering Department
Mr. Yasini M. Limia
Artisans
Mr. Evance E. Mlawa, Diploma in Vocational Teacher: Carpentry & Joinery

Accountant
Mr. John S. Mwabanga, ADA (IFM)

Procurement Management Unit
Mr. Hassan Semndili

Campus Nurse
Ms Edith E. Kijah

Campus Records Officer
Humphrey A. Kyando

Driver
Mr. Uswege M. Mwakatuma

Genitor
Israel A. Mwambipile

CHAPTER NINE

GENERAL INFORMATION

9.1 BEST STUDENTS' PRIZES AND AWARDS

In order to promote learning competitions among students, the Institute, award prizes to the best three students in each academic department who show outstanding academic performance in all the subjects carried out in an academic year. In addition, other prizes are awarded by different sponsors (individuals and companies) to best students in various fields. Information regarding awards and prizes will be released to students by the DIT management before the graduation day of each academic year.

9.2 STUDENTS' ACCOMMODATION

Currently, DIT has a limited number of rooms in its hostels to provide accommodation to all students. Students are encouraged to look for private accommodation in the city. For the limited accommodation spaces available, Institute Students Accommodation Bureau (ISAB) will use criteria stipulated in accommodation policy in allocation accommodation for students preferentially for those who have applied for accommodation from ISAB. Students' hostels are located within the DIT compound and Chang'ombe area.

Student who will secure accommodation in DIT hostels are required to bring with them; pillows, bed sheets, blanket and mosquito nets. Every student shall, before being granted institutes' accommodation pay a prescribed accommodation fee.

Every resident student shall observe accommodation rules and regulations. These include, but not limited to, the strict requirement for all students to vacate their rooms and hand-over their room keys to the janitor/warden during vacation and industrial practical training periods. Residents are not allowed to sublet, use illegal drugs as well as not to cook in hostels or employ house girls/boys for cooking and laundry duties.

9.3 STUDENTS' ADMINISTRATION

Most of the students' activities at the Institute are organized by the DIT Students Organisation (DITSO) under the coordination of the Office of the Dean of Students. The Organisation is concerned with the student's academic, political, social and recreational activities. Every student becomes a member of DITSO (DIT Student Organization) and students are advised to make their academic life meaningful by making their organization contribute positively towards the Institute Vision, Mission and its objectives.

9.4 STUDENTS' CATERING SERVICES

NTA Level 4-6 students are not paid meal allowances, instead, meals are provided by the Institute in a dining hall located in the campus. Menu depends on the ability of the sponsor. B.Eng students obtain their meals from a number of points providing catering services within the proximity of the Institute. The same applies to all day and private sponsored students.

9.5 MEDICAL SERVICES

The Institute has a health care unit for students, staff and their families. The unit provides outpatient services to NHIF members and on cost sharing basis to non-NHIF members and may refer to other hospitals if necessary. Students are encouraged to bring with them NHIF cards and for non-members a special health insurance package for students has been introduced by the NHIF. Each non-member student should make early consultation with the institute students NHIF officer to get registration forms for students to fill. Currently, the

amount to be paid by individual student is TZS 50,400/= per academic year. The amount to be paid regarding medical insurance cover is clearly stipulated in the college fee's structure. Students are directed to report at the health care unit each time before they embark for any referral treatment.

9.6 GENDER MANAGEMENT UNIT (GMU)

The DIT- Gender Management Unit (DIT_GMU) was established in 2000 to advocate all the gender related issues at DIT including gender equity and efficiency in education and training. GMU recognizes and addresses gender issues and problems as stipulated in *the DIT corporate strategic plan*.

The DIT-GMU closely works with the management in an attempt to intensify efforts to admit more qualified female students and recruit female staff to address gender imbalance. It also works closely with the management in an attempt to ensure supportive learning environment to both male and female.

GMU provides counselling services to new students during the orientation period and whenever needed in collaboration with the dean of students' office.

9.6.1PROMOTING AND SUPPORTING FEMALE STUDENTS

a) Gender sensitization programs

i. GMU conducts sensitization campaigns to selected secondary schools in different regions to encourage female students join science and engineering/technological fields.
ii. Creation of gender awareness in the DIT community through seminars and workshops as per the action plan or when budget allow.
iii. Incorporation of gender modules in the curricula for all DIT programmes (O.D and B.Eng.) through entrepreneurship module GST 04103.

iv. In collaboration with HIV/AIDS coordinator, dispensary unit and dean of students' office, GMU makes provision of *counselling services* to students and employees. In this way, other gender issues or problems are addressed.

v. Promoting gender empowerment to gender task force members so as to enable the team to mainstream gender in some DIT programmes and documents. Furthermore, GTF solicit resources for running some GMU activities and other related projects for staff and students.

b) The Sponsorship for Female Students

In an attempt to ensure gender mainstreaming, GMU constantly make efforts to solicit fund from various sources to sponsor female students. GMU therefore, from time to time ensures limited sponsorship for OD female students admitted in the Institute.

9.6.2 RENTAL SERVICES

DIT possesses a variety of renting facilities, which are available for use at reasonable charges and its ideal location in the city centre makes it possible for excellent use and access of these facilities for interested users.

DIT has 19 engineering workshops and 4 science laboratories that can be used for providing both training and production services to students and outside community.

It has 26 classrooms which can be rented during weekends and when students are on vacation or industrial training.

The DIT library has adequate facilities to cater for meetings and/or conferences with up to 100 participants. The facility is available to the outside community for renting, when it is not in DIT use.

An executive room with a sitting capacity of about 20 people is also available for renting. This room is furnished with soft chairs and can be ideal for small workshops, meetings and other similar forum. The strategic central location of DIT makes this offer most attractive.

DIT hostels and the Dining Hall may be available when students are out for vacation.

9.6.3 ACADEMIC CALENDAR FOR ACADEMIC YEAR 2025/2026

DAR ES SALAAM IN STITUTE OF TECHNOLOGY

ACADEMIC ALMANAC FOR ACADEMIC YEAR 2026/2027

S/N	DATE	WEEKS	SEMESTER	EVENT	
1	19/10/2026-25/10/2026	1	I	ORIENTATION FOR FRESHERS	
2	26/10/2026-07/02/2027	15		LEARNING PERIOD	
3	08/02/2027-21/02/2027	2		END OF SEMESTER I EXAMINATIONS	
4	22/02/2027-28/02/2027	1		EXAMINATIONS MARKING	STUDENTS VACATION
5	01/03/2027-07/03/2027	1		DEPARTMENTAL EXAMS APPROVAL MEETINGS	
6	08/03/2027-14/03/2027	1		INSTITUTE EXAMS APPROVAL MEETINGS/RESULTS	

				PUBLICATIONS		
7	15/03/2027-21/03/2027	1		PREPARATIONS FOR SUPPLIMENTARY EXAMINATIONS		
8	22/03/2027-28/03/2027	1		END OF SEMESTER I SUPPLEMENTARY EXAMINATIONS		
9	29/03/2027-04/07/2027	15	II	LEARNING PERIOD	29/03/2027-04/04/2027	SUPPLEMENTARY EXAMINATIONS MARKING
					05-06 /04/2027	DEPARTIMENTAL EXAMS APPROVAL MEETINGS
					07-08/04/2027	INSTITUTE EXAMS APPROVAL MEETINGS/RESULTS PUBLICATIONS
10	05/07/2027-18/07/2027	2		END OF SEMESTER II EXAMINATIONS		
11	19/07/2027-25/07/2027	1	10	EXAMINATIONS MARKING	STUDENTS VACATION AND	
12	26/07/2027-01/08/2027	1		DEPARTMENTAL MEETINGS		
13	02/08/2027-08/08/2027	1		INSTITUTE APPROVAL MEETINGS/RESULTS PUBLICATIONS		
14	09/08/2027-15/08/2027	1		PREPARATIONS FOR SUPPLIMENTARY EXAMINATIONS		

15	16/08/2027-22/08/2027	1			SUPPLEMENTARY EXAMINATIONS FOR SEMESTER II	INDUSTRIAL PRACTICAL TRAINING (IPT)
16	23/08/2027-29/08/2027	1			END OF SEMESTER II SUPPLEMENTARY EXAMINATIONS MARKING	
17	30/08/2027-05/09/2027	1			DEPARTIMENTAL EXAMS APPROVAL MEETINGS	
18	06/09/2027-12/09/2027	1			INSTITUTE EXAMS APPROVAL MEETINGS/RESULTS PUBLICATIONS	
19	13/09/2027-26/09/2027	2			LAST 2 WEEKS OF IPT	

This prospectus may be reviewed from time to time as deemed necessary to accommodate additional information approved by the Council.

For further Enquiries contact:

The Rector,
Dar es Salaam Institute of Technology
Junction of Bibi Titi Mohamed and Morogoro Road,
P.O. Box 2958, Dar es Salaam, Tel: +255 22 2150174,
Fax: +255 22 2152504; E-mail: rector@dit.ac.tz
www.dit.ac.tz