

Focus Your Future at DIT

Dar es Salaam Institute of Technology

Prospectus 2013/2014



Fully Accredited by the

National Council for Technical Education

(NACTE)



Start your future today

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 realities. We embrace competence based education and training approach. The Institute is fast establishing itself as the ideal tertiary institution for the holistic studentsí development.

We are focused on nurturing the growth of academic excellence and instilling the importance of scientific and engineering skills and entrepreneurship.

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MESSAGE FROM THE PRINCIPAL

Prof. John Kondoro

The Dar es Salaam Institute of Technology (DIT) is an Institution of Technical Education which was established in 1997 through an Act of Parliament NO. 6. It is fully accredited by the National Council for Technical Education (NACTE) to offer technician and engineering programmes leading to the qualifications of National Technical Awards Levels 6 (Ordinary Diploma), level 8 (Bachelor Degrees in engineering as well as bachelor of Technology in Laboratory Science) and level 9 (Postgraduate programme, Master of Engineering in ,Maintenance Management). These programmes are competence based and the academic programmes are developed basing on the stakeholders needs and are approved by NACTE. The institute also offers various professional short courses in various engineering and other fields.

This academic year 2013/2014, five new training programmes will be offered by DIT through various academic Departments. Diploma programmes which will be offered for the first time are renewable energy which will be offered by the Department of Electrical Engineering, diploma programme in multimedia and film technology offered by the Department of Computer Studies, Ordinary diploma in Communication System Technology to be offered by the Department of Electronics and Telecommunication Engineering. The Department of Science and Laboratory Technology will start offering Bachelor of Technology in Laboratory Sciences (B. Tech) while the Department of Civil Engineering in collaboration with other academic Departments will start offering master degree of Engineering in Maintenance Management (MEngMM). Curricula for these

new training programmes were supported by various stakeholders (Professional, Societal and Industrial Stakeholders) and have already been approved by NACTE.

Moreover, various short term Professional training courses will be offered by DIT as illustrated in chapter eight and nine of this prospectus. These trainings will be offeredthrough InstituteConsultancy Bureau (ICB) & India and Tanzania Center of Excellency In Information Communication Technology (ITCoEICT).

To ensure quality and to match with the current existing technology, DIT through Quick-win project, has procured modern scientific equipment that will ensure development of competences and high quality education. In addition, the following new and modern laboratories have been established at DIT; renewable energy lab, multimedia lab, food and biotechnology labs equipped with modern facilities. Our ultimate goal is to transform our Institution to a World class Centre of Excellence in Engineering, Applied Sciences and Entrepreneurship. We believe that success comes out of the skilled hand and the innovated mind.

VISION

The vision of Dar es Salaam Institute of Technology (DIT) is to become the leading provider of high quality engineering education, research and consultancy, within Tanzania and the East African region.

MISSION

- To provide access to high quality technical education and training for students in Applied Sciences, Engineering, Entrepreneurship and related disciplines as well as to conduct relevant research and consultancy.
- To promote the development and usage of appropriate technology that meets national, regional and international needs and standards through skills and practical-oriented training, research and consultancy.
- To cooperate with the Government of the United Republic of Tanzania and the private sector in establishing centres of excellence to combat national catastrophes such as draught, floods, hunger and pollution amongst other things.
- To foster honesty, respect and responsibility, lifelong learning and innovation.

FUNCTION

- To provide facilities for study and training in the principles, procedures and techniques and conduct training programmes in Electrical Engineering, Civil Engineering, Mechanical Engineering, Computer Engineering, Science and Laboratory Technology, Electronics and Telecommunications Engineering, and such other related disciplines as the Institute may from time to time decide.
- To engage in applied research and development in the disciplines specified above.
- To provide consultancy services to the public.
- To conduct examinations and grant awards of DIT as approved by the National Council for Technical Education
- To perform all such other functions as stipulated in the Act that established the institute

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MEMBERS OF THE DIT GOVERNING BODY (COUNCIL)

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2. Prof. Evelyne Mbede

Ministry of Communication, Science and Technology

3. Vacant

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10. Dr. Patrick D. Nsimama

ASA Chairman, Dar es Salaam Institute of Technology

11. Godwin Ndeki

Chairman, RAAWU DIT

12. Mr. Nuhu Chiduo

President, Dar es Salaam Institute of Technology Studentsí Organisation (DITSO)

13. Prof. John W.A. Kondoro (Secretary)

Principal, Dar es Salaam Institute of Technology

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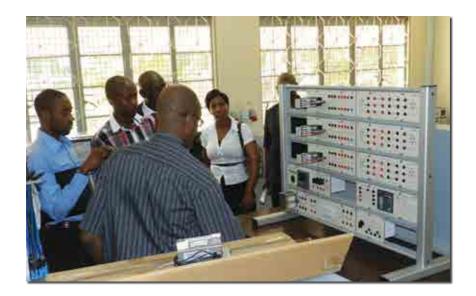
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Dar es Salaam Institute of Technology has two campuses such as Dar es Salaam and Mwanza. Dar es Salaam main campus offers a wide range of full and part time engineering and professional courses leading to the awards of Ordinary Diploma, Bachelor of Engineering Bachelor of Technology and Master of Engineering. These courses are delivered by six academic Departments namely Civil, Electrical, Electronics & Telecommunications, Mechanical Engineering, Computer Studies, and Laboratory Science & Technology. The General Studies Department which offers courses in Mathematics, Communications Skills and Entrepreneurship Education supports the academic Departments. In addition various short term professional courses ar offered by DIT through Institute Consultancy Bureau (ICB) and India Tanzania Center of Excellency in Information Communication Technology) ITCoEICT.

Currently, DIT Mwanza campus offers short training courses in leather technology.

INTRODUCTION TO DAR ES SALAAM INSTITUTE OF TECHNOLOGY

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. Historically, DIT was established in 1997 by the Act of Parliament, ithe DIT Act No.6 of 1997î 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 with the main task of 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.

Part of the responsibilities of DTC at the time of its inception was to train technicians under the London City and Guilds Training Programme. 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.

Concurrently with that move, 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.

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, DE and ADE graduates can be found in almost all engineering firms/institutions and positive feedback is available from the respective employers to indicate their overall good performance.

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, with its old set-up and mission.

A new institution was therefore necessary to replace the Dar es Salaam Technical College; the institution that can 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 realise that aspiration, as guided by its vision and mission.

DIT is a fully accredited institution by the National Council for Technical Education (NACTE). Currently, DIT offers a wide range of full-time, part-time and professional engineering qualifications and courses. The Institute has replaced the FTC and ADE programmes with Ordinary Diploma and Bachelor of Engineering programmes respectively (i.e. National Technical Awards (NTA) Level 4-8) in line with the NACTE competence based modular training system. This academic year 2013 / 2014 a new training program of master of Engineering in Maintenance Management (NTA 9) will be offered. The expectations and aspirations of Tanzanians towards DIT are very high as expressed in the National Technical Education and Training Policy of 1996, National Higher Education Policy of 1999 and Tanzania Development Vision 2025 of 1999. In order for DIT to match with its new structure, roles and functions, cureent market demand. Training curricula are reviewed after every five years by incorporating various stakeholdersí views. In addition, 2013/2014 academic year new 6 programmes will be offered by various academic Departments in order to meet the market demand. Our ultimate goal is to transform DIT to a world-class centre of excellence in Engineering, Applied Sciences and Entrepreneurship.

This Prospectus therefore, describes the main features of the DIT in line with the customersí and stakeholdersí interests. It provides an outline of academic programmes. It gives important information on the basic requirements, procedures and regulations to be met for one to get admission and graduate at the Institute, course programmes, course duration and other necessary information.

1.2 Organization Structure of DIT

The top organ of the DIT is the Council followed by the Chief Executive Officer (Principal) who is supported by the Deputy Principal (Academic, Research and Consultancy) and the Deputy Principal (Administration and Finance). The two Deputy Principals are supported by Heads of various Departments who overseas teaching, learning and resources of the respective Department. Organization structure of DIT is shown in Figure 1.2.

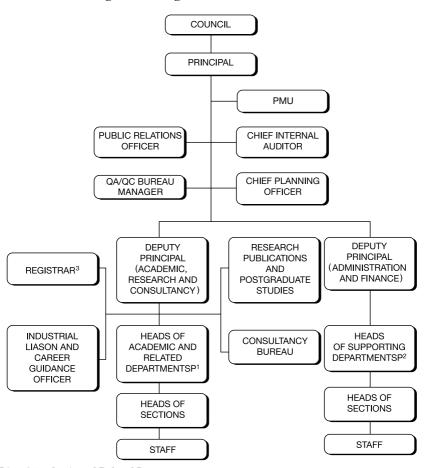


Figure 1.2 Organization Structure of DIT

¹List of Academic and Related Departments

- · Civil Engineering
- Computer Studies
- · Electrical Engineering
- Electronics & Telecommunications Engineering.
- · General Studies
- · Mechanical Engineering
- Science & Laboratory Technology
- · Industrial Liaison and Career Guidance
- · Library Services
- · Research, Publications and Postgraduate Studies
- Institute Consultancy Bureau

²List of Supporting Departments

- Accounts
- · Students' Affairs
- Estate
- · Human Resources and Administration
- Information Technology (IT) services

³List of Departments under Office of Registrar

- Examination
- · Admission

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 in Chapter 2. It also provides information on procedures and regulations for admission to such programmes and the corresponding fees in Chapters 3 and 4 respectively.

Chapter 5 provides Examination Regulations. These detail the course of action to be taken on all matters related to examinations conducted by the Institute for programmes leading to the awards of NTAs 4-9 levels namely; the Ordinary Diploma, Bachelor of Engineering or Technology and Master of Engineering.

Chapter 6 gives the profiles of academic Departments and other related units of the Institute to include 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 students. These are presented in Chapter 7. Chapter 8 presents general information regarding studentsí prizes & awards, students, important information for students and the center of Excellency in ICT. Chapter 9 has the information about Mwanza campus. The academic calendar for the academic year 2013/2014 is shown on chapter 10.

ACADEMIC PROGRAM OFFERED

DIT is fully accredited by the National Council for Technical Education (NACTE) to run and grant awards to (Technician and Bachelor Degree programmes to successful candidates. Awards offered are National Technical Level (NTA) 4 - 6 (Ordinary Diploma Programmes), 7 - 8 (Undergdaduate Degree programmes) and NTA 9 (Master of Engineering In Maintenance Management by course work and dissertation).

2.1 Basic Technician Certificate and Technician Certificate

The Basic Technician Certificate and Technician certificate are part of the Ordinary Diploma. 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.

2.2 Ordinary Diploma Programmes

- i. Ordinary Diploma in Civil Engineering
- ii. Ordinary Diploma in Computer Engineering
- iii. Ordinary Diploma in Electrical Engineering
- iv. Ordinary Diploma in Electronics and Telecommunications Engineering
- v. Ordinary Diploma in Mechanical Engineering
- vi. Ordinary Diploma in Science and Laboratory Technology
- vii. Ordinary Diploma in Mining Engineering
- viii. Ordinary diploma in Biomedical Equipment
- ix. Ordinary Diploma in Information Technology
- x. Ordinary Diploma Renewable Energy Technology
- xi. Ordinary Diploma Communication System Technology
- xii. Ordinary Diploma Multimedia and Film Technology

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

2.4 Bachelor Degrees Programmes (NTA 8)

The Bachelor Degree programmes are of six semesters covered in three academic years.

- 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

2.5 Post-graduate Studies

In response to the market demands capacity and technological challenges, DIT has a new postgraduate programme, Master of Engineering in Maintenance Management. This programme will be offered by coursework and dissertation, and the course duration will be 18 months.

Table 2.1 briefly details courses offered, duration, awards granted and related remarks

Table 2.1: Summary of Courses Offered at DIT

	PROGRAMMES OFFERED	PROGRAMME DURATION	AWARD	REMARKS
1	Ordinary Diploma in Civil Engineering			Basic Technician Certificate
2	Ordinary Diploma in Computer Studies		Basic Technician	are awarded to students who
3	Ordinary Diploma in Electrical Engineering		Certificate (1wo Semesters)	wish to exit or fail to obtain
4	Ordinary Diploma in Electronics and Telecommunication Engineering		Technician Certificate (Two Semesters)	a Technician Certificate or an ordinary diploma but have successful fulfilled the requirements for a basic Technician Certificate.
5	Ordinary Diploma in Mechanical Engineering			
9	Ordinary Diploma in Science and Laboratory Technology			
7	Ordinary Diploma in Mining Engineering			
~	Ordinary Diploma in Biomedical Equipment Engineering	Six semester	Ordinary Dinloma	Ordinary Diploma 1s awarded to students who
6	Ordinary Diploma in Information Technology	onered in three academic years	(Two Semester)	the requirements for the
10	Ordinary Diploma in Renewable Energy Technology			Ordinary Diploma in the respective programmes
11	Ordinary Diploma in Communication System Technology			
12	Ordinary Diploma Multimedia and Film Technology			

	PROGRAMMES OFFERED	PROGRAMME DURATION	AWARD	REMARKS
13	Bachelor Degree in Civil Engineering	Bachelor degree	NTA 7: Higher Diploma (Six	
14	Bachelor Degree in Computer Engineering	courses are offered in eight semesters covered	Semesters) for candidates admitted by form six	Higher Diploma is awarded
15	Bachelor Degree in Electrical Engineering	in four years for engineering programmes for students admitted by form six qualifications.	qualifications. Four semisters by candidates of BTech or engineering programmes admitted by NTC	to students who wish to exist or fail to obtain a degree but have successfully fulfilled the requirements for a Higher Diploma in engineering.
		for 3 years	quanneanons	
16	Bachelor of Engineering in Electronics and Telecommunication Engineering	for bachelor of		Bachelor Degree is
17	Bachelor of Engineering in Mechanical Engineering	technology and Beng candidates admitted by NTA	NTA 8: Bachelor Degree (Two	awarded to students who have successfully fulfilled
18	Bachelor of Technology in Laboratory Sciences	6 qualifications or FTC	Semester)	the requirements for the Bachelor Degree in the respective programmes.
19	Master of Engineering in Maintenance Management	Two semesters including six months of dissertation	Master of Engineering in Maintenance Management	This Programme is offered by course work and dissertation.

ADMISSION REGULATIONS

3.1 Minimum Entry Qualifications for Ordinary Diploma (NTA LEVEL 4-6) Programmes

Candidates may join the Ordinary Diploma (NTA LEVEL 4-6) programmes offered by DIT through the Direct Entry Scheme, the Indirect Entry Scheme or the Access Course Channel.

3.1.1 Direct Entry Scheme

In order to qualify for admission under the Direct scheme, a candidate must be a holder of a good Certificate of Secondary Education (CSE) with a minimum pass of iCî grade (or 9 points based in the following conversion A=1, B=2, C=3, D=4) in three of the following subjects; Physics/Engineering Science, Mathematics and Chemistry/English or a good General Certificate in Engineering (GCE).

For admission into the NTA LEVEL 4-6 in Laboratory Science & Technology and Biomedical Equipment Engineering applicants must have passed chemistry and Biology in addition to the above requirement.

3.1.2 Indirect Entry Scheme

3.1.3 Pre- Ordinary Diploma Entry Courses (for NTA LEVEL 4-6 Programmes)

This is a 12 week course with the following objectives:

- (i) To provide access to technical and higher education for candidates who traditionally were not considered for direct enrolment although they meet the minimum entry qualification
- (ii) To improve candidate's competence in the field of engineering and technology by bridging their respective gaps.

- (iii) To enable more number of Tanzanians to gain access to Ordinary Diploma and Degree training programmes at the Institute.
- (iv) To redress Gender imbalance for DIT enrolment.
- (v) To diversify enrolments by widening catchments areas
- (vi) To increase competitiveness in accessing engineering and technology education at DIT

There are two categories of candidates that are admitted through this route.

(i) Pre-Ordinary Diploma Entry Courses for Female Candidates
The objective of this programme is to improve gender balance amongst the DIT students by assisting potential female candidates who do not qualify under the Direct Entry Scheme (scored below the prevailing cut-off point) to qualify for admission. Under this programme, a female candidate is required to follow and successfully complete a 12 weeks -upgrading course. The subjects covered in the course include Mathematics, Physics, Mechanics, Communication Skills and Computer Applications. Upon successful completion, (passing in all the prescribed Subjects), a female candidate will qualify for the Government sponsorship, subject to availability of vacancies.

(ii) Pre- Ordinary Diploma (NTA LEVEL 4-6) Entry Programme for General Candidates

This scheme is similar to Pre -Ordinary Diploma (NTA LEVEL 4-6) Entry Course for Female candidates described above but it is mainly aimed to private or third party sponsored students. Under this category, candidates who do not qualify under the Direct Entry and Mature Age Entry Schemes may be admitted after attending some upgrading courses and obtaining pass marks in all the prescribed subjects at the end of course examination.

In order to qualify for this Pre-Ordinary Diploma (NTA LEVEL 4-6) Entry Course, a candidate must possess one of the following minimum qualifications:

(i) A Certificate of Secondary Education with a minimum

- of iDî Grade in Mathematics, Physics and English, Chemistry.
- (ii) A Certificate of Secondary Education with a minimum of D grade in Mathematics and Trade Test Certificate of at least Grade II or CBA Level II offered by VETA accredited Institution.

3.2 Minimum Entry Qualifications for Bachelor Degree (NTA Level 7-8) Programmes

Candidates can join the Bachelor Degree (NTA Level 7-8) programmes offered by DIT through the Direct Entry Scheme

3.2.1 Direct Entry Scheme

In order to qualify for admission into Bachelor Degree (NTA Level 7-8) three (3) years programmes, the following minimum entry qualifications are required:-

(ii) Candidates applying for Bachelor of Engineering must be holders of Ordinary Diploma (NTA Level 6) in Engineering majoring either: Civil or mining or Computer or Electrical or Electronics & Telecommunications or Mechanical or Water Supply and Sanitation or its equivalent from a recognised institution with minimum of Second Lower Class (Grade Point Average (GPA) of 2.7) from a NACTE recognised Institution and at least 4 passes or three (3) credit passes in relevant subjects at Certificate of Secondary Education (CSEE)

Or

Holders of Full Technician Certificate (FTC) in Engineering majoring either: Civil or Computer or Electrical or Electronics & Telecommunications or Mechanical or Water Resources or its equivalent from a NACTE recognised Institution 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 and at least 4 passes or three (3) credit passes in relevant subjects at Secondary Education (CSEE)

(iii) Candidates applying for Bachelor of Technology in Laboratory

Sciences must possess Ordinary Diploma (NTA Level 6) in Technology majoring either: Science and Laboratory Technology or its equivalent from a recognised institution with minimum of Second Lower Class (Grade Point Average (GPA) of 2.7) from a NACTE recognised Institution and at least 4 passes or three (3) credit passes in relevant subjects at Certificate of Secondary Education (CSEE).

Or

Holder of good Full Technician Certificate (FTC) in Technology majoring either: Science and Laboratory or its equivalent from a recognised institution 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 and at least 4 passes or three (3) credit passes in relevant subjects at Secondary Education (CSEE)

In order to qualify for admission into Bachelor Degree (NTA Level 7-8) four (4) years programmes, the following minimum entry qualifications are required:-

(iv) Holders of Advanced Certificate of Secondary Education (ACSEE) in the combination of Physics, Chemistry and Mathematics (PCM) or Physics, Geography and Mathematics (PGM) with Principal Pass in Mathematics and Physics from the same sitting with a total of not less than 2.5 points based on the following conversion scale: A=5, B=4, C=3, D=2, E=1, S = 0.5, F= 0. Selected candidates will be required to undergo a four year programme.

or

(v) Holders of Ordinary Diploma (NTA LEVEL 6) or Full Technician Certificate (FTC) who meet criteria (i) above wishing to change programme of study.

3.3 Admission requirements for BE.ng

Admission into this programme is open to candidates, who have National Technical Award (NTA) level 6 or its equivalent as set by the DIT Council. Also candidates with Form six qualifications and those changing field of study will be admitted after a successful completion of pre-requisite modules.

3.4 Procedures for Application and Admission

3.4.1 Direct Entry Scheme

- (i) Candidates applying for Bachelor Degree programmes must apply through the Central Admission System (CAS) coordinated by Tanzania Commission of Universities (TCU). The modality of application is found on TCU website: www.tcu.go.tz
- (ii) Ordinary Diploma Candidates are required to submit their application form, attaching certified copies of the relevant certificates i.e. CSEE/GCE, ACSEE, valid National Examination results slips, birth certificates as well as 2 personal passport size photographs taken within the last six months.
- (iii) Application forms for Ordinary Diploma Candidates are obtained at the Institute, Registraris office or may be downloaded from our Website: http://www.dit.ac.tz. All application forms with all necessary requirement/ certificates are processed by different boards and finally selected applicants are notified.
- (iv) All applications must be accompanied by a non-refundable application fee of Tsh. 10,000/= for Tanzanian applicants, USD20 for non-Tanzanian for Bachelor of Engineering programmes and Tsh.5,000 for Tanzanian applicants and USD10 for non-Tanzanian for Ordinary Diploma payable the Dar es Salaam Institute of Technology through any branch of CRDB Bank account No 0150408417800.
- (v) All interested candidates are required to fill the application forms and submit within the announced deadline.
- (vi) Non disclosure of details or provision of false information to any of the sections in the application form if discovered shall render

- the candidate's registration with the Dar es Salaam Institute of Technology cancelled.
- (vii) The applications are scrutinized and ranked according to the performance in terms of qualifications and the availability of admission chances

3.4.2 Pre entry Course Scheme

- (i) Dates for Pre- entry Courses are advertised in local newspapers.

 Tentatively, this Course starts within the month of July of each calendar year.
- (ii) Candidates are required to submit their application forms, attaching copies of relevant certificates i.e. Certificate of Secondary School Education (CSSE), Advanced Certificate of Secondary School (ACSSE) and birth certificates
- (iii) All candidates selected for the Pre- entry courses are required to pay prescribed tuition fee before they can be allowed to attend classes. For the Pre-entry Female candidates, the Institute contributes a certain portion of the prescribed tuition fee as described in the Advertisement of the respective courses.
- (iv) At the end of the course, the candidates shall sit for a qualifying examination. All candidates who pass all subjects are recommended for admission subject to available chances.
 - Qualifying female candidates may obtain Government sponsorship or loan, subject to availability.
 - Other candidates are offered admission as private or third party sponsored students.
 - All qualified female candidates are given priority for the selection over male candidates

3.5. Admission requirements and procedures for Master of Engineering in Maintenance Management Programme

3.5.1 Minimum entry qualifications

i. Applicants must be holders of a Bachelor of Engineering Degree in Civil or Electrical with a GPA of at least 3.0 of the Dar es Salaam

Institute of Technology or its equivalent from any other accredited higher learning Institutions. OR

- ii. Candidates with a Bachelor of Engineering Degree in Civil or Electrical or equivalent and at least 2.7 GPA may be considered if they have an evidence of not less than 3 years working experience after graduation. OR
- iii. Holders of Advanced Diploma in Civil or Electrical Engineering or equivalent from an accredited higher learning institution with a PASS and a minimum of five years experience can also be considered.

3.5.2 Procedures for application

Applicants are required to download, print and fill the application forms (DIT/PS/APPL/01 and DIT/PS/APPL/02) and mail them by the address indicated in the form. The duly filled in application must be accompanied with non-refundable application fee of Tshs.30,000/= for Tanzanian applicants or USD 30 for non-Tanzanian applicants payable to the Principal, Dar es Salaam Institute of Technology through any branch of NBC Ltd Bank, account number 011103007131. The form must also be accompanied with certified copies of academic, birth certificates and transcripts as well as two coloured passport size photographs taken within the last six months. Applicants who graduated in non Tanzanian higher learning institutions their academic certificates should be certified by TCU. Application forms and detailed information for application can be downloaded from the DIT website (www.dit.ac.tz).

3.6 Other Important Information Related to Admission

3.6.1 Registration

All selected candidates are required to register after they have paid registration fee within the first two weeks after arrival at the Institute. Specifically, the deadline for registration of first year students is two weeks from the first day of the orientation week, while for continuing students it is the Friday of the second week after the beginning of the First Semester session.

3.6.2 Institute Regulations

Upon admission, all freshers must obtain and read thoroughly the following regulations:

- (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 special for postgraduate students
- (viii) All admitted students are expected to comply entirely with institute regulations.
- (ix) Any other regulations issued by the Institute from time to time.

3.6.3 During registration every student must produce the following documents:

- (i) Joining Instructions sent to him/her
- (ii) A duly filled acceptance form to abide by the Institute Rules and Regulations
- (iii) A duly filled medical examination form
- (iv) All the original receipts / pay in slips of the money paid to the Institute through the Bank
- (v) Original certificates, academic transcripts, statement of results etc for (B.Eng, mature age and Pre entry course entrants)
- (vi) A birth certificate/affidavit
- (vii) 2 passport size and 4 stamp size photographs recently taken
- (viii) All foreign students are required to apply for residence permit from their nearest Tanzania Embassy before they depart for Tanzania.
- **3.6.4** Every student shall report at the Institute at the beginning of the semester and on a prescribed date by the Institute. Any student who fails to report at the Institute on the prescribed date but reports not later than seven days from the date of reporting and without showing any reasonable cause for the failure to do so, shall be liable to receive a written warning from the Registrar.

- **3.6.5** Students who have been selected but cannot register at the Institute for any reason cannot defer the admission to the next academic year. Such students need to apply afresh.
- **3.6.6** Students who have postponed studies will be required to report at the Institute at the corresponding time/date and semester similar to that one she/he left.
- 3.6.7 No change of names by students is entertained during the course of study at the Institute. Names appearing on the original academic certificates shall be used.
- 3.6.8 No student is allowed to change course, except in very exceptional circumstances. In the latter case, no student is allowed to change course later than the Friday of the second week after the beginning of the first semester session.
- **3.6.9** No student is allowed to postpone studies after commencement of an academic year except under special circumstances. Permission to postpone studies is considered after producing satisfactory evidence for the reasons of postponement and written approval from the sponsor.
- **3.6.10** Students shall be allowed to be away from studies for a maximum of two academic years if they are to be allowed for re-admission to the same year of studies where they left.
- **3.6.11** Students discontinued from studies on academic grounds may be readmitted to a different programme in the immediate next academic year or in the same programme after lapse of two years.
- **3.6.12** Students discontinued from studies on disciplinary grounds are barred from re-admission to any programme at the Institute.

FEES AND OTHER FINANCIAL REQUIREMENTS

4.1 General Information

Apart from Tuition Fee, each student is required to pay for the following:

4.1.1 Registration Fee

All selected candidates will be required to register annually and pay a registration fee of Tsh. 5,000/= only per year. For Postgraduate Programmes, registration fees is TSh 50,000/= or USD 50 for non Tanzanian students.

4.1.2 Caution Money

Each student is required to pay Tsh. 10,000/= 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 exceeds 10,000/=, the student shall be asked to pay the difference. USD 10 for non Tanzanians.

4.1.3 Identity Card

Each student is required to come with two recently taken stamp size photographs and TSh. 1,000/= 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. 5,000/=

4.1.4 Membership to the DIT Studentsí Organisation

Every DIT registered student is a member of the DIT Students Organisation (DITSO). The membership registration fee for the first year students is TSh. 10,000/=. Membership subscription fees for every continuing student is TShs 5,000/= each year. This amount must be paid to the Office of the Bursar.

4.1.5 Students Relief Fund /Medical contribution

Every DIT registered student is required to pay a total of TShs. 50,400/= as a contribution towards students joining NHIF. This amount is paid directly to the Institute's Bank Account. Students with NHIF cards are not required to pay TShs. 50,400/=. Evidence of payment of this contribution the IDs for NHIF is required before registration.

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. The Institute has mattresses, which are hired at TSh. 5,000/= only, per academic year. A corresponding bed is hired at TSh. 2,000/= only. Both bed and mattresses are therefore hired together at a total of TSh. 7000/= per academic year.

4.2 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 and students pursuing Bachelor Degree Programmes are as shown in Table 4.1, 4.2 and 4.4 respectively. Tables 4.3 and 4.5 indicate costs that are paid directly to students by Government and /or sponsors/parents/guardian. Table 4.6 shows fees structure of master of engineering in maintenance management programme.

Table 4.1: Fees/costs paid directly to DIT by Government Sponsored Students for Ordinary Diploma (NTA Level 4-6) Programmes

S/N	DESCRIPTION	Year 1	Year 2	Year 3
5/11	S/N DESCRIPTION		TShs	
1	Tuition Fee	130,000.00	130,000.00	130,000.00
2	DIT Boarding Costs	-	-	-
3	Registration Fee			
4	Caution Money	10,000.00	-	-
5	National Health Insurance Fund (NHIF)	50,400.00	50,400.00	50,400.00
6	DIT Examination Fee	50,000.00	50,000.00	50,000.00
7	Identity Card	1,000.00	-	-
8	Library membership Fee	5,000.00	5,000.00	5,000.00
9	Hire of DIT Bed	2,000.00	2,000.00	2,000.00
10	10 Hire of DIT Mattress		5,000.00	5,000.00
11	Students Union Organisation Fee	10,000.00	5,000.00	5,000.00
	Total costs	268,400.00	252,400.00	252,400.00

Table 4.2 Costs paid directly to DIT by Private Sponsored Students for Ordinary Diploma (NTA Level 4-6) Programmes

S/N	DESCRIPTION	Year 1	Year 2	Year 3
5/11	DESCRIPTION		TShs	
1	Tuition Fee	700,000.00	700,000.00	700,000.00
2	Registration Fee	5,000.00	5,000.00	5,000.00
3	Caution Money	10,000.00	-	-
4	National Health Insurance Fund (NHIF)*	50,400.00	50,400.00	50,400.00
5	Identity Card	1,000.00	-	-
6	DIT Examination Fee	50,000.00	50,000.00	50,000.00
7	Library membership fee	5,000.00	5,000.00	5,000.00
8	DIT Students Union Organisation Fee	10,000.00	5,000.00	5,000.00
	Total costs	831,400.00	815,400.00	815,400.00

^{*} For Non- NHIF Members

N.B

- (i) DIT Hostel Accommodation and meals is subject to availability of chances at a rate **TShs 712,000** per year
- (ii) The Institute reserves the right to change or modify fees and cost rate from time to time

Table 4.3: Costs paid directly to Sponsored Ordinary Diploma students by the Government and or Sponsors/parents/guardians

		Year 1	Year 2	Year 3
S/N	DESCRIPTION		TShs	
		444,000	444,000	-
1	Industrial Practical Training Allowance and Training(IPT)*	1	-	1
2	Final Project Cost	-	-	-
	Total costs		444,000	

^{*}IPT rate per day 6000.00 x 70 days and 24,000.00 IPT transport (flat rate).

S/N	DESCRIPTION	Year 1	Year 2	Year 3
			TShs	
1	Tuition fee*	1,020,000.00	1,020,000.00	1,020,000.00
	Registration Fee	5,000.00	5,000.00	5,000.00
	Caution Money	10,000.00	-	-
2	National Health Insurance Fund (NHIF)**	50,400.00	50,400.00	50,400.00
3	Identity Card	1,000.00		-
	Library membership fee	5,000.00	5,000.00	5,000.00
4	DIT Students Union Organization Fee	10,000.00	5,000.00	5,000.00
5	Special Faculty Requirements	See Section.	-	-
6	Final Project/Research requirements	-	-	See section 4.4
Total	costs	1,101,400.00	1,085,400.00	1,085,400.00

Table 4.4 Fees/costs paid directly to DIT by Sponsors of students pursuing Bachelor Degree (NTA LEVEL 7-8) Programmes

* Students benefiting from HESLB facility will be required to pay first part of the fee which is not covered by the HESLB

Note: DIT hostel accommodation is subject to availability of chances at a rate **Tshs 62,000** per year in 1st year and 2nd to 3rd at a rate of **60,000** in each year

Table 4.5: Costs paid directly to Bachelor Degree students by sponsors (Government, organizations or parent/guardian)

S/N	DESCRIPTION	Year 1	Year 2	Year 3
3/11	DESCRIPTION		TShs	
1	Accommodation & Meal Allowance	1,225,000.00	1,990,000.00	1,990,000.00
2	Book and Stationery	120,000.00	120,000.00	120,000.00
3	Industrial Practical Training Allowance (IPT)	500,000.00	500,000.00	-
4	Industrial Practical Training (IPT) Transport*	Variable	Variable	
Total	costs	1,905,000.00	1,870,000.00	1,310,000.00

^{*} Variable depending on IPT place/location ** IPT rate per day TShs. 10,000.00 x 56 days

Note: The living cost for the students provided in this prospectus is minimum cost; however sponsors may opt to pay more to students to meet living cost as per their circulars.

Table 4.6 Fees structure for postgraduate studies (Master of Engineering in Maintenance Management Programme)

1. Fees payable to the Institute

	Resid	lents	Non residents	
Item	First Year [TZS]	6 Months [TZS]	First Year [US \$]	6 Months [US \$]
Application Fees	30,000.00		30.00	
Registration Fees	50,000.00		50.00	
Tuition Fees	3,475,000.00	625,000.00	3,475.00	625.00
DITSO Contribution	10,000.00	5,000.00	10.00	5.00
Graduation Fees		20,000.00		20.00
*Non - Refundable Medical Capitation Fees	-	-	-	-
Caution money	10,000.00		10.00	
Total	3,575,000.00	650,000.00	3,575.00	650.00

(Total amount required for the 1st year can be paid in two installments).

2. Direct Cost payable to Student

	Resid	ents	Non res	idents
Item	First Year [TZS]	6 Months [TZS]	First Year [US \$]	6 Months [US \$]
Books	500,000.00		500.00	
Stationery	150,000.00	50,000.00	150.00	50.00
Dissertation Production Costs		250,000.00		250.00
Living and Facilitation Costs Allowance	3,600,000.00	1,800,000.00	3,600.00	1,800.00
Research Costs		2,000,000.00		2,000.00
Total	4,250,000.00	4,100,000.00	4,250.00	4,100.00

^{*} All Students should have the health insurance

SPECIAL FACULTY/COURSE REQUIREMENTS FOR B.ENG (NTA 7-8) PROGRAMME

Faculty/Course requirements enable students to realise 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 4.6. Course requirement fund is recommended to be paid directly to the Institute.

Table 4.6 Special Faculty/Course requirements for Bachelor Degree Programmes. NTA Level 7-8

PROGRAMME	Costs (TShs)
Civil Engineering	300,000.00
Computer Engineering	170,000.00
Electrical Engineering	145,000.00
Mechanical Engineering	300,000.00
Electronic and Telecommunication Engineering	205,000.00
Laboratory Sciences	300,000.00

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. 258,000.00 where it is recommended that TShs. 118,000.00 and TShs. 140,000.00 are directly paid by the sponsor or third part to the student and the Institute respectively. For Master of Engineering Programme costs for research is TSh. 2,000,000/= or USD 2,000.00 for non Tanzanians.

4.4 PAYMENT OF TUITION AND OTHER FEES 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 any branch, CRDB Bank DIT, A/C No. 0150408417800. Original Bank pay in slips should be presented before registration. Fees once paid will not be refunded.

DIT Bankers: CRDB, Vijana Branch - DSM A/C No. 0150408417800. For Mastr of Eng. Programe payment should be made through NBC account with the following details

Bank Account: Dar es Salaam Intitite of Technology

Account Number: 011103005389

Bank: NBC (any Branch)

However, even in special cases where payment by installment is allowed, 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. Please note that, students **must themselves collect from the Institute Accounts Office profoma invoices** for the money due to be paid directly to the Institute.

EXAMINATION REGULATIONS

At the end of each semester students are required to sit for examinations in accordance with the Institutes regulations. In fulfilling these requirements, Ordinary Diploma (NTAs 4-6) and B.Eng (NTAs 7-8) students are required to be observe the Institutes examination regulations under clause 5.1 (statutory Examinations Powers) as approved by the DIT Council.

5. EXAMINATION REGULATIONS

5.1 Statutory Examinations Power

The Dar es Salaam Institute of Technology (DIT) is empowered to make regulations governing the conduct of and grant of awards by Section 25 of the Parliamentary Act No. 6 of 1997.

5.2 Primacy of Institute Examination Regulations

The Institute examination Regulations take precedence over any other regulations, including those of external or professional bodies, unless variation is specifically permitted by the DIT Council.

5.3 Examination Regulations and its applications

- 5.3.1 The examination regulations detail courses of action to be taken by DIT on all matters related to examinations and awards.
- 5.3.2 These examinations regulations apply to programmes leading to the qualifications National Technical Awards Levels 4 8.

5.4 Cognisance of Examination Regulations

By registering as 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.

5.5 Examinations

- 5.5.1 Examinations include continuous assessment (tests, assignments, seminars presentations, practicals or any other form of assessment specified in the study guide issued at the beginning of Semester) and end of Semester Examinations including practical where appropriate.
- 5.5.2 There shall be a written and, where the course demands, a practical examination during each end of semester for a course taught.
- 5.5.3 Timing of examinations shall be between 08.00 am and 09.00 pm any day of the week including weekends. Approved public holidays and other days when the Institute is closed are excluded.

5.6 Registration for modules

- 5.6.1 In the First Semester of any programme of study candidates shall register for studies and modules in their respective Departments during the orientation week.
- 5.6.2 For second and above semesters students shall provisionally register for modules to be offered in the subsequent semesters two weeks before the end of current semester.
- 5.6.3 Elective modules shall be registered at the Department offering the course and endorsed by the programme administering Department.
- 5.6.4 A candidate may be allowed to add or drop a module within the first two weeks of the semester subject to the approval of the programme administering Head of Department.
- 5.6.5 A candidate shall be examined in all modules registered for.
- 5.6.6 For an elective module to be offered, the minimum number of students shall be ten (10)
- 5.6.7 A candidate shall be registered in the first two weeks of a Semester

5.7 Eligibility for Examinations

- 5.7.1 Candidates eligible for examinations shall be those fulfilling Institute registration and course eligibility requirements, and full payment of fees.
- 5.7.2 No candidate shall be eligible for any examination in any module unless the Head of Department has been satisfied that the candidate has undertaken and completed the course by attendance of at least 80% of the

lectures and practicals.

- a) A candidate with compelling reasons may be granted Permission to absent her/himself from class by the Head of Department after consultation with the Registrar.
- b) Notwithstanding the provision of sub-section 5.7.2 (a), such a candidate shall be required to complete the course by attendance before being allowed to sit for the examination.
- 5.7.3 Permission for postponement of end of Semester Examinations for compelling reasons shall be granted by the Registrar in consultation with the Deputy Principal (Academic, Research & Consultancy); while postponement of continuous assessment component for compelling reasons shall be granted by the respective Head of Department in consultation with the Registrar.

5.8 Performance Threshold

5.8.1 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.

5.8.2 Weighting of Assessment components

The overall score shall be 100% and shall be composed of Continuous Assessment and end of Semester Examination components. Weighting of assessment components unless specified otherwise at the beginning of the semester shall be:

- a) Continuous Assessment 40%
- b) End of Semester Examination 60%

5.8.3 Passing score

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

- b) 50% for continuous assessment, for end of semester examination and for semester overall assessment for NTAs levels 4 5
- c) 45% for continuous assessment, for end of semester examination and for semester overall assessment for NTAs level 6

d) 40% for continuous assessment, for end of semester examination and for semester overall assessment NTAs levels 7 - 8

5.8.4 Industrial practical training (IPT)

All industrial practical training modules and their continuous assessment will be carried out in semester two of the respective NTA level. The log books will be marked and IPT results compilation will take place and included in the semester I of the next NTA level.

5.8.5 Students' Projects

5.8.5.1. Coverage

- i) Project skills are complemented through Project Data Collection and Project Data Analysis modules taken by a student at both NTA 6 and 8.
- ii) Project Data Collection module addresses the project proposal with relevant data collection and is carried out in semester I in both NTA 6 and 8.
- iii) Project Data Analysis module covers the data collection, organization, analysis and the final report done in semester II in both NTA 6 and 8.

5.8.5.2. Projects Evaluation

Students' Projects (Project Data Collection and Project Data Analysis modules) shall be assessed like other module(s);

- i) Evaluation of the Project Data Collection and Project Data Analysis modules shall be done as guided in the Project guidelines (Section 5.1).
- ii) Project Data Collection module is a pre-requisite to Project Data Analysis module, hence failure in Project Data Collection module means that the candidate cannot proceed to Project Data Analysis module, shall have to re-take the whole Project when next offered.
- iii) Failure of Project Data Analysis module shall require the candidate to re-do the whole Project when next offered. The score given to Project Data Collection in that case shall be nullified.

5.9 Absence from Examination

- 5.9.6 A candidate who absents oneself (unauthorized absence) from any examination without compelling reasons shall be discontinued from studies. In this regulations, iunauthorized absenceî include going out of examination room, temporarily or otherwise, staying out of the examinations room for an unduly long period, without authority or permission of the invigilator or one of the invigilators for the examinations in question.
- 5.9.7 A candidate allowed to be absent (authorized absence) from the end of Semester examination shall carry forward the un-examined module(s) as incomplete and shall have to sit and pass the respective examination(s) when next offered.
- 5.9.8 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 mark.

5.10 Dates and duration of Examinations

- 5.10.1 Dates and times of conducting continuous assessments shall be determined and indicated by the respective Lecturer(s)/Instructor(s) in the course outlines or study guides or otherwise at the beginning of the Semester.
- 5.10.2 Frequency of continuous assessment shall be at least two for each assessed item, e.g., minimum number of class tests is two.
- 5.10.3 Dates for the end of semester examinations shall be published in the Institute academic calendar approved by the Academic Committee of the Council.
- 5.10.4 Duration for end of semester theory examinations shall be at least two hours for NTAs 4 5, two and half hours for NTAs 6 and three hours for NTAs 7 8.

5.11 Administrative organs

5.11.1 Academic Board

There shall be Academic Board of the Institute.

a) Responsibilities:

- The Academic Board shall review External Examinersi reports of all Dar es Salaam Institute of Technology departments, review performance of all students and make recommendations to the Academic Committee of the Council.
- ii) In addition, the Academic Board shall review and recommend academic policies and regulations to the Academic Committee of the Council for approval.

b) Composition:

- (i) Principal Chairperson
- (ii) Deputy Principal (Academic Research and Consultancy)
 Secretary
- (iii) Registrar
- (iv) Heads of Academic Departments
- (v) Two Student representatives (NTAs levels 4 6 and NTAs levels 7 8) nominated by the DIT Students Organization (DITSO).
- (vi) Dean of students

5.11.2 Irregularities Committee of the Academic Board

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

(b) Responsibilities:

- The Irregularities Committee shall receive irregularities reports, deliberate, investigate and recommend action to be taken by the Registrar subject to approval of 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.

(c) Composition

Composition of the Irregularities Committee shall be decided by the Registrar.

5.11.3 Academic Appeals Board

There shall be Academic Appeals Board of the Institute.

(b) Responsibilities

The Academic Appeals Board shall receive appeals, investigate, discuss and make recommendations to the Academic Committee of the Council.

(c) Composition

- (i) Registrar Chairperson
- (ii) Secretary of the Academic Staff Association (ASA) Secretary
- (iii) Head(s) of Department(s) where the appealing student(s) belong(s)
- (iv) Two Students representatives nominated by DITSO.
- (v) Dean of students

5.11.4 Academic Committee

There shall be Academic Committee of the Council.

(a) Responsibilities:

- The Academic Committee shall receive, deliberate and provisionally approve reports and recommendations of the Academic Board.
- ii) The Academic Committee shall recommend deliberations of the Academic Board to the Council for approval/endorsement.

(b) Composition:

The composition of the Academic Committee shall be decided by the Council.

5.12 Examination Irregularities and Penalties

- **5.12.1:** All cases of alleged examination irregularities shall be referred to the Office of Registrar immediately which, through Irregularities Committee, shall investigate and submit recommendations to the Academic Board.
- **5.12.2:** Unauthorized materials such as written or printed materials, purses, electronic equipment including cell-phones, pagers and any other device (other than an approved device) capable of storing text or restricted information etc shall not be allowed into the examination premises.

Any candidate who shall be proven to have brought/used unauthorized material in the examination room in any part of the examination process shall have committed examination irregularities.

- 5.12.3: Candidates shall not engage themselves in any form of communication in the examination room when the examination is in progress. There shall be no borrowing or exchanging of materials such as calculators, rulers and pens among candidates during examinations.
- 5.12.4. Any candidate who shall be proven to have committed examination irregularities, including being involved in Plagiarism and impersonation in any part of the examination shall be discontinued from studies subject to confirmation by the Council.

5.13 Publication and Nullification of Results

5.13.1 Provisional Results Publication

The provisional results of candidates in every examination shall be published by the Registrar soon after the Instituteís Academic Board meeting but the results shall be provisional until the Academic Committee of the Council confirms them.

5.13.2 Right and Discretion of the Institute

- (b) The issue of results and awards shall be entirely at the discretion of the Academic Committee of DIT Council.
- (c) The Institute, subject to the approval of the Council, shall amend the classification of, withhold or nullify an award of any candidate in proved cases of irregularity or any other forms of fraud, or to revoke, any certificate it has already awarded, and to require the awarded certificate to be returned to the Institute.

5.13.3 Release of Examinations Results and Candidates Responsibilities

- (a) Candidates shall be informed where and how to get their results as directed by the Academic Committee.
- (b) 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
- (c) Candidates shall be responsible for maintaining an awareness of their academic performance and dates of normal, supplementary and re-take examinations.

5.13.4 The Timing and Means of Release of examination results

- (b) Examination results shall be published immediately after the approval of the Academic Committee. The results may be posted on departmental boards and shall bear a certification of the Registrar.
- (c) The Institute may also use other means including its own website and tools such as the electronic platform software to give notices on matters related to examination results.
- (d) In the event Institute releases examination results by publishing in the news media, notice-boards or 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 shall be used for releasing the results to the general public.

5.14 Procedure for Appeal

- 5.14.1 Except where unfair marking or other irregularity in the conduct of any examination is alleged, no appeal shall be entertained in respect of any such examination on any other grounds.
- 5.14.2 Appeals shall be lodged to the Registrar through the Heads of the respective Departments using appeal forms within seven (7) working days from the date of the provisional publication of results, unless directed otherwise by the Principal.
- 5.14.3: For appeals related to unfair marking the Registrar shall forward the appeal to the respective departments that offer the module. The head of the department shall appoint expert(s) that shall determine the validity or re-mark the scripts and the department shall give its recommendations to the Academic Board.

- 5.14.4: For appeals not related to unfair marking, they shall be forwarded to the Academic Appeals Board that shall determine the validity of the appeal and shall give its recommendations to the Academic Board.
- 5.14.5 All appeals must be accompanied by a non refundable appeal fee prescribed per module by the Principal at the beginning of each academic year.
- 5.14.6 The decision of the Council shall be final and no further appeals shall be entertained.
- 5.14.7 No mass action by students shall be entertained in academic matters as per regulations.

5.15 Preservation of Examination Scripts

- 5.15.1 Written examination scripts and examinations records, like, practical examinations, shall be preserved for at least one year after publication of the results.
- 5.15.2 The examination scripts and examinations records of failed modules shall be preserved until a year after their clearance.

5.16 Academic Audit Units for NTAs Levels

5.16.1 Academic Audit Unit for programmes leading to the awards of NTAs Levels 4-to 8 shall be one academic year.

5.17 Progress from one Academic Audit Unit to the next Academic Audit Unit

A candidate shall be allowed to proceed to the next academic unit within the same qualification level (NTAs level) as a probating student provided the GPA in that academic unit is not less than 2.0.

- **5.17.1:** A candidate getting a GPA less than 1.8 in that academic audit unit shall be discontinued from studies.
- **5.17.2:** A candidate getting a GPA of 1.8 or above but failing some modules in that academic audit unit shall be required to supplement the failed modules and pass before being promoted to the next academic audit unit.

- **5.17.3**: A probating candidate failing in a continuous assessment shall be required to supplement the CA part of the module similar to one failing in the semester examination.
- **5.17.4:** A probating candidate failing in a supplementary examination including continuous assessment or semester examination shall be required to retake the respective module when next offered, but only once for the NTA level registered for, provided that the candidate attains a GPA of at least 2.0 and passes at least 50% of the total credits.
- **5.17.5:** NTA level 7 students are allowed to re-take a maximum of two modules of the first academic year (first and second semesters) while undertaking second academic year module (third and fourth semester)
- **5.17.6:** Any candidate who absents oneself from a scheduled examination without compelling reason(s) shall be deemed to have absconded from the examination and shall be discontinued from studies.
- **5.17.7:** The highest grade for all supplementary examinations shall be the lowest pass mark of "C".
- **5.17.8:** For promotion to the next level of award candidates shall pass all prescribed modules for the prerequisite (current) level of award through first sitting, supplementary or as a probating student.

5.18 Progress from current level to the next level of award

- 5.18.1 A candidate shall be allowed to proceed to the next level of award after passing all prescribed modules at the pre-requisite level.
- 5.18.2 A candidate who does not meet requirements for level progression may be recommended for a lower level of award for which has fulfilled the requirements for the award.

5.19 Special Examinations (First Sitting)

Candidates permitted to sit for special first sitting examinations shall do so as directed by the Registrar.

5.20 Postponement of Studies

- 5.20.1 Permission for postponement of studies on compelling grounds shall be granted by the Principal in consultation with the sponsor.
- 5.20.2 The maximum duration for postponement of studies for whatever reasons shall be two academic years.
- 5.20.3 No one shall be allowed to postpone more than once in one level of award except for compelling medical grounds.

5.21 Conditions for the Award

A candidate shall qualify for the award registered for if:

- 5.21.1 He/She has successfully completed all modules for the award and achieved a minimum cumulative Grade Point Average (GPA) equivalent to pass.
- 5.21.2 He/She has passed all industrial practical training modules.
- 5.21.3 He/She has passed senior projects (where applicable).
- 5.21.4 He/She has paid required fees.
- 5.21.5 He/She has fulfilled any other terms and conditions established by the Council

5.22 Classification of Awards

- 5.22.1: i) A Five Point and Six-Point Systems shall be used in averaging the final grades in awards classified by the Institute at NTAs Levels 4-5 and NTAs Levels 6-8 respectively. The letter grades shall be assigned a Five Point and Six-Point (in line with item 5.23.2), that shall be used in the general formula for calculating the Grade Point Average (GPA) for semester modules and finally the annual GPAs.
- ii) Grade point (GP) for a module shall be calculated as a product of letter grade points achieved in the module (Table 5.1) and credits of the module i.e Σ (Letter Grade points \times Credit). Ranges of scores for different grades and levels of studies are given in Table 5.1.

Table 5.1: Ranges of Scores for Different Grades

	NTAS Level 4-5	ŵ		NTA Level 6			NTAs Level 7-8	
Grade	Definition	Score Range	Grade	Definition	Score Range	Grade	Definition	Score Range
			A	Excellent	75 - 100	A	Excellent	70 - 100
A	Excellent	80 - 100	B+	Well Above Average (Very Good)	65-74	B+	Well Above Average (Very Good)	69-09
В	Above Average (Good)	62 - 29	В	Above Average (Good	55-64	В	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
Ħ	Failure	0-39	দ	Failure	0-34	ΙΉ	Failure	0-34
н	Incomplete		П	Incomplete		I	Incomplete	

5.22.2 Procedure for Classification of Degrees

(a) NTA	<u>s Level 4-5</u>
Class of Awards	Cumulative GPA
First Class	3.5 - 4.0
Second Class	3.0 - 3.4
Pass	2.0 - 2.9
(b) 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

5.23 Procedure for calculating Grade Point Average (GPA)

5.23.1 Modules considered in computing GPA

All core modulesí credits shall be included in calculating GPA. However, where candidate takes electives over and above minimum required, credits from electives with highest scores adding to the minimum particular NTAs award shall be used in calculating GPA. The scores for the remaining electives shall be entered into the transcript.

5.23.2 Computation of the Cumulative GPA (CGPA)

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

CGPA = Avg GPA = GPA FOR SEMESTER I + GPA FOR SEMESTER II

2
WHERE GPA FOR A GIVEN SEMESTER =
$$\sum$$
 (Grade points x Credit)
$$\sum$$
 Credit

Grade Points Computation for NTAs 4-5

Range of Marks	Grade	Grade point	Equation For The Grade Point
80 - 100%	A	4.0	
65 – 79 %	В	3.0	
50 – 64 %	С	2.0	Σ (Letter Grade points \times Credit)
40 – 49 %	D	1.0	Σ Credits
0 – 39%	F	0	

Grade Points Computation for NTAs 6

Range of Marks	Grade	Grade point	Equation For The Grade Point
75 - 100%	A	5.0	
65 – 74 %	B+	4.0	
55 – 64 %	В	3.0	Σ (Letter Grade points $ imes$ Credit)
45 – 54 %	С	2.0	<u>Σ (Letter Grade points × Credit</u> Σ Credits
35 – 44%	D	1.0	2 6, 6,
0 - 34%	F	0	

Grade Points Computation for NTAs 7-8

Range of Marks	Grade	Grade point	Equation For The Grade Point
70 - 100%	A	5.0	
60 - 69%	B+	4.0	
50 – 59 %	В	3.0	
40 – 49 %	С	2.0	Σ (Letter Grade points × Credit)
35 – 39%	D	1.0	Σ Credits
0 - 34%	F	0	

5.23.3 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 places
- 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

5.24 Institute awards approved

Upon completion of studies the Institute shall award successful candidates the following Institute awards as approved by the National Council for Technical Education (NACTE)

- (b) NTAs level 4 Basic Technician Certificate
- (c) NTAs level 5 Technician Certificate
- (d) NTAs level 6 Ordinary Diploma
- (e) NTAs level 7 Higher Diploma
- (f) NTAs level 8 Bachelor Degree
- (g) NTAs 9- Master Degree

5.25 Issue of Academic Certificate

- 5.25.1 The Institute shall award Academic certificates to successful candidates as approved by the Council of the Institute. The certificate recipients will not be required to meet the cost of printing the certificates.
- 5.25.2. The institute may correct a printed certificate and issue a corrected certificate if it is satisfied that there is a need to do so. The Principal shall prescribe the cost to be paid by the bearer of the certificate if the error to be corrected is caused by the bearer.

5.26 Replacement of Lost Academic Certificates

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

- (a) The applicant produces a sworn affidavit,
- (b) The certificate so issued shall be marked "COPY", across it;
- (c) The replacement certificate shall not be issued until 12 months after reporting the loss to the Institute;
- (d) The applicant must produce evidence that the loss has been adequately publicly announced, including a written report from the Police;
- (e) A fee prescribed by the Principal at the beginning of the academic year shall be charged, for the copy of the certificate issued.

5.27 Issue of Transcript/Statement of results

The Institute may issue transcripts statement of results at a cost prescribed by the Principal at the beginning of the academic year.

5.28 Amendments

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

Note: The examination regulations for Postgraduate programmes are presented in the postgraduate guidelines and the postgraduate students should comply with the postgraduate guidelines.

PROFILE OF ACADEMIC DEPARTMENT

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 Dept will also start offering Master of Engineering in Maintenance Management (NTA 9) by course work and dissertation, in this academic year 2013/2014. 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 are awarded a Higher Diploma (HD), including those who proceed to NTA level 8, but are unable to qualify for a degree. 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 programmes, the department possesses adequate physical and human resources this include lecturers, classrooms, laboratories and workshops. It has Thirty eight 38 qualified teaching staff members and five technical supporting personnel.

6.1.1 Programmes offered by Civil Engineering Department

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

Semester I

Code	Module Title	Credit		
	FUNDAMENTAL MODULE			
GST 04101	Algebra	5		
GST 04102	Basic Technical Communication skills.	2		
GST 04103	Entrepreneurship Concepts and Context	3		
CSET 04101	Computer Basics, Word processing & Spreadsheep	2		
EET 04104	Electrical Installation and Drafting	12		
MET 04103	Gas Welding Processing	9		
SLTP 04101	Statistic and Dynamics	3		
CORE MODULES				
CET 04101	Linear Surveying	9		
CET 04102	Road Drainage & Maintenance	6		
CET 04103	Introduction to Technical Drawing	9		
CET 04104	Basic Soil Mechanics	6		
CET 04105	Introduction to Civil Engineering Material	6		
CET 04106	Basic Construction Practice	6		
	Total	78		

Code	Module Title	Credit
	FUNDAMENTAL MODULE	
GST 04204	Trigonometry and Vectors	5
GST 04205	Communication skills	2
GST 04206	Small Business Development	3
CSET 04204	Spread Sheet and Database	2
MET 04208	Arc Welding Processes	9
SLTP 04202	Gravitation and Simple Harmonic Motion	3

CORE MODULES		
CET 04206	Basic construction practices	6
CET 04207	Basic Building Construction	9
CET 04208	Introduction to Architectural Drawing	9
CET 04209	Mechanics	5
CET 04210	Maintenance and Construction techniques	9
	Total	62

Total Credits at NTA Level 4: 130 (Minimum credits required at level 4: 120)

(b) TECHNICIAN CERTIFICATE IN CIVIL ENGINEERING -NTA 5

Code	Module Title	Credit		
	FUNDAMENTAL MODULE			
CCT 05101	Fundamental Rule of Counting, matrices and	_		
GST 05101	Differentiation	5		
GST 05102	Business Communication	2		
CSET 05101	Presentation and Internet	2		
GST 05103	Business Start up and Management	3		
SLTP 05101	Strength of Materials and Rotational Dynamic	3		
	CORE MODULES			
CET 05101	Land Surveying	9		
CET 05102	Buildings Construction	9		
CET 05103	Measurement of Building Works	8		
CET 05104	Building and Civil Engineering Materials	6		
CET 05105	Structural Analysis	9		
CET 05106	Hydraulic and Fluid Mechanics	6		
CET 05212	Industrial Practical Training	10		
	Total	72		

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 Techniques	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 IN CIVIL ENGINEERING -NTA 6

Code	Module Title	Credit	
	FUNDAMENTAL MODULE		
GST 06101	Conics and Differential Equation	4	
GST 06102	Engineering Study Skills	2	
GST 06103	Formalizations, Internationalization and	2	
GS1 00103	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 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	87

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	Head 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	Structure 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 IN MINING ENGINEERING (NTA4)

Code	Module Title	Credit
	FUNDAMENTAL MODULE	
GST 04101	Algebra	5
GST 04102	Basic Technical Communication Skills	2
SLTP 04101	Statics and Dynamics	3
GST 04103	Entrepreneurship Concepts and Context	3

CSET 04101	Computer BasicS Word Processing and	2
CSE1 04101	Spreadsheet	
MET 04103	Arc Welding Processes	9
	CORE MODULES	
CET 04103	Introduction to Technical Drawing	9
MMT04101	Introduction to Mining	6
EET 04104	Electrical Installation & Drafting	12
MMT 04102	Fundamental of Drilling Practices	9
MMT 04103	Mine Safety and Regulations	6
MMT 04104	Drilling Skills Practices	6
MMT 04105	Introduction to Geology	6
EET 04102	Principles of DC Network	12
	Total	90

Code	Module Title	Credit
	FUNDAMENTAL MODULE	
GST 04204	Trigonometry and Vectors	5
GST 04205	Communication Skills	2
GST 04206	Small Business Development	3
CSET 04204	Spread Sheet and Database	2
MET 04208	Gas Welding Processes	9
SLT 04202	Gravitational and Simple Harmonic Motion	3
	CORE MODULES	
MMT 04205	Fundamentals of Structural Geology	6
MMT 04206	Explosive and Blasting Techniques	9
SLTP 04214	Basic chemistry Techniques	3
MMT 04207	Basic Surface Mining Practices	6
MMT 04208	Basic of Rock Properties for Drilling and Blasting	9
CET 04209	Mechanics	6
	Total	63

Total Credits of the equivalent NTA Level 6: 153 (Minimum credits required at level 6: 120)

(e) TECHNICIAN CERTIFICATE (TC) IN MINING ENGINEERING -NTA 5

Semester I

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

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
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
SLTP 05202	Fluid Mechanics	3
	Total	60

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

(f) ORDINARY DIPLOMA IN MINING ENGINEERING -NTA 6

Code	Module Title	Credits
FUNDAMENTAL MODULES		
GST 06101	Conics and Differential equation	4
GST 06102	Engineering Study SkillS	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
	Quantity Survey	9
	TOTAL	84

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
	ELECTIVE MODULES	
MED 103	Industrial Management and Law	6
CET 309	Road construction	6
	Total	12

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

(g) GENERAL COURSE PROGRAMME FOR B.ENG (CIVIL ENGINEERING)

Code	Module Title	Credits
FUNDAMENTAL MODULES		
CSET 04101	Computer Basics and Word Processing	2
EET 04104	Electrical Installation and Draughting	12
GST 04102	Basic Technical Communication Skills	2
GST 04103	Entrepreneurship Concepts and Context	3
MET 04208	Arc Welding Processes	9
SLTP 04101	Static and Dyanamics	3

CORE MODULES		
CET 04101	Linear Surveying	9
CET 04102	Road Drainage and Maintenance	6
CET 04103	Introduction to Civil Engineering Materials	9
CET 04104	Basic Construction Practices	6
CET 04106	Labour Based Technology	9
CET 04105	Introduction to Civil Engineering Materials	6
CET 04106	Basic Construction Practices	6
	Total	82

Code	Module Title	Credits
FUNDAMENTAL MODULES		
CSET 04204	Spreadsheet and Database	2
GST 04205	Communication Skills	2
GST 04206	Small Business Development	3
MET 04103	Gas Welding Processes	9
SLTP 04202	Gravitation and simple harmonic motion	3
	CORE MODULES	
CET 04206	Basic Construction Practices	6
CET 04207	Basic Building Construction	9
CET 04208	Introduction to Architectural Drawing	9
CET 04209	Mechanics	5
CET 04210	Maintenance and Construction Techniques	9
CET 04211	Industrial Practical Training	10
CET 05105	Structural Analysis	9
CET 05210	Soil Mechanics	9
	Total	85

(h) HIGHER NATIONAL DIPLOMA IN CIVIL ENGINEERING NTA LEVEL 7

Semester I

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GSU 07101	Calculus	6	
GSU 07105	Computing Using Mathematical Software	6	
GSU 07106	Technical Communication Skills	6	
CSEU 07101	Object Oriented Programming	9	
CORE MODULES			
CEU 07101	Land Surveying	6	
CEU 07102	Building Construction	6	
CEU 07103	Measurement of Building and Civil Works	6	
CEU 07104	Basic Civil Engineering Materials	6	
CEU 07105	Strength of Materials	6	
CEU 07313	Engineering Geology	9	
	Total	66	

Code	Module Title	Credit		
	FUNDAMENTAL MODULES			
GSU 07202	Advanced Calculus	6		
CSEU 07201	Data Structure and Programming	6		
	CORE MODULES			
CEU 07206	Control Surveying	9		
CEU 07207	Civil Engineering and Drawing	6		
CEU 07208	Buildings Planning and Drawing	6		
CEU 07209	Concrete Technology	6		
CEU 07210	Basic Structural Theory	6		
CEU 07211	Fluid Mechanics	6		
CEU 07423	Labour Based Road Engineering	3		
	Total	54		

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GSU 07303	Differential Equations and Complex Variables	6	
	CORE MODULES		
CEU 07312	Quantity Surveying	6	
CEU 07314	Structural Analysis	6	
CEU 07315	Open Channel Hydraulics	6	
CEU 07316	Construction Management	9	
CEU 07317	Reinforced Concrete Design	6	
CEU 07318	Traffic Engineering	6	
Ceu 07227	Industrial Practical Training	12	
Total			

Semester IV

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GSU 07404	Probability and statistics	6
GSU 07407	Research Methods for Engineers	3
	CORE MODULES	
CEU 07419	Contract Planning and Administration	6
CEU 07420	Soil Mechanics	6
CEU 07421	Reinforced Concrete Design and Detailing	6
CEU 07422	Construction of Multi-storey Structures	6
CEU 07424	Hydrology Engineering	6
CEU 07425	Water Supply	6
CEU 07426	Route Design	6
CEU 07428	Industrial Practical Training	12
	Total	63

Total Credits at NTA Level 7 is 240, (Minimum credits required at level 7 is 120)

(i) BACHELOR OF CIVIL ENGINEERING - NTA 8

Semester I - Structural Engineering

Code	Module Title	Credits
	CORE MODULES	
CEU 08101	Engineering Economics	9
CEU 08103	Structural Steel design	9
CEU 08104	Soil Technology	6
CEU 08105	Highway Engineering materials	6
CEU 08106	Construction Technology Services	6
CEU 08107	Solid Waste Management	6
CEU 08108	Data Collection	18
CEU 08110	Industrial Practical Training	12
	Total	66

Semester II - Structural Engineering

Code	Module Title	Credit
	CORE MODULES	
GSU 08201	Entrepreneurship for Engineers	3
CEU 08201	Structural Timber design	9
CEU 08202	Foundation Engineering	9
CEU 08203	Industrial Building Construction	9
CEU 08204	Masonry and Retaining Wall Design	9
CEU 08205	Project	18
	Total	57

Total Credits at NTA Level 8: 168 (Minimum credits required at level 8: 120)

Semester I - Transportation Engineering

Code	Module Title	Credit	
	CORE MODULES		
CEU 08101	Engineering Economics	9	
CEU 08103	Structural Steel design	9	

CEU 08105	Highway Engineering Materials	6
CEU 08109	Bridge Design and Construction	6
CEU 08107	Solid Waste Management	6
CEU 08108	Data Collection	18
CEU 08110	Industrial Practical Training	12
	Total	66

Semester II - Transportation Engineering

Code	Module Title	Credit	
	CORE MODULES		
CSU 08201	Entrepreneurship for Engineers	3	
CEU 08201	Structural Timber design	9	
CEU 08202	Foundation Engineering	9	
CEU 08206	Pavement Design and Construction	6	
CEU 08207	Transportation Engineering	6	
CEU 08208	Pavement Maintenance	6	
CEU 08205	Project	18	
Total		57	

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

Semester I - Water Resources Engineering

Code	Module Title	Credit
	CORE MODULES	
CEU 08101	Engineering Economics	9
CEU 08103	Structural Steel design	9
CEU 08105	Highway Engineering Materials	6
CEU 08107	Solid Waste Management	6
CEU 08110	Hydraulic Structures	6
CEU 08108	Data Collection	18
CEU 08110	Industrial Practical Training	12
	Total	66

Semester II - Water Resources Engineering

Code	Module Title	Credit
	CORE MODULES	
CSU 08201	Entrepreneurship for Engineering	3
CEU 08201	Structural Timber design	9
CEU 08202	Foundation Engineering	9
CEU 08209	Waste Water Engineering	9
CEU 08210	Irrigation Engineering	9
CEU 08205	Project	18
Total		57

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

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

Code	Module Title	Credits
	CORE MODULES	
CEMG 09101	Leadership Principles and Human Resource Management	9
CEMG 09102	Maintenance Management	12
CEMG 09103	Maintenance Organisation and Planning	9
CEMG 09104	Maintenance Materials Management	9
GSMG 09101	Statistics in maintenance management	12
CEMG 09112	Financial Management	6
	Total	57
	ELECTIVE MODULES	
EEMG 09101	Electrical Maintenance Workshop	9
EEMG 09102	Power Transmission and Distribution Lines Maintenance	9
CEMG 09105	Building Maintenance Management	9
Total 25		

Code	Module Title	Credits
	CORE MODULES	
CEMG 09206	System Engineering and Life Cycle Management	12
CEMG 09207	Maintenance System Design and Management	9
CEMG 09208	Computer Managed Maintenance System	9
CEMG 09209	Risk and Safety Management	9
CEMG 09210	Dissertation	60
	Total	99
	Elective Modules	
EEMG 09203	Energy Management	12
EEMG 09204	Energy-Efficient Electric Motor Selection	9
CEMG 09211	Maintenance of Road and Road Structures	12
CEMG 09212	Maintenance for Water and Sanitation	9
CLIVIO 09212	Infrastructures	9
	Total	42

Total credits at this level NTA 9 is 225, (Minimum credits required at this level is 150.)

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

Lecturer and Head of Department

P. Mgaya, FTC Eng (TCA), BSc.Eng(Dar), MSc Eng(Dar), PhD (Japan)

Senior Lecturer

S S. Kassim, FTC Eng (KTC), ADE (DTC), MEng (Holland), GEng(T) GEng (IET), PhD (UK)

Lecturers

E.S. Urio, FTC Eng (DTC), MSc.Eng (USSR), PhD (China) ,G.Eng (T) Rwandallah, FTC Eng (DTC), MSc. Eng (USSR), PhD (China), G. Eng (T)

- A.M. Thomas, BSc. Eng (UDSM), MSc WRE (UDSM), PhD (China)
- *S.J. Mbawala, FTC (DTC), ADE (DTC), MSc. Eng. (RSA)
- J. Musagasa BSc Eng. (UDSM), MSc Eng. (UDSM), PhD (USA)
- J.Malisa, BSc. Eng (UDSM), MSc. Eng (UDSM), MSc, Eng. (UDSM), PhD Water Resources (UDSM)
- A.S. Oberlin, ADE (Public Health.) (UCLAS), MSc (Environ.) (Holland), PhD Environment Mgt (Wageningen) Univ The Netherland

Assistant Lecturers

- D.R. Singo, Diploma Ed. (Klerruu), BSc. Eng (UDSM),MSc (Highway) (UK), PEng (T)
- *M.S. Ntiyakunze, AD Public Health (Ardhi Institute), MSc Env (Holland)
- J.A. Njau, AD Arch) (Ardhi Institute)
- I.M. Kanuti, FTC Eng (DTC), MSc Eng (USSR)
- Y.N. Ngoma, PGD (Geology) (Holland), MSc (Struct. Eng) (Byelorussia)
- B.Y.B. Masangya, FTC Eng ADE (DTC), MSc.(Struct. Eng.) (UK)
- M. Kongola, BSc. Mining (Zambia), MSc. Mining (UK)
- B. Mvuoni, AD (Land Surv) Ardhi Institute
- P. Mfaume, BSc.Geology (UDSM) MSc Hydrogeolog (UDSM)

- A. L. Ndibalema, ADBE (Ardhi Inst), MSc (Facility Management) Leeds
- J. Chacha, B.Eng (DIT), MSc(UK)
- M. Kaswa ,FTC Civ. Eng (DIT), ADE (Electr.&Telecom.) (DIT) Adv. Cert (T) FRG, MSc (UK)
- R. Mkemai, BSc. (Mining) (UDSM), MSc. (Mining & Geotechnical Eng) (Sweden)
- J. Sandoka, BSc. (UDSM). MSc Env. Tech Mgt (ARU)

Tutorial Assistant

P. Sillah BSc (UDSM)

Principal Instructors I

C.A.J. Msulwa, FTC Eng (DTC), DE (Kleruu) DTE (DTC)

A. Ambogo Ad. Dip (Surveying - ARU), Post. Dipl. (UK) MSc (Geomatics - ARU)

Principal Instructors II

- G.J. Msengi, FTC Eng, DTE (DTC), Adv Cert. (Woodwork) (FRG) ADE (DIT Senior Instructor II
- E.J. Mwansele, FTC Eng, DTE (DTC), Adv. Dip. IT (IFM)
- Z. Nuru. BSc. Mining (UDSM)
- W. Shiyo B.Sc (UDSM) MSc (USA)
- P.M.C. Njovu, FTC Eng (DTC), B. Eng (MIST)

Laboratory Technician grade I

A.H. Hemed, FTC Eng, (DTC), BTEC Adv. Dip. (IT), (Soft-Tech Ltd., (UDSM))

Mwita, FTC Eng (TCA), Adv Cert. (Woodwork) (FRG

Nungu, FTC Eng (DTC), Adv. Cert. (Woodwork) (FRG), ADE (DIT)

Yasini M. Limia, OD (ATC)

6.2 DEPARTMENT OF COMPUTER STUDIES

This department offers Computer Engineering , Information Technology and Multimedia &Film Technology at Ordinary Diploma (NTA Level 4 - 6) and Bachelor of Engineering (NTA Level 7 -8) programmes. It also provide services to other academic departments in the teaching of computer related modules. This department has adequate facilities as well as 25 qualified teaching staff and 4 technical supporting personnel. The teaching facilities as well as staffing level in terms of numbers and qualifications are constantly improved so as to support above programmes. In the new directive from NACTE, Computer Engineering and IT students will study the same modules at NTA Levels 4 and 5 and separate at NTA Level 6.

6.2.1 Programmes Offered by Computer Studies Department

(a) BASIC TECHNICIAN CERTIFICATE IN COMPUTER ENGINEERING AND IT - NTA 4

Code	Module Title	Credits		
	FUNDAMENTAL MODULES			
		Credit for	Credit	
		IT	for Eng.	
GST 04102	Basic Technical Communication skills	2	2	
GST 04101	Algebra	5	5	
SLTP 04101	Statics and Dynamics	3	3	
GST 04103	Entrepreneurship Concepts and Context	3	3	
	CORE MODULES			
CSET 4102	Computer Systems Maintenance and Rep	air	12	
CSET 4103	Computer basic Word Processing and Spr	readsheet	12	
CSET 4103 Computer basic Word Processing and Spreadsheet		12		
ETT 04101	Basic Electronics		9	
EET 04102	Principal of DC Network		9	
MET 04105	Workshop Technology		9	
Total Credits			64	

Code	Module Title	Credits IT	Credits for Computer Eng.
	FUNDAMENTAL MODULES		
GST 04205	Communication Skills	2	2
GST 04204	Trigonometry and Vectors	5	5
SLTP 04208	Gravitation and simple harmonics motion	3	3
GST 04206	Small Business Development	3	3
CORE MODULES			
CSET 04205	Computer Peripherals Maintenance and Repair	12	12
CSET 04206	Local Area Network	12	12
CSET 04207	Database fundamentals	12	12
EET 04205	Principal of AC Network	09	09
IT an	d Computer Engineering Total	58	58

Total Credits at NTA 4 Computer Engineering: 122. (Minimum credits required at NTA 4:120)

Total Credits at NTA 4 IT: 122 (Minimum credits required at NTA 4 120)

(b) TECHNICIAN CERTIFICATES IN COMPUTER ENGINEERING AND IT (NTA LEVEL 5)

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
		Credit for IT	Credit for Computer Eng.
GST 05101	Fundamental Rule of counting, matrices and Differentiation	5	5
GST 05102	Business Communication	2	2

GST 05103	Business Start Up and Management	2	3
SLT P	Strength of Materials & Rotational	2	2
05101	Dynamics	2	2
	CORE MODULE		
CSET 05102	Computer Programming		6
CSET 05103	Operating Systems		12
EET 05102	Instrumentation		9
EET 05103	Analogue Electronics		6
EET 05104	Digital Electronics		6
MET 05101	Engineering Drawing		9
EET 04104	Electrical Installation & Draughting		12
CSET 05108	Industrial Practical Training		10
Total credits			82

Code	Module Title	Credits		
	FUNDAMENTAL MODULES			
GST 05204	Integration, Statistics and Probability	5		
GST 05205	Communication & Technical Presentations	2		
GST 05206	Business Financial Management & Accounting	3		
GST 05207	Research Methods for Technicians	3		
SLT P 05202	Fluid Mechanics	3		
	CORE MODULES			
CSET 05205	Data Structure and File Handling	6		
CSET 05206	Computerized System Maintenance and Repair	12		
CSET 05207	Microprocessor Technology	6		
CSET 05208	System Analysis & Design	7		
CSET 05209	Wide Area Network and Internetworking	12		
Tot	ral credit for IT and Computer Eng.	59		

Total Credits at NTA 5 Computer Engineering: 140. (Minimum credits required at NTA 5: 120)

Total Credits at NTA 5 IT: 140 (Minimum credits required at NTA 5: 120)

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

Semester I

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06101	Conics and Differential Equations	4
GST 06102	Engineering study skills	2
SLTP 06102	Electromagnetism	2
GST 06103	Formalization, Internationalization and E-business	2
	CORE MODULE	
CSET 06102	Software Engineering Fundamentals	9
CSET 06103	Multimedia Concepts	9
CSET 06104	Concepts of System Analysis and Design	9
CSET 06105	Automation and Control Concepts	9
CSET 06107	Basic Computer Security and Data Integrity	9
ETT 06104	Electronics Design	9
CSET 06108	Project Data Collection	10
CSET 06110	Industrial Practical Training	10
	Total credit for Computer Eng.	84

Semester II

Code	Module Title	Credits		
	FUNDAMENTAL MODULES			
GST 06204	Complex number, numerical methods and series	4		
SLTP 06202	Heat and Themodynamic	2		
GST 06205	Technical Writing	2		
GST 06206	Business Planning	2		
	CORE MODULE			
CSET 06209	Web Design and Hosting	9		
CSET 06211	Multimedia Application Production	9		
CSET 06212	Industrial Automation System	9		
CSET 06213	Network Management	9		
CSET 06215	Laws and Cyber-Forensic	9		
CSET 06214	Project	10		
	Total credit for Computer Eng.	65		

Total Credits at NTA 6: 149 (Minimum credits required at NTA 6: 120)

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

Semester I

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06103	Formalization, Internationalization and E- Business	2
	CORE MODULE	
CSIT 06101	Database Management	12
CSET 06103	Multimedia Concepts	12
CSET 06104	IT Security	9
CSIT 06102	Open source operating system	9
CSIT 06103	Web Application Design and Hosting	12
CSIT 06104	Basics of Object Oriented Programming	9
CSET 06107	Project I	10
Total credit for IT		

Semester II

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06205	Technical writing	2
GST 06206	Business planning	2
	CORE MODULE	
CSIT 06202	IT Systems Analysis	6
CSIT 06203	ICT Policies and Management	9
CSIT 06204	Introduction to e-commerce	6
CSET 06211	Multimedia Application Production	12
CSET 06215	Network Management	6
CSET 06213	Project II	10
Total credit for IT.		

Total credits at NTA 6: 128 (Minimum credits required at this level 120)

(e) BASIC TECHINICIAN PROGRAMME IN MULTIMEDIA AND FILM TECHNOLOGY (NTA 4)

Semester I

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 04102	Basic Technical Communication skills	2	
GST 04103	Entrepreneurship Concepts and Context	3	
GST 04101	Algebra	5	
SLT 04101	Static and Dynamics	3	
CORE MODU	CORE MODULES		
CSMT 04101	Introduction to Graphic Design	12	
CSMT 04102	Multimedia equipment and devices	9	
CSMT 04103	Photography and Digital Imaging	9	
CSMT 04104	Word processor presentation and internet	12	
	TOTAL	55	

Semester II

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 04205	Communication Skills	2
GST 04206	Small Business Development	3
GST 04204	Trigonometry and Vectors	5
LTB 04208	Gravitation and simple harmonics motion	3
	CORE MODULES	
CSMT 04206	Multimedia Hardware Maintenance and repair	12
CSMT 04207	Screen Writing and Storyboarding	12
CSMT 04208	Spreadsheet and database	12
CSMT 04209	Video Fundamental	6
CSMT 04210	Web Design and Applications	12
	TOTAL	67

Total credits at NTA 4: 122 (Minimum credits required at NTA 4: 120)

(f) TECHINICIAN PROGRAMME IN MULTIMEDIA AND FILM TECHNOLOGY (NTA 5)

Semester I

Code	Module Title	Credits		
	FUNDAMENTAL MODULES			
GST 05101	Fundamental Rule of counting, matrices and Differentiation	5		
GST 05102	Business Communication	2		
GST 05103	Business Start Up and Management	3		
CORE MODULES				
CSMT 05101	Computer Programming for Multimedia	6		
CSMT 05102	Digital Video Production	12		
CSMT 05103	Introduction to 2D and 3D Animation	12		
CSMT 05104	Lighting for Film Production	9		
CSMT 05105	Music Production	9		
CSMT 05106	Industrial Practical Training	10		
	TOTAL	68		

Semester II

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 05204	Integration, Statistics and Probability	5
GST 05205	Communication & Technical Presentations	2
GST 05206	Business Financial Management & Accounting	3
GST 05207	Research Methods for Technicians	3
	CORE MODULES	
CSMT 05207	Advanced 3D Animation	9
CSMT 05208	African Cinema	6
CSMT 05209	Game Design	9
CSMT 05210	Interactive Media Broadcasting	9
CSMT 05211	Sound Techniques for Video and Film	9
	TOTAL	55

Total credits at NTA 5: 123 (Minimum credits required at NTA 5: 120)

(g) DIPLOMA PROGRAMME IN MULTIMEDIA AND FILM TECHNOLOGY (NTA6)

Semester I

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 06101	Conics and Differential Equations	4	
GST 06102	Engineering Study Skill	2	
SLT 06101	Electromagnetism	3	
GST 06103	Formalization, Internationalization and E-business	2	
CORE MODULES			
CSMT 06101	Advertising Graphics Designs	9	
CSMT 06102	Compositing and Visual Effects	6	
CSMT 06103	Introduction to Film Production Management	12	
CSMT 06104	Multimedia Authoring Tools	6	
CSMT 06105	Music DJ	9	
CSMT 06106	Junior Project	10	
CSMT 06107	Industrial Practical Training	10	
	TOTAL	73	

Semester II

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 06204	Complex Numbers, Numerical Methods and Series	4
SLT 06202	Heat and Thermodynamic	2
GST 06205	Technical writing	2
GST 06206	Business planning	2
	CORE MODULES	
CSMT 06204	Media Law and Ethics	9
CSMT 06209	Musics and Film Composition	6
CSMT 06210	Web Development	9
CSMT 06211	Senior Project	12
	TOTAL	56

Total credits at NTA 6: 129 (Minimum credits required at NTA 6: 120)

(h) GENERAL COURSE PROGRAM (COMPUTER EINGEERING)

Semester I

Code	Module Title	Credit	
	FUNDAMENTALS MODULES		
GST 06107	Algebra and Application of Integrals	4	
	CORE MODULES		
CSET 04103	Computer Basics , Word Processing and Spreadsheets	12	
CSET 05205	Computer Programming	06	
CSET 04102	Computer Systems Maintenance and Repair	12	
CSET 06105	Automation and Control Concepts	09	
Total Credits		43	

Semester II

Code	Module Title	Credit
GST 05204	Intergrated Statistics and Probability	5
CSET 04206	Local Area Networking	12
CSET 04205	Computer Peripherals Maintenance and Repair	12
CSET 06110	Industrial Training Practical	10
CSET 06103	Multimedia Concept	9
CSET 06209	Web Design and Hosting	9
	Total Credits	57

Total credits at NTA 6: 100 (Minimum credits required at NTA 6: 120)

(i) HIGH DIPLOMA IN COMPUTER ENGINEERING NTA 7

Code	Module Title	Credit	
	FUNDAMENTALS MODULES		
EEU 07105	Fundamentals of AC Circuit Analysis	6	
GSU 07101	Calculus	6	
GSU 07105	Computing Using Mathematical Software	6	
GSU 07106	Technical Communication Skills	6	

CORE MODULES		
ETU 07101	Analogue Electronics	6
ETU 07103	Electronic Devices	6
ETU 07104	Measurements and Instrumentation	6
ETU 07123	Introduction to Communications Systems	6
MET 06103	Engineering Mechanics	3
EEU 07109	Principles of Electrical Machines	6
CSEU 07101	Object Oriented Programming	9
Total 6		66

Code	Module Title	Credit	
	FUNDAMENTALS MODULES		
EEU 07206	Control Engineering Analogue Analysis	6	
MEU 07212	Industrial Management	6	
GSU07202	Advanced Calculus	6	
	CORE MODULES		
ETU 07206	Digital Electronics	6	
ETU 07207	Electronic Circuits	6	
ETU 07224	Communications Systems	6	
CSEU 07201	Data structure of Computer programming	9	
CSEU 07202	Computer Networks	9	
CSEU 07203	Computer System Engineering	9	
	Total	63	

Code	Module Title	Credit	
	FUNDAMENTALS MODULES		
MEU 07322	Finance and Human Resources Management	3	
MEU 07316	Engineering Service Drawing	6	
GSU 07303	Differential Equations and Complex Variables	6	
	CORE MODULES		
ETU 07311	Electronics Design and Fabrication	6	
CSEU 07301	Data base Systems	9	

CSEU 07302	Microprocessor	9
CSEU 07303	Computer Aided System Technology	9
CSEU 07304	Operating Systems	9
CSEU 07305	Industrial Practical Training	12
	Total	69

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
MEU 07428	Engineering Operations Management	4	
GSU 07404	Probability & Statistics	6	
	CORE MODULES		
GSU 07407	Research Methods for Engineers	3	
CSEU 07401	Digital Signal Processing	9	
CSEU 07402	Multimedia Application Production	9	
CSEU 07403	Industrial Automation	9	
CSEU 07404	System Analysis and Design	9	
CSEU 07405	High Performance Computing	9	
	Total	58	

Total Credits at NTA 7: 257 (Minimum credits required at NTA 7: 240)

(j) BACHELOR OF COMPUTER ENGINEERING NTA 8

Code	Module Title	Credits
MEU 08106	Laws For Engineers	6
CSEU 08101	Computer Graphics	6
CSEU 08102	Expert System and Interactive multimedia	9
CSEU 08103	Internet Technologies	9
CSEU 08104	Real Time System Design	6
CSEU 08105	Robotics And Intelligent Systems	9
CSEU 08106	Software Engineering	9
CSEU 08107	Project Data collection	18
CSEU 08108	Industrial Practical Training	12
	Total	84

Code	Module Title	Credits
GSU 08201	Entrepreneurship for Engineers	3
CSEU 08201	User Interface Design	6
CSEU 08202	Computer Networks and Teletraffic Engineering	9
CSEU 08203	Embedded Systems design	6
CSEU 08204	Industrial Robotics	9
CSEU 08205	Project	18
Total		51

Total Credits at NTA 8: 135 (Minimum credits required at NTA 8: 120)

Elective Modules

Code	Module Title	Credits
ETU 08213	Cellular Mobile Radio Systems	6
ETU 08210	Fiber Optic Communication	6
Total		12

6.2.2 List of Academic Staff in the Department of Computer Studies

Assistant Lecturer and Head of Department

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

Lecturer

- A. Nungu BSc Comp. (UDSM), MSc. Comp. (Sweden) PhD (Sweeden)
- Y. Challo, Cert. (Comp. Techno.) (Japan), BSc. Ed. (Dar), M Eng. (Comp.) (China)

Assistant Lecturers

- N.M. Mwasaga, MSc Comp (Ukraine)
- *D.H Kisanga, Cert. (Comp. Techno.) (Japan),BSc. Ed (Dar), M Eng. Comp. (China)
- *G. Sanga, BSc. Comp. Science (UDSM), M.Eng. Comp. (China)
- *S. J. Mwalembe, BSc. Ed.(UDSM) MSc. Electronics (UDSM)
- *F. Mwalongo, BSc. Comp. (UDSM), MSc (India)
- I. Hassan BSc IT (Malaysia), MSc IT (Malaysia)
- *V. A. Ndume, Adv. Dipl Comp. Scienc) (IFM), PGD Com) (UDSM)
- C. Budoya, BSc (UDSM) MSc Comp. (UDSM)
- H. Fimbombaya, Beng. Comp (Russia), MSc, Digital Comm (UK)
- *S. Kimbi BSc Comp. (UDSM) MSc, (Comp.) (Sweden)
- P.L.Ngíimba, BSc. Electronics (UDSM), MSc. Multimedia Eng. (UK)
- E. Kondela, BSc. Comp,(Ukraine),MSc. (China)
- D.H. Clement, FTC Comp. (DIT), BSc. (UDSM), MSc. (China)
- G. Tesha, Beng. (DIT), M. Eng Comm (China)
- N. Maganga, BSc. Com. Sc (UDSM), MSc. Comp (UDSM)
- H. Mohamed, FTC (Comp) (DIT), Adv. Dipl. Comp. (China), M. Eng Comp. (China)
- Is-haka S. Hassan, BMIS(Malaysia), PGD in Wireless & Mobile Computing (India), MMIS (Malaysia)

Tutorial Assistant

R. Jesse, Beng. (Comp) (DIT)

ialK. Mwalami, FTC Comp. DIT, B. Eng. Comp. (DIT)

T. Isakwisa BSc. Comp (UDSM)

Senior Instructor II

D. Shija M. Eng (CHINA)

L.. Champuku PGD Comp.(IFM)

H. Msechu BSc. Comp. (St. Augustine)

Technicians:

V. Sichirima Cert (Electrical) VETA

R.Angotike, Dipl Comp. Eng (DIT)

N.Kimario, Dipl. Comp. Eng. (DIT) b. Eng Comp. (DIT)

Ashley Mbilinyi B. Eng. Comp. (DIT)

Instractors:

Hillary F. Msechu, B tech. IT (St. Joseph Coll. Eng & Tech.),PGD in Adv. Computing

Mwalami K. Khalfani, Cert. Networking & System Security (India), BEng. Comp. (DIT)

Lott Champuku, Adv. Dipl. Comp Sc.(IFM), PGD in Adv. Computing (India)

6.3 DEPARTMENT OF ELECTRICAL ENGINEERING

The Department offers NTA Ordinary Diploma and Bachelor of Engineering level 4-8 programmes in Electrical Engineering. The department has adequate resources which include laboratory and teaching facilities, 20 qualified teaching staff members with various qualifications and one competent and experienced Technician. Details of the courses are provided below.

6.3.1 Programmes offered by Electrical Engineering Department

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

Semester I

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
SLTP04101	Statics and Dynamics	3	
GST 04102	Basic Technical Communication skills	2	
GST 04103	Entrepreneurship Concepts and Context	3	
GST 04101	Algebra	5	
CSET04101	Computer Basic Word Processing and Spreadsheet	2	
	CORE MODULES	·	
MET 04104	Workshop Technology	9	
MET 04101	Basic Technical Drawing	9	
EET 04102	Principles of DC Networks	12	
EET 04104	Electrical Installation and Draughting	12	
	Total	57	

Module Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
SLTP04202	Gravitation & Simple Harmonic Motion	3	
GST 04205	Communication Skills	2	
GST 04206	Small Business Development	3	
GST 04204	Trigonometry and vectors	5	
CSET04204	Spreadsheet and Database	2	
	CORE MODULES		
EET 04202	Principles of AC Networks	9	
EET 04204	Design of Electrical Installation Systems	12	
EET 04203	Electrical Measurement and Measuring Instruments	9	

	Total	63
EET 04201	Electrical Power Utilization	9
EET 04205	Electrical Engineering Materials	9

Total Credits at NTA 4: 140 (Minimum credits required at NTA 4: 120)

(b) TECHNICIAN CERTIFICATE IN ELECTRICAL ENGINEERING NTA LEVEL 5

Semester I

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
GST 05101	Fundamental Rule of counting, matrices and Differentiation	5
GST 05102	Business communication	2
GST 05103	Business Start Up and Management	3
SLTP 05101	Strength of Materials and Rotational Dynamics	3
	CORE MODULES	
EET 05101	DC Machines	12
EET 05102	Industrial Electronics	9
EET 05104	Power Plants	9
EET 05105	Electrical Instrumentation	9
EET 05100	Industrial Practical Training	10
	Total	62

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
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
SLT P 05202	Fluid Mechanics	3
CSET 05201	Computer Aided Design	2

CORE MODULES		
EET 05201	AC Machines	12
EET 05202	Electronic Control Circuits	9
EET 05203	Digital Electronics	9
EET 05204	Power Transmission and Distribution	9
EET 05205	MATLAB	3
EET 05206	Computer Aided Electrical Drawing	3
	Total	63
	ELECTIVE MODULES	
CSET 05102	Computer Programming	6
CSET 05204	Microprocessor Technology	6
ETT 05206	Telecommunication	6
	Total	18

Total Credits at NTA 5: 126 (Minimum credits required at NTA 5: 120)

(c) DIPLOMA IN ELECTRICAL ENGINEERING NTA 6

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 06101	Conics and Differential Equation	4	
GST 06102	Engineering Study Skills	2	
SLTP 06101	Electromagnetism	2	
GST 06103	Formalisation, Internationalisation` and E-Business	2	
	CORE MODULES		
EET 06101	Electrical Machines - Rewinding	9	
EET 06105	Control Engineering	12	
EET 06106	Elements of Power Electronics	9	
EET 06107	Power Protection	9	
EET 06100	Project Data Collection	10	
EET 06102	Industrial Practical Training	10	
	Total	69	

Code	Module Title	Credits	
FUNDAMENTAL MODULES			
GST 06204	Complex number, Numerical methods and Series	4	
GST 06205	Technical Writing	2	
SLT 06202	Heat and Thermodynamics	2	
GST 06306	Business Planning	2	
CSET 05205	Data Structure and file handling	6	
CORE MODULES			
EET 06206	Power Electronics Circuits	9	
EET 06207	Renewable Energy Technologies	9	
CSET 06204	Industrial Automation System	9	
EET 06205	Electrical Maintenance and Repair	6	
EET 06208	Electric Drives	9	
EET 06200	Project	10	
	TOTAL	68	
	ELECTIVE MODULES		
MET 06211	Environmental Engineering	6	
MET 05214	Automotive Electricity and Electronics	9	
ETT 06206	Practical Telecommunication and system Networking	9	
	Total	24	

Total Credits at NTA 6: 137 (Minimum credits required at NTA 6: 120)

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

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 04101	Algebra	5
GST 04102	Basic Technical Communication skills	2
GST 04103	Entrepreneurship Concepts and Context	3

CSET 04101	Computer Basics & Word Processing	2
SLT 04101	Statics and Dynamics	3
	CORE MODULES	
MET 04105	Workshop Technology	8
MET 04101	Baisic Technical Drawing	9
EET 04102	Principles of DC Networks	12
ETT 04101	Basic Electronics	9
EEBT 04101	Human anatomy and Physiology	9
EEBT 04102	Introduction to Biomedical Field , Hospital Safety And Standards	6
	Total	68

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 04204	Trigonometry and Vectors	5	
GST 04205	Communication Skills	2	
GST 04206	Small Business Development	3	
CSET 04101	Spreadsheet and Database	2	
SLT 04201	Gravitation & Simple Harmonic Motion	3	
	CORE MODULES		
EET 04202	Principles of AC Networks	9	
ETT 04204	Electronics Circuits	9	
EEBT 04201	Doctorsí Equipment	6	
EEBT 04202	Basic Laboratory Equipment	6	
EEBT 04203	Basic Theatre Equipment	6	
EEBT 04204	Dental Equipment	6	
EEBT 04205	Basic Intensive Care Unit Equipment	6	
	Total	63	

Total Credits for NTA level 4 is 131, (minimum required total credits at NTA 4:120)

(e) TECHINICIAN CERTIFICATE IN BIOMEDICAL EQUIPMENT ENGINEERING (NTA 5)

Semester I

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 05101	Fundamental Rule of counting, matrices and Differentiation	5
GST 05102	Business Communication	2
SLT 05101	Strength of Materials and Rotational Dynamics	3
GST 05103	Business Start Up and Management	3
CSET 05101	Presentation and Internet	2
	CORE MODULES	
EEBT 05101	Patient Monitoring Equipment	9
EEBT 05102	Optician and Dentistry Equipment	9
EEBT 05103	Laboratory Analyzer equipment	9
EEBT 05104	Theatre Equipment	9
EET 05101	DC Machines	12
EET 05102	Industrial Electronics	9
EEBT 05102	Biomedical Instrumentation	12
EEBT 05100	Industrial Practical Training	10
	Total	94

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 05204	Integration Statistics and Probability	5	
GST 05205	Communication and Technical Presentations	2	
SLT 05201	Fluid Mechanics	3	
GST 05206	Business Financial Management and Accounting	3	
CSET 05201	Computer Aided Design	2	
GST 05207	Research Methods for technicians	3	
	CORE MODULES		
EEBT 05201	Fundamentals of XRAY and CTSCAN	9	

EEBT 05202	Principles of Magnetic Resonance Imaging	9
EEBT 05203	Radiotherapy and Lithotripter	9
EEBT 05204	Dialysis and Ultrasound technology	9
EET 05203	Digital Electronics	9
EET 05201	AC Machines	12
Total		74

Total Credits for NTA Level 5 168, (minimum required total credits at NTA 5: 120)

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

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 06101	Conics and Differential Equations	4
GST 06102	Engineering Study Skills	2
SLT 06101	Electromagnetism	2
GST 06103	Formalisation, Internationalisation and E-Business	2
CSET 06101	Basic Computer Programming	2
	CORE MODUES	
EEBT 06101	Biomedical Equipment Engineering Management	9
EEBT 06102	Biomedical Computer Networks and Data Communications	9
ETT 05208	Principles of Signal Modulation and Demodulation	6
ETT 06104	Electronic Design	9
EEBT 06103	Biomedical Equipment Project Data Collection	10
CSET 05207	Microprocessor Technology	6
SLT 06104	Laboratory Stores Management	6
EET 06102	Industrial Practical Training	10
	Total	77

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 06204	Complex number, Numerical methods and Series	4	
GST 06205	Technical Writings	2	
SLT 06202	Heat and Thermodynamics	2	
GST 06206	Business Planning	2	
CSET 05205	Data Structure and file handling	6	
	CORE MODULES		
EEBT 06201	Training Methodology	6	
ETT 06208	Communication Systems	9	
EEBT 06203	Medical Device Standards	6	
EEBT 06204	Work Ethics	2	
EEBT 06205	Biomedical Equipment Project	10	
SLT 06201	Basic Environmental Management	6	
	Total	55	

Total Credits for NTA Level 6 is 132, (Minimum total credits required at NTA 6: 120)

(g) BASIC TECHNICIAN PROGRAMME IN RENEWABLE ENERGY TECHNOLOGY (NTA -Level 4)

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
SLT 04101	Statics and Dynamics	3	
GST 04102	Basic Technical Communication skills	2	
GST 04103	Entrepreneurship Concepts and Context	3	
GST 04101	Algebra	5	
CSET 04101	Computer Basics & Word Processing	2	
CORE MODULES			
MET 04105	Workshop Technology	8	
MET 04101	Basic Technical Drawing	9	

EET 04102	Principles of DC Networks	12
EET 04104	Electrical Installation and Draughting	12
EERT 04107	Renewable Energy Market Policies	6
Total		62

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
SLT 04201	Gravitation & Simple Harmonic Motion	3	
GST 04202	Communication Skills	2	
GST 04203	Small Business Development	3	
GST 04201	Trigonometry and Vectors	5	
CSET 04201	Spreadsheet and Database	2	
	CORE MODULES		
EET 04202	Principles of AC Networking	12	
EET 04203	Measurement and Measuring Instruments	12	
EET 04205	Electrical Engineering Materials	12	
EERT 04208	Energy Storage Systems	6	
IPT 04200	Industrial Practical Training	10	
	Total	67	

Total credits at NTA 4 is 129, (Minimum credits required at NTA 4: 120)

(h) TECHNICIAN PROGRAMME IN RENEWABLE ENERGY TECHNOLOGY (NTA -Level 5)

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 05101	Fundamental Rule of Counting, Matrices and Differentiation	5	
GST 05102	Business Communication	2	
GST 05103	Business Start Up and Management	3	
SLT 05101	Strength of Materials and Rotational Dynamics	3	

CSET 05101	Presentation and Internet	2
	CORE MODULES	
EERT 05110	Alternative Sources of Energy	6
EERT 05107	Energy Utilization and Management	9
EERT 05108	Solar Energy	9
EET 05101	DC Machines	12
EET 05102	Industrial Electronics	9
	Total	60

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
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	
SLT 05201	Fluid Mechanics	3	
CSET 05201	Computer Aided Design	2	
	CORE MODULES		
EET 05201	AC Machines	12	
EET 06106	Elements of Power Electronics	9	
EET 05205	MATLAB	3	
EERT 05208	Photovoltaic System Design	9	
EERT 05203	Energy Systems Instrumentation	6	
EERT 05200	Industrial Training	10	
	Total	67	
ELECTIVE MODULES			
EERT 05109	Green Building Technology and Design	3	
EERT 05209	Solar Heating Systems	3	
	6		

Total credits at NTA 4 is 132, (Minimum credits required at NTA 4: 120)

(i) ORDINARY DIPLOMA PROGRAMME IN RENEWABLE ENERGY TECHNOLOGY (NTA -Level 6)

Semester I

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 06101	Conics and Differential Equations	4	
GST 06102	Engineering Study Skills	2	
SLT 06101	Electromagnetism	2	
GST 06103	Formalisation, Internationalisation and E-Business	2	
CSET 06101	Basic Computer Programming	2	
	CORE MODULES		
EERT 06111	Hydropower Technology	9	
EERT 06112	Geothermal Energy	6	
EERT 06107	Sustainable Energy Systems	6	
EERT 06113	Bio Energy Technologies	9	
EERT 06100	Project Data Collection	10	
EET 06206	Power Electronics Circuits	9	
	Total	61	

Code	Module Title	Credit
FUNDAMENTAL MODULES		
GST 06204	Complex number, Numerical methods and Series	4
GST 06205	Technical Writing	2
LST 06201	Heat and Thermodynamics	2
GST 06206	Business Planning	2
CSET 06201	Computer Programming and Data Structure	2
	CORE MODULES	
EERT 06214	Hybrid Renewable Electric Systems	9
EERT 06215	Maintenance in Renewable Energy Systems	9
EERT 06216	Wind Systems Installation	9
EERT 06200	Renewable Energy Project	10
	Total	76

ELECTIVE MODULES		
EERT 06101	Special Electrical Machines	6
EERT 06114	Low Cost Rural Distribution Systems	3
EERT 06213	Biogas Reactor Construction	3
Total		8

Total credits at NTA 4 is 149, (Minimum credits required at NTA 4: 120)

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

Semester I

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST G6107	Algebra and Application of Integrals	4	
CSETG4101	Computer Basics & Word Processing	12	
	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 measurement and Measuring Instruments	12	
EET G5102	Industrial Electronics	9	
Total			

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		49	

(k) HIGHER DIPLOMA IN ELECTRICAL ENGINEERING-NTA 7

Semester I

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GSU 07101	Calculus	6
CSEU07101	Object Oriented Programming	9
GSU 07105	Computing using Mathematical Software	6
MEU 07107	Engineering Mechanics	3
GSU 07106	Technical Communication Skills	6
	CORE MODULES	
ETU 07101	Analogue Electronics	6
EEU 07101	Engineering Drawing	6
EEU 07103	Power Plants	6
ETU 07104	Instrumentation and Measurement	6
EEU 07105	Fundamentals of AC Circuit Analysis	6
EEU 07109	Principles of Electrical Machines	6
	Total	66

Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07202	Advanced Calculus	6
MEU 07212	Industrial Management	3
CSEU07201	Data Structure and Computer Programming	9
	CORE MODULES	
EEU 07202	Electrical Engineering Materials	6
EEU 07203	Electrical Power Transmission Distribution	9
EEU 07205	Electrical Networks Modelling	6
EEU 07206	Control Engineering Analogue Analysis	6
ETU 07206	Digital Electronics	6
EEU 07209	DC Machines	9
EEU 07201	Electrical Networks Transients	6
	Total	66

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GSU 07303	Differential Equations and Complex Variables	6	
MEU 07322	Finance and Human Resource Management	3	
CSEU07302	Microprocessors	9	
	CORE MODULES		
EEU 07301	Engineering Electromagnetics	6	
EEU 07303	Electrical Power Systems Modelling	6	
EEU 07300	Industrial Practical Training	12	
EEU 07306	Control Engineering Analogue Design	6	
ETU 07207	Electronic Circuits	6	
EEU 07309	A. C. Electrical Machines	9	
MEU 07316	Engineering Service Drawing	5	
	Total	68	

Semester IV

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GSU 07404	Probability and Statistics	6	
MEU 07428	Engineering Operation Management	2	
GSU 07407	Research Methods for Engineers	3	
CSEU07203	Computer System Engineering	9	
	CORE MODULES		
EEU 07403	Fault Analysis and Power Systems Stability	9	
CSEU07403	Industrial automation	9	
EEU 7405	Active and Passive Filter Design	6	
EEU 7409	Special Electrical Machines	6	
Total			

Total Credits at NTA 7: 250 (Minimum credits required at NTA 7: 240)

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

Semester I

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
MEU 08101	Laws for Engineers	6	
ETU 07311	Electronic Design and Fabrications	6	
CSEU08104	Real Time System Design	6	
	CORE MODULES		
EEU 08103	Power System Protection	9	
EEU 08106	Control Engineering Digital Analysis	6	
EEU 08107	Power Electronics Devices	6	
EEU 08102	High Voltage Engineering	6	
EEU 08100	Project Data Collection	18	
EE 08104	Industrial Practical Training	12	
	Total	75	

Semester II

Code	Module Title	Credits		
	FUNDAMENTAL MODULES			
GSU 08201	Entrepreneurship for Engineers	3		
	CORE MODULES			
EEU 08206	Control Engineering Digital Design	9		
EEU 08207	Power Electronics Applications	6		
EEU 08208	Digital System Engineering	9		
EEU 08209	Electrical Machines selection	6		
EEU 08200	Project	18		
	ELECTIVE MODULES			
CSEU08203	Embedded System design	6		
EEU 08201	Renewable Energy Technologies	6		
	Total	63		

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

6.3.2 List of Academic Staff in the Department of Electrical Engineering

Lecturer and Head of Department

S.F.M. Karugaba, BSc. Eng (UDSM), Ms Electrical Eng. (USA) PhD Eng. (USA), G. Eng (T), MIEEE USA)

Lecturers

B.B. Saanane, Cert Workshop Mgt (Belgium), MSc. Eng. (Moscow), P. Eng (T) C. Eng. (T), MIET, Ph.D (UDSM)

M.A. Kusekwa, MSc, Eng. (Sofia), PhD. Electrical Power Eng. (RSA) P. Eng (T) C Eng. (T), MIET

C. Msigwa, Msc (Russia), PhD. Electr. Power Sys. (UDSM)

A. Kilimo, FTC Elect. Eng. (DTC), MSc. Eng (USSR), PhD Electrical Eng. (RSA)

Assistant Lecturers

S.D. Kabingo, BSc.Eng (UDSM), MscEng (USA)

T.Ndimba, FTC Elect. Eng. (TCA), BscEng (Dar), MSc (Electr.) (UDSM)

P.L.T. Yakob, FTC Tel. Eng.(DTC), Diploma Elect. (DTC) PGD(UDSM), MSc (UDSM)

A.H. Abel FTC. Eng DTC, BSc (UDSM), MSc (UDSM)

*T. Magesa, FTC Eng (DTC), ADE. Eng (DIT), PGD(E&IT) (UDSM), MSc (UDSM)

J.F. Mushi, FTC Eng (MTC), ADE. Eng (DIT), MSc Electr.&WP Sys (China)

*R. Clemence B.Sc. (UDSM), MSc (UDSM)

*G. G. Moshi, B.Sc. (UDSM), MSc EE&RE Sys (UK)

M. Juma, Beng (DIT), MSc (China)

Principal Instructor I

P. E. S. Mkiramweni, BSc. (Electrical) (UDSM)

Principal Instructor II

D. Mwakyusa, FTC Eng, Teaching Cert. (UK), Adv. VT (Germany), B. Eng. (DIT)

Senior Instructor I

D.P. Msangi, DTE (DTC), FTC Eng (TCA)

A.A. Ahmed, FTC Eng (DTC), DTE (DTC)

Tutorial Assistants

*A. Liwondo, ADE (DIT)

*H. Libani, Beng (DIT)

Instructor II

D. Bahebe, FTC (Electrical) (DIT), B. Eng (DIT)

F. Joseph BSc Eng. (UDSM)

Technician

Z. Mashalu, FTC Eng (MTC)

*On study Leave

6.4 DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

The Department offers Ordinary Diploma and Bachelor of Engineering (NTA level 4-8) programmes in Electronics and Telecommunication Engineering. It has adequate resources to run its programmes, which include well-equipped laboratories and classrooms, 18 teaching staff and 2 technical support staff members.

6.4.1 Programmes Offered by Electronics Telecom Engineering Department

(a) BASIC TECHNICIAN CERTIFICATE IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING (NTA LEVEL 4)

Semester I

Module Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
CSET 04101	Computer Basics, Word Processing and Spreadsheet	12	
GST 04102	Basic Technical Communication skills	2	
GST 04101	Algebra	5	
GST 04103	Entrepreneurship Concepts and Context	3	
SLT P 04101	Statics and Dynamics	3	
EET 04102	Basic principles of DC Networks	9	
MET 04101	Basic Technical Drawing	9	
MET 04104	Workshop Technology	6	
	CORE MODULES		
ETT 04101	Basic Electronics	9	
ETT 04102	Measurements	6	
ETT 04103	Electronic Drawing	6	
Total		70	

Module Code	Module Title	Credits
	FUNDAMENTAL MODULES	
CSET 04204	Spreadsheet and Database	2
GST 04204	Trigonometry and Vectors	5
GST 04205	Communication Skills	2
GST 04206	Small Business Development	3
SLP T 04202	Gravitation and Simple Harmonic Motion	3

EET 04202	Principles of AC Networks	9	
	CORE MODULES		
ETT 04204	Electronic Circuits	9	
ETT 04205	Principles of Digital Electronics	6	
ETT 04201	Telecommunication Principles	6	
ETT 04202	Basic Networking Principles	6	
Total		51	

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

(b) TECHNICIAN CERTIFICATE IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING- NTA LEVEL 5:

Semester I

Code	Module Title	Credits	
	FUNDAMENTALS MODULES		
GST 05101	Fundamental Rule of counting, matrices and Differentiation	5	
GST 05102	Business Communication	2	
SLTP 05101	Strength of Materials and Rotational Dynamics	3	
GST 05103	Business Start Up and Management	3	
CSET 05101	Presentation and Internet	2	
	CORE MODULES	•	
ETT 05101	Electromagnetics	6	
ETT 05102	Instrumentation	9	
ETT 05103	Analogue Electronics	6	
ETT 05104	Digital Electronics	6	
ETT 05111	Practical Electronic Circuits and IT Applications	9	
ETT 05105	Industrial Practical Training	10	
	Total	61	

Code	Module Title	Credits
	FUNDAMENTAL MODULES	
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
SLT P 05202	Fluid Mechanics	3
	CORE MODULES	
ETT 05205	Television Technology	6
ETT 05206	Telecommunication	6
ETT 05207	Data Communication	6
ETT 05208	Principles of Signal Modulation and Demodulation	6
ETT 05209	Signal Amplifiers	6
ETT 05212	Analogue and Digital Communication Laboratory	9
ETT 05213	Electronic Systems CAD.	9
Total		64

Total Credits at NTA 5: 122 (Minimum credits required at NTA 5: 120)

(c) DIPLOMA IN ELECTRONICS AND TELECOMMUNICAITON ENGINEERING - NTA LEVEL 6

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 06102	Engineering Study Skills	2	
GST 06101	Conics and Differential Equation	5	
GST 06103	Formalization, Internalization and E-Business	3	
CSET 06101	Basic Computer Programming	6	
	CORE MODULES		
ETT 06101	Power Electronics	6	
ETT 06102	Measurements and Instrumentation	9	
ETT 06103	Radio Transmission Systems	6	
ETT 06104	Electronic Design	9	

ETT 06105	Project-Data Collection	10
ETT 06106	Industrial Practical Training	10
Total		66

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 06204	Complex Number, Numerical Methods and Series	5	
GST 06205	Technical Writing	2	
GST 06206	Business Planning	3	
CSET 06208	Computer Programming and Data Structure	2	
	CORE MODULES		
ETT 06207	Practical Telecommunication and System Networks	9	
ETT 06208	Television and Video Technology	9	
ETT 06209	Communication Systems	9	
ETT 06210	Radar and Navigation Aids	9	
ETT 06211	Project-Data Analysis	10	
ETT 06212	Telephone System s	6	
ETT 06213	System Control and Automation Laboratory	9	
CSET06201	Website Design and Hosting	9	
Total		82	

Total Credits at NTA 6: 153 (Minimum credits required at NTA 6: 120)

(d) BASIC TECHNICIAN CERTIFICATE IN COMMUNICATION SYSTEM TECHNOLOGY (CST) LEVEL 4

Code	Module Title	Credits
	FUNDAMENTALS MODULES	
CSET:04101	Computer Basics & Word Processing	12
GST 04102	Technical English	2
GST 04101	Algebra	5
GST 04103	Entrepreneurship Concepts and Context	3

SLTP 04101	Statics and Dynamics	3	
EET 04102	Basic principles 0f DC Networks	9	
MET 04101	Basics of Technical Drawing	9	
MET 04104	Workshop Technology	6	
	CORE MODULES		
ETT 04101	Basic Electronics	9	
ETT 04102	Measurements	6	
ETT 04103	Electronic Drawing	6	
TOTAL		70	

Code	Module Title	Credits	
	FUNDAMENTALS MODULES		
CSET 04204	Spread Sheet and Database	2	
GST 04204	Trigonometry and Vectors	5	
GST 04205	Communication Skills	2	
GST 04206	Small Business Development	3	
SLT:04202	Gravitation and Simple Harmonic Motion	3	
EET 04202	Basic Principles of AC Networks	9	
	CORE MODULES		
ETT 04204	Electronic Circuits	9	
ETT 04205	Principles of Digital Electronics	6	
ETT 04201	Telecommunication Principles	6	
ETT 04202	Basic Networking Principles	6	
TOTAL		51	

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

(e) TECHNICIAN CERTIFICATE IN COMMUNICATION SYSTEM

TECHNOLOGY (CST)- NTA 5

Semester I

FUNDAMENTALS MODULES			
Code	Module Title	Credits	
GST 05101	Coordinate Geometry, Matrices and Differentiation	5	
GST 05102	Business Communication	2	
SLT 05101	Strength of Material & Rotation Dynamics	3	
CSET 05101	Presentation and Internet	2	
GST 05103	Business Start Up and Management	3	
	CORE MODULES		
ETT 05102	Instrumentation	9	
ETT 05103	Analogue Electronics	6	
ETCT 05101	Digital Electronics & Circuit Design	9	
ETCT 05102	Introduction to Wireless Communication Systems	9	
ETCT 05103	Introduction to Fiber Optic Communication Systems	9	
CSET 05103	Operating System	6	
TOTAL		63	

Semester II

Fundamentals Modules		
Code	Module Title	Credits
GST 05204	Integration, Statistics & Probability	5
GST 05205	Communication & Technical Presentation	2
GET 05206	Business Financial, Management and Accounting	3
SLT 05202	Fluid Mechanics	3
CORE MODULES		
ETT 05213	Electronic Systems CAD	9
ETCT 05201	Introduction to Data Communication	9
ETCT 05202	Wireless Networks	9
ETCT 05203	Fiber Optic Communication Systems	9
ETCT 05204	Industrial Practical Training	10
TOTAL		62

Total credits at NTA 5:122 (Minimum credits required at NTA 5:120)

(f) DIPLOMA PROGRAMME IN COMMUNICATION SYSTEM

TECHNOLOGY (CST) NTA 6

Code	Module Title	Credits	
	FUNDAMENTALS MODULES		
GST 06101	Conics and Differentiation	5	
GST 06102	Engineering Study Skills	2	
SLT 06101	Electromagnetism	3	
GST 06103	Formalization, Internalization and E-Business	3	
CSET 06101	Basic Computer Programming	2	
	TOTAL	15	
	CORE MODULES		
ETT 06101	Power Electronics	6	
ETCT 06101	Bandwidth Management	6	
ETCT 06102	Satellite Communication	6	
ETCT 06103	Wireless Network	9	
ETCT 06104	Optic Fiber Network	9	
ETCT 06105	Network Maintenance & Troubleshooting	6	
ETCT 06105	Project - Data Collection	10	
ETCT 06106	Industrial Practical Training	10	
TOTAL		77	

Code	Module Title	Credits	
	FUNDAMENTALS MODULES		
GST 06204	Complex Number, Numerical Methods and Series	5	
SLT 06202	Heat and Thermodynamics	2	
GST 06205	Technical Writing	2	
GST 06206	Business Planning	3	
CSET 06208	Computer Programming and Data Structure	2	
	CORE MODULES		
ETCT 06201	Communication Systems	6	
ETCT 06202	VSAT Network	9	
ETCT 06203	Network Security and Management	9	
ETCT 06204	Digital cellular Network	6	
ETCT 06205	Project - Data Analysis	10	
CSET 06201	Website Design and Hosting	5	
TOTAL		71	

Total credits at NTA 6:148 (Minimum credits required at NTA 6:120)

(g) GENERAL COURSE PROGRAMME

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 06107	Algebra and Application of Integrals	4	
CSET04101	Computer Basics, Word Processing and Spreadsheet	12	
	CORE MODULES		
MET 04101	Basic Technical Drawing	9	
MET 04104	Workshop Technology	6	
ETT 05104	Digital Electronics	6	
ETT 05103	Analogue Electronics	6	
ETT 06102	Measurements and Instrumentation	9	
EET 04102	Basic principles of DC Networks	9	
Total		61	

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
ETT 05213	Electronic Systems CAD	9	
	CORE MODULES		
ETT 04201	Telecommunication principles	6	
ETT 05209	Signal Amplifiers	6	
ETT 06212	Telephone Systems	6	
ETT 06207	Television and Video Technology	9	
ETT 06209	Communication Systems	9	
ETT 06210	Radar and Navigation Aids	9	
ETT 06106	Industrial Practical Training	10	
Total		64	

Total Credits at GC: 125 (Minimum required 120)

(h) HIGHER NATIONAL DIPLOMA IN ELECTRONICS AND TELECOMMUNICATION -NTA LEVEL 7

Code	Module Title	Credits	
	FUNDAMENTALS MODULES		
GSU 07101	Calculus	6	
GSU 07105	Computing Using Mathematical Software	6	
GSU 07106	Technical Communication Skills	6	
CSEU 07101	Object Oriented Programming	9	
	CORE MODULE		
ETU 07101	Analogue Electronics	6	
ETU 07102	Micro Electronics	6	
ETU 07103	Electronic Devices	6	
ETU 07104	Instrumentation and Measurements	6	
ETU 07105	Principles of Modulation and Demodulation	6	
EEU 07105	Fundamentals of AC Circuit Analysis	6	
EEU 07109	Principles of Electrical Machines	6	
	Total	69	

Code	Module Title	Credits	
	FUNDAMENTALS MODULES		
GSU 07202	Advanced Calculus	6	
CSEU 07201	Data Structure and Programming	9	
MEU 07212	Industrial Management	6	
	CORE MODULE		
ETU 07206	Digital Electronics	6	
ETU 07207	Electronic Circuits	6	
ETU 07208	Signal Processing	6	
ETU 07209	Analogue Communication Laboratory	6	
ETU 07210	Linear IC Applications Laboratory	6	
EEU 07206	Control Engineering (Analogue Analysis)	6	
TOTAL		57	

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GSU 07303	Differential Equations and Complex Variables	6	
MEU 07316	Engineering Service Drawing	6	
CSEU 07302	Microprocessor	9	
MEU 07322	Finance and Human Resource Management	6	
	CORE MODULES		
ETU 07311	Electronic Design and Fabrication	6	
ETU 07312	Signal Transmission Analysis	6	
ETU 07313	Transmission Lines	6	
ETU 07314	Digital Communication Laboratory	6	
ETU 07315	Digital IC Applications	6	
ETU 07316	Electronic Computer Aided Design	6	
EEU 07301	Engineering Electromagnetics	6	
ETU 07317	Industrial Practical Training	12	
TOTAL		81	

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GSU 07404	Probability and Statistics	6	
CSEU 07203	Computer System Engineering	9	
MEU 07428	Engineering Operational Management	6	
GSU 07407	Research Methods	3	
	CORE MODULES		
ETU 07417	Broadcasting Systems	6	
ETU 07418	Wave Propagation and Antennas	6	
ETU 07419	Antenna Design and Measurements Laboratory	6	
ETU 07420	Switching Systems	6	
ETU 07421	Micro Processor Applications	6	
ETU 07422	Practical Signal Processing	6	
CSEU 07403	Industrial Automation	9	
TOTAL		69	

Total Credit at NTA 7: 276 (Minimum credits required at NTA 7: 240)

(i) BACHELOR IN ELECTRONICS AND TELECOMMUNICATION ENGINEERING- NTA LEVEL 8

Code	Module Title	Credits	
	CORE MODULES		
ETU 08101	Radio Communication Systems	6	
ETU 08102	Digital Networks	6	
ETU 08103	Radar Systems	6	
ETU 08104	Data Communications	6	
ETU 08105	Television Engineering	6	
ETU 08115	Industrial Practical Training	12	
ETU 08106	Project Data Collection	18	
MEU 08106	Law for Engineers	6	
	Total	66	

ELECTIVE MODULES		
CSEU 08103	Internet Technologies	9
CSEU 08105	Robotics and Intelligent Systems	9
CSEU 08102	Expert System and Interactive Multimedia	9
ETU 08107	Multimedia Communications	6
ETU 08108	Introduction to VLSI	6
Total		39

Code	Module Title	Credits	
	CORE MODULES		
ETU 08209	Satellite Communication	6	
ETU 08210	Fibre Optic Communications	6	
ETU 08211	Navigation and Surveying Aids	6	
ETU 08212	Telecommunication Standards	6	
ETU 08213	Cellular and Mobile communications	6	
ETU 08214	Project	18	
GSU 08201	Entrepreneurship for Engineers	3	
	ELECTIVE MODULES		
ETU 08216	Advanced VLSI	6	
CSEU 08202	Computer Networks and Telegraphic Engineering	9	
CSEU 08204	Industrial Robotics	9	
CSEU 07402	Multimedia Application Production	11	
	Total	86	

Total Credits at NTA 8: 194 (Minimum credits required at NTA 8: 120)

6.4.2 List of Academic Staff in the Department of Electronics and Telecommunications Engineering

Lecturer and Head of Department

G. Rugumira, FTC Eng (DTC), ADE (DIT), MSc (China), PhD (China)

Lecturers

M.D. Kabadi, FTC Eng (DTC) ADE Eng (DTC), BSc (Hons) (Pretoria), MSc. (Electronics) (Pretoria)

*A. Manyele, Dip.TV & VCR tech. (Canada), BSc. Applied Physics (UDSM), MSc. (Seismology) (Norway)

K.A. Greyson, FTC Eng (DTC), ADE Eng (DIT), PGD (USA), MSc (UDSM), PhD (Surenaree, Thailand)

Assistant Lecturers

M. M. Mburuma, FTC Eng (DTC), ADE Eng (DTC), (PGD) (Dar),MSc. Eng (UDSM)

N.G. Nzowa, FTC Eng (DTC), MSc. Eng (USSR)

*J.A. Msumba, FTC Eng (DTC), ADE (DIT) BSc. (Hons)), MSc. (Electronics) (Pretoria)

*P.E.Pesha, BSc. (Electronic Science & Comm. ((UDSM), MSc. Eng Electronics (Stellenbosch)RSA Grad. Eng (T), Grad. IET

Mbano, ADE (DTC), PGD (UK) (PGD) (UDSM), MSc. Eng. (UDSM)

*P. Fahamuel, ADE (DIT), MSc (China)

J. Ally, BSc (Electronic Science & Comm. (UDSM), MSc Telecom Eng. (China)

P. Haule, FTC (DTC), Beng (DIT)

R. Lihakanga, FTC (DIT), Beng (DIT), MSc (UK)

A. O. Mfinanga, FTC Eng (DTC), ADE Eng (DIT), PGD (UDSM), MSc(UDSM)

*J.W. Matiko, FTC Eng (DIT), Beng (DIT), MSc. Lund (Sweden)

Tutorial Assistants

*A. J. Mohamed, FTC (TCA), B.Eng (DIT)

Principal Instructor I

*T. G. Malongo, FTC Eng (DTC), ADE Eng (DTC)

Laboratory Technicians I

- I. M. Kibani, FTC Eng (TCA)
- * On study leave

6.5 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 26 teaching staff and technical supporting personnel consisting of 9 members.

6.5.1 Programmes Offered by Mechanical Engineering Department

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

Module Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 04101	Algebra	5	
SLTP04101	Statics & Dynamics	3	
GST 04102	Basic Technical Communication skills	2	
GST 04103	Entrepreneurship Concept & Context	3	
CSET04101	Computer Basics ,Word Processing and Spread sheet	2	
CORE MODULES			
MET 04101	Basic of Technical Drawing	9	
MET 04102	Statics	6	
MET 04103	Gas Welding Processes	9	
MET 04104	Workshop Technology	9	
MET 04105	Automotive Petrol/Gas Engine	6	
EET 04102	Principles of DC Networks	12	
	Total	66	

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 04204	Trigonometry & Vectors	5	
SLTP04202	Gravitation & Simple harmonic motion	3	
GST 04205	Communication Skills	2	
GST 04206	Small Business Development	3	
CSET04204	Spread Sheet and Database	2	
CORE MODULES			
MET 04206	Fundamentals of Engineering Drawing	9	
MET 04207	Dynamics	9	
MET 04208	Arc Welding Processes	9	
MET 04209	Metal Cutting Machine Tools	9	
MET 04210	Automotive Diesel Engine	6	
EET 04202	Principles of AC Networks	9	
Total 66			

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

(b) TECHNICIAN CERTIFICATE IN MECHANICAL ENGINEERING NTA LEVEL 5

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 05101	Fundamental Rules of Counting, Matrices and Differentiation.	5	
GST 05102	Business Communication	2	
GST 05103	Business Start up and Management	3	
CSET05101	Presentation and Internet	2	
CORE MODULES			
MET 05101	Engineering Drawing	9	
MET 05102	Basic Machine Element	6	
MET 05103	Engineering Measurements & Instrumentation	6	

MET 05104	Materials Technology	9
MET 05105	Strength of Materials	6
MET 05106	Thermodynamics	6
MET 05107	Maintenance and Safety	6
MET 05108	Automotive transmission and suspension	6
EET 05101	Principles of D.C. Machines	12
MET 05109	Industrial Practical Training	10
Total		88

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 05204	Integration, Statistics and Probability	5	
GST 05207	Research Methods for Technicians	3	
GST 05205	Communication & Technical Presentations	2	
GST 05206	Business Financial Management and Accounting	3	
	CORE MODULES		
MET 05209	Machining Process	9	
MET 05210	Machine Elements Analysis	9	
MET 05211	Fluid Mechanics	6	
MET 05212	Metal Forming	9	
MET 05213	Basic CAD	9	
MET 05214	Automotive Electricity and Electronics	9	
EET 05201	Principles of A. C. Machines	12	
Total		76	

Total Credits at NTA 5: 164 (Minimum credits required at NTA 5: 120)

(C) NTA LEVEL 6 DIPLOMA IN MECHANICAL ENGINEERING

Semester I:

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 06101	Conics and Differential Equations	4	
SLTP06101	Electromagnetism	2	
GST 06102	Engineering Study skills	2	
GST 06103	Formalization, Internationalisation & E. Business	2	
CSET06101	Basics of computer programming	2	
	CORE MODULES		
MET 06101	Production Technology	9	
MET 06102	Refrigeration Machinery	9	
MET 06103	Farm Machinery & Power	9	
MET 06104	Industrial Hydraulics and Pneumatics	9	
MET 06105	Basics of Automation	6	
MET 06106	Project Data Search	10	
MET 06107	Industrial Practical Training	10	
	Total	74	

Code	Module Title	Credits	
	FUNDAMENTAL MODULES		
GST 06204	Complex numbers, Numerical methods and series	4	
GST 06205	Technical Writing	2	
GST 06206	Business Planning	2	
CSET06201	Computer Programming and Data Structure	2	
CORE MODULES			
MET 06208	Industrial Control Systems	9	
MET 06209	Foundry Technology	12	
MET 06210	Industrial Refrigeration and A/C	9	
MET 06211	Environmental Engineering	6	
MET 06212	Project Data Analysis and conclusion	12	
	Total	58	

(d) GENERAL COURSE PROGRAMME IN MECHANICAL ENGINEERING

Semester I

Code	Module Title	Credits
GST G6107	Algebra and Application of Integrals	4
CSET G 4101	Computer Basics & Word Processing	2
MET G 4101	Basics of Technical Drawing	9
MET G4102	Static	6
MET G4103	Gas Welding Processes	9
MET G4104	Workshop Technology	9
MET G4105	Automotive Petrol/Gas Engine	6
MET G4207	Dynamics	6
MET G5103	Engineering Measurements and Instrumentation	6
MET G5307	Maintenance and Safety	6
Total		63

Semester II:

Code	Module Title	Credits
MET G5101	Engineering Drawing	9
MET G5213	Basic CAD	9
MET G5104	Materials Technology	9
MET 04209	Metal Cutting Machine Tools	9
MET 05105	Strength of Materials	6
MET G5108	Automotive Transmission and Suspension System	6
MET G5102	Basic Machine Element	6
MET G5209	Machining Processes	9
MET G5106	Thermodynamics	6
MET G4208	Arc Welding Processes	9
MET G4211	Industrial Training Practical	10
Total		88

Total Credit at GCP: 151 (Minimum credits required at GCP:120)

(e) HIGHER DIPLOMA IN MECHANICAL ENGINEERING - NTA LEVEL 7

Semester I

Code	Module Title	Credits	
FUNDAMENTAL MODULES			
GSU 07105	Computing Using Mathematical Software	6	
GSU 07101	Calculus	6	
GSU 07106	Technical Communication Skills	6	
EEU 07105	Fundamental of AC circuit Analysis	6	
ETU 07101	Analogue Electronics	6	
EEU 07109	Principles of Electrical Machines	6	
	CORE MODULES		
MEU 07101	Computer Aided Drafting	9	
MEU 07102	Machine Elements	6	
MEU 07103	Low of Engineering Thermodynamics	6	
MEU 07104	Systems Reliability and Plant Maintenance	6	
MEU 07105	Introduction to Fluid Mechanics	6	
MEU 07106	Manufacturing Processes	9	
	Total	78	

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GSU 07202	Advanced Calculus	6	
CSEU07201	Data Structure and Computer Programming	9	
ETU 07206	Digital Electronics	6	
CORE MODULES			
MEU 07207	Strength of Materials	6	
MEU 07208	Machine Elements Design	6	
MEU 07209	Mechanics of Machines	6	
MEU 07210	Engineering Thermodynamics Combustion	6	
MEU 07211	Materials Technology	6	
MEU 07212	Industrial Management	6	

MEU 07213	Fluid Dynamic	6
MEU 07214	Metal Cutting Processes	6
Total		69

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GSU 07303	Differential Equations and Complex Variables	6	
CSEU07101	Object Oriented Programming	9	
EEU 07309	DC Machines	9	
	CORE MODULES		
MEU 07315	Industrial Practical Training	12	
MEU 07316	Engineering Service Drawing	6	
MEU 07317	Material Handling Design	6	
MEU 07318	Computer Aided Drafting Application	9	
MEU 07319	Solid Mechanics	6	
MEU 07320	Machine Dynamics	6	
MEU 07321	Engineering Vibrations	6	
MEU 07322	Finance and Human Resources Management	6	
MEU 07323	Industrial Energy Management	6	
MEU 07324	Metal Casting and Forming	6	
ELECTIVE MODULES			
EEU 07206	Control Engineering Analogue Analysis	6	
CSEU 7309	Microprocessor	9	
	Total	108	

Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07404	Probability and Statistics	6
EEU 07409	AC Machines	6
GSU 07407	Research Methods for Engineers	3
CORE MODULES		

	Total	84		
CSEU 07403*	Industrial Automation	9		
EEU 07306*	Control Engineering Analogue Design	6		
	ELECTIVE MODULES			
MEU 07433	Principles of Engineering Design	6		
MEU 07432	Automotive Engineering	6		
MEU 07431	Internal Combustion Engines	6		
MEU 07430	Heat Transfer	6		
MEU 07429	Computer Aided Engineering (CAE)	6		
MEU 07428	Engineering Operations Management	6		
MEU 07427	Fluid Power and Control	6		
MEU 07426	Dynamics of Mechanical Structure	6		
MEU 07425	Industrial Design Engineering	6		

Total Credits at NTA7: 309 (Minimum credits required at NTA 7: 240)

(f) BACHELOR OF MECHANICAL ENGINEERING - NTA LEVEL 8

Code	Module Title	Credit
MEU 08101	System and Control engineering	6
MEU 08102	Computer Aided Design (CAD)	9
MEU 08103	Production Engineering	6
MEU 08104	Power Plant	6
MEU 08105	Refrigeration and Air Conditioning	6
MEU 08106	Laws for Engineers	6
MEU 08107	Project Data collection	18
MEU 08108	Industrial Practical Training	12
	Total	69
	ELECTIVE MODULES	
EEU 08107	Power Electronics	6
CSEU07403	Industrial Automation	9
	Total	84

Code	Module Title	Credit
MEU 08208	Engine Technology and Design	6
MEU 082109	Renewable Energy Technologies	6
MEU 08210	Computer Aided Manufacturing (CAM)	6
MEU 08211	Foundry Technology	6
MEU 08212	Quality Assurance and Control	6
MEU 08213	Automation and Robotics	6
GSU 08201	Entrepreneurship for Engineers	3
MEU 08215	Project	18
Total		57

Total Credits at NTA 8: 141 (Minimum credits required at NTA 8: 120)

6.5.2 List of Academic Staff in the Department of Mechanical Engineering

Senior Lecturer and Head of Department

C.T. Mgonja, FTC Eng. (TCA), MSc. Eng., PhD Welding Techn (Russia)

Associate Professors

Eng. Prof. Christian W. M. Nyahumwa, Ph.D Metallurgy & Materials (U.K), MSc. Mech. Eng. (Canada), BSc. Mech. Eng. (UDSM), Reg. Eng (T), Member (IET)

Senior Lecturers

**Eng N.P. A. Kaena, BSc. Eng (UDSM) MSc. Eng (Ireland), PhD Construction Mang. (UDSM), Reg. Eng (T)

Lecturers

F.E. Utou, FTC Eng. (TCA), MSc. Eng. (USSR), PhD. Mech. Eng. (RSA)

Y.J. Kimori, MSc.Mech.Eng (Moscow), PhD Eng Design (MSUDT)

Eng. J.N. Mkilania, MSc. Eng (Bulgaria), Reg. Eng (T), MIET , PhD, Eng. Mgt (UDSM)

C.E. Kilele, Dip. Ed (Mkwawa), MSc Eng. (USSR), MSc. Mgt (FRG) PhD, Eng. Mgt (UDSM)

J.M. Malifedha, FTC. Eng (TCA), MSc. Eng. (USSR) Phd, Mechatronics (China)

Assistant Lecturers

M.Y. Kiluswa, BSc. Eng. (UDSM) MSc. Eng. (China)

R.S. Nzumbi, FTC (DTC), MSc. Eng (USSR)

Eng. F. Sanga, BSc. Machinery (UDSM), MSc. Ind. Management, Reg. Eng. (T)

***P.N. Ambogo, FTC Eng. (TCA), MSc. Eng. (USSR)

**P.A. Mkongwi, MSc. Eng (USSR), MSc. Marine (China)

*A. Esebi, BSc. Eng (UDSM), MSc. Prod. Eng. (RSA)

Eng. E.A. Kinyawa, BSc. Mech. Eng, MSc. Eng (FRG, Reg. Eng. (T)

*F. Lujaji BSc. Mech. Eng. (UDSM) Msc. Eng. (RSA)

D. Mbunga, FTC (TCA), MSc Eng (FRG)

Tutorial Assistant

E.L. Munuo, Cert. Mechatronics)(Japan), FTC Eng (DTC), ADE (DIT)

A., Kisioki, FTC (TCA), Beng, (DIT)

L. Kassian, FTC (MTC) Beng (DIT)

Chief Instructors I

E.G.R. Kizima, FTC Eng, (DTC), ADE Eng. (DTC), PGD Eng. (UDSM), MSc. Prod. Eng. (UDSM)

*R.B. Nankokonumbi, FTC Eng, (DTC), ADE Eng. (DTC), PGD Eng (UDSM), MSc. Prod. Eng. (UDSM).

Y.J. Msigala, FTC DTE (DTC), ADE (DTC), PGD Eng. (UDSM) , MSc. Prod. Eng. (UDSM) $\,$

P.R. Mubamba, BSc. Eng. MEED (UDSM)

Principal Instructors I

**K. Namweram, FTC Eng (DTC), DTE (India), ADE (DTC), PGD Eng (UDSM)

L. S. A. Mgungo, BSc. Eng (UDSM)

Senior Instructor I

W.M. Gideme, Motor Vehicle Mech. (VETA), DTE (DTC)

**N.R. Mkude, Cert (Weld) (UK), Cert. Weld (Japan), Adv. Cert. Weld (FRG), DTE (FRG)

**P. P. Kazimbaya, DTE (DTC), Cert Tool & Die design (Japan), Adv. Machine Maint. (Netherland)

Instructor II

**A. H. Katani, BSc (UDSM)

Principal Technician II

K.M. Salira, FTC Eng. (DTC)

Senior Technician II

**J. G. Nhindilo, FTC Eng (DTC)

Technician I

W.C. Mkami, FTC Eng (DTC)

Principal Artisan

B. Bwire, Trade Test Grade I (NVTC) A.R.Gurti, Tradetest Grade II (NVTC)

Artisan I

N.N. Msamwela, Cert Trade Test Grade I (NVTC)

H.R. Abdallah, Trade Test Grade II

**L. Namkoloma, Trade Test II (El. Installation)(NVTC), Trade Test I (Refr & Air Cond)(VETA)

P.A. Luhanda VETA Level III (Welding & Metal Fabrication (NVTA III)

- * On study leave
- ** On contract
- *** On transfer

6.6 DEPARTMENT OF SCIENCE AND LABORATORY TECHNOLOGY

This Department offers Ordinary Diploma (NTA Level 4-8 in Science and Laboratory Technology. It also provides services to all academic departments in the teaching of Physics. The department has adequate classrooms and laboratory facilities. In addition, it has 19 teaching staff members who are supported by 2 technicians.

6.6.1 Programmes Offered by Science and Laboratory Technology Department

(a) BASIC TECHNICIAN CERTIFICATE IN SCIENCE AND LABORATORY TECHNOLOGY- NTA LEVEL 4

Semester I

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 04101	Algebra	5	
GST 04102	Basic Technical Communication skills	2	
GST 04103	Entrepreneurship Concepts and Context	3	
CSET 04101	Computer Basics and Word Processing	12	
	CORE MODULE		
SLT 04101	Introduction to Basic Principles of Physics	6	
SLT 04102	Basic Experimental Chemistry	6	
SLT 04103	Use and Maintenance of Laboratory Equipment & Apparatus	9	
SLT 04104	Basic Biology Instrumentation	6	
SLT 04105	Solutions and Bench Reagents	6	
SLT 04106	Basic Biological Principles	9	
SLT 04107	Laboratory Safety	6	
	Total	70	

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
GST 04204	Trigonometry and vectors	5

GST 04205	Communication Skills	2
GST 04206	Small Business Development	3
CSET 04204	Spreadsheet and Database	2
	CORE MODULE	
SLT 04202	Qualitative Analytical Chemistry	9
SLT 04204	Basic Electronics for General Instrumentation	9
SLT 04205	Basic Biological Experiments	9
SLT 04206	Principles of Physics	6
SLT 04207	Introduction to General Chemistry	6
SLT 04208	Basic Photographic Principles	6
	Total	57

Total Credits at NTA 4: 127 (Minimum credits required at NTA 4)

(b) TECHNICIAN CERTIFICATE IN SCIENCE AND LABORATORY TECHNOLOGY NTA LEVEL 5

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 05101	Fundamental Rule of counting, matrices and Differentiation	5	
GST 05102	Business Communication	2	
GST 05103	Business Start Up and Management	3	
	CORE MODULES		
SLT 05101	Analytical Measurements and Instrumentation	6	
SLT 05102	Electrostatics & Current Electricity	9	
SLT 05103	Inorganic chemistry Practical	6	
SLT 05104	Applied Mechanics	6	
SLT 05105	Plants and Animal Taxonomy	6	
SLT 05106	Lab Layout and organization	9	
SLT 05107	Industrial Practical Training	10	
Total		62	

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 05204	Integration, Statistics and Probability	5	
GST 05205	Communication and Technical Presentations	2	
GST 05206	Business Financial Management and Accounting	3	
CSET 05205	Computer Aided design	2	
	CORE MODULE		
SLT 05201	Magnetism and AC Theory	9	
SLT 05202	Introduction to Physical Chemistry	9	
SLT 05203	Applied Optics	6	
SLT 05204	Biological Specimen Management	9	
SLT 05205	Applied Photography	9	
SLT 05206	Basic Environmental Management	6	
GST 05207	Research Methods for Technicians	2	
	Total	62	

Total Credits at NTA 5: 124 (Minimum credits required at NTA 5: 120)

(c) ORDINARY DIPLOMA TECHNICIAN CERTIFICATE IN SCIENCE AND LABORATORY TECHNOLOGY NTA LEVEL 6

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
GST 06101	Conics 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 MODULE		
SLT 06102	Advanced Experimental physics	9	
SLT 06103	Modern Nuclear Physics	9	
SLT 06104	Physical Chemistry	9	

SLT 06105	Microbiology	9
SLT 06106	Physical Chemistry Practical	9
SLT 06107	Project Data Collection	10
SLT 06108	Industrial Practical Training	10
	Total	75

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 MODULE		
SLT 06201	Basic electronics	6	
SLT 06202	Applied Experimental physics	9	
SLT 06204	Applied Organic Chemistry	9	
SLT 06205	Project	10	
SLT 06206	Molecular biology and Genetics	9	
	Total	53	
	TOTAL CREDITS	128	

Total Credits at NTA 6:128. (Minimum Credits required NTA 6: 120)

(d) HIGHER DIPLOMA IN SCIENCE AND LABORATORY TECHNOLOGY NTA LEVEL 7

Code	Module Title	Credit
FUNDAMENTAL MODULES		
GSU 07101	Calculus	6
GSU 07105	Computing using in mechanical and software	6
GSU 07106	Technical Communication skills	6
CORE MODULES		

SLU 07101	Principles of Physics	6
SLU 07102	Cell Biology	9
SLU 07103	Advanced Organic Spectroscopy	6
SLU 07104	Laboratory Management and Maintenance	6
SLU 07105	Chromatographic Techniques	9
ETU 07101	Analogue Electronics	6
	TOTAL	60

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
MEU 07212	Industrial Management	6	
GSU 07202	Advanced Calculus	6	
CSEU 07201	Data Structure and Computer Programming	6	
	CORE MODULES		
SLU 07201	General Microbiology	6	
SLU 07202	Advanced Organic chemistry	6	
MEU 07213	Fluid Dynamics	9	
ETU 07206	Digital Electronics	6	
ETU 07206	Control Systems Engineering Analogy	6	
SLU 07203	Industrial Practical Training	12	
	TOTAL	63	
ANNUAL TOTAL CREDITS		123	

ELECTIVES

Code	Module Title	Credit
MEU 07211	Material Technology	6
ETU 07207	Electronic Circuits	6
SLU 07204	Fundamental of Physics	6

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
MEU 07322	Finance and Human Resource Management	6

CSEU 07302	Microprocessors	9
GSU 07307	Differential Equations and Complex variables	6
	CORE MODULES	
SLU 07301	Advanced Physical Chemistry	6
SLU 07302	Molecular Biology	9
SLU 07303	Applied Organic Chemistry	6
SLU 07304	Advanced Laboratory Stores Management	6
SLU 07305	Computational Physics and Electronics	6
SLU 07306	Environmental Impact and Risk	3
MEU 07306	Control System Engineering Digital	6
	TOTAL	63

Code	Module Title	Credit	
	FUNDAMENTAL MODULES		
MEU 07428	Engineering Operationis Management	6	
GSU 07404	Probability and Statistics	6	
GSU 07407	Research Methods for Engineers	3	
	CORE MODULES		
SLU 07401	Applied Thermodynamics	9	
SLU 07402	Industrial chemistry	6	
SLU 07403	Nuclear Chemistry	6	
SLU 07404	Biochemistry	9	
SLU 07405	Industrial Practical Training	12	
	TOTAL	57	
ANNUAL TO	OTAL CREDITS	120	

ELECTIVES

Code	Module Title	Credit
MEU 07105	Fluid Mechanics	3
ETU 07307	Metal Technology	3
SLU 07308	Waste Water Management	3

Total Credits at NTA 7:372. (Minimum Credits required NTA 7: 240)

(e) BACHELOR OF TECHNOLOGY IN SCIENCE AND LABORATORY TECHNOLOGY NTA LEVEL 8

Semester I

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	6	
SLU 08103	Instrumental Analytical Chemistry and quality control	6	
SLU 08104	Project - Data Collection	18	

ELECTIVE

Code	Module Title	Credit
SLU 08105	Electronic Polymer and Polymer based magnets	6
CSEU 07301	Data base Management Systems	9
SLU 08106	Applied Electromagnetism	9
SLU 08107	Soil and Water Testing	6
SLU 08108	Automation in the Laboratory	3
	TOTAL	75

Code	Module Title	Credit
	FUNDAMENTAL MODULES	
CSE 07403	Industrial Automation	9
GSU 08201	Entrepreneurship for Engineers	3
CORE MODULES		
SLU 08201	Applied Biochemistry	6
SLU 08202	Industrial Microbiology	9
SLU 08203	Synthetic Organic Chemistry	6
SLU 08204	Project	18

ELECTIVE

Code	Module Title	Credit
MEU 08209	Renewable Energy Technologies	6
SLU 08205	Explosive and Propellants	3
SLU 08206	Lubricants Chemistry	3
SLU 08207	Wave Mechanics	3
SLU 08208	Environmental Pollution and Mitigations	3
	TOTAL	69
	REQUIRED TOTAL ANNUAL CREDIT	120

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

6.6.2 List of Academic Staff in the Department of Science and Laboratory Technology

Senior Lecturer and Head of Department

E. Amri BSc. Ed (UDSM), MSc, Botany (UDSM) PhD. Bot (UDSM)

Senior Lecturers

- L. Henry, BSc. Ed., MSc Chem, PhD Chem (UDSM)
- P.D. Nsimama, BSc. Ed. (UDSM), MSc. Physics. (UDSM).PhD Physics (SA)
- F. A. Mamboya, BSc. Chemistry & Mar. Biology (UDSM), MSc Mar. Biology (UDSM), PhD. Biology (Stockholm)

Lecturers

- A.G. Mmari, BSc. Ed. (UDSM), MSc. Physics.((UDSM), MSc. (Seismology) (Norway), PhD (SA)
- L.N. Mkiramweni, BSc. Ed. (UDSM), MSc. Physics. (UDSM)

Assistant Lecturers

- S.W. Momburi, BSc. Ed. (UDSM), MSc. Chem (UDSM)
- C.C. Kimaro, BSc. Ed (UDSM), Meng. (Environ.) (Holland)
- C.A. Malisa, BSc. Ed. (UDSM), MBA (UDSM)
- D. D.Ntisy, BSc. Chem., MSc. Chem. (Moscow)
- U. Mtaita, BSc. Ed. Med (Sc), (UDSM)

J. Assey, BSc. Ed. (UDSM), MSc (Science) SUA) *S.K Samson BSc (SUA), MSc (Spain)

Principal Instructor I

J.H. Muhale, FTC Eng (DTC), ADE Electronic. (DIT) F.N. Mushumbusi BSc Ed. (UDSM) V. Mhina BSc Ed. (UDSM). MBA (UDSM)

Principal Instructor II

P.E. Msangi, FTC Eng, (DTC), ADE. Electronics (DIT)

Senior Instructor I

F. Mwaimu BSc Edn. (UDSM)

Laboratory Technician I

H. Ngulika FTC Lab Tech. (DIT)

Laboratory Technician II

G. Damas, FTC Lab Tech. (DIT)

*on study leave

6.7 DEPARTMENT OF GENERAL STUDIES

This is a service Department that provides services to all academic departments for the teaching of Mathematics, Research Methods, Communication Skills and Entrepreneurship. It has 24 teaching staff members on full time basis.

6.7.1 Modules Offered by General Studies Department

(a) BASIC TECHNICIANS CERTIFICATE NTA LEVEL 4

Code	Module Title	Credits		
Semester I				
GST 04101	Algebra	5		
GST 04102	Basic Technical Communication Skills	2		
GST 04103	Entrepreneurship Concepts and	3		
	Context			
Semester II				
GST 04204	Trigonometry and Vectors	5		
GST 04205	Communication Skills	2		
GST 04206	Small Business Development	3		

(b) TECHNICIAN CERTIFICATE NTA LEVEL 5

Code	Module Title	Credits		
Semester I				
GST 05101	Fundamental Rule of Counting, Matrices and Differentiation	5		
GST 05102	Business Communication	2		
GST 05103	Business Start Up and Management	3		
Semester II				
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		

(c) DIPLOMA IN ENGINEERING NTA LEVEL 6

Code	Module Title	Credits	
	Semester I		
GST 06101	Conics and Differential Equation	4	
GST 06102	Engineering study skills	2	
GST 06103	Formalization, Internalization and E-Business	2	
GST 06107	Algebra and Application of Integrats	4	
	Semester II		
GST 06204	Complex Number, Numerical methods and Series	4	
GST 06205	Technical writing	2	
GST 06206	Business planning	2	

(d) HIGH DIPLOMA IN ENGINEERING NTA LEVEL 7

Code	Module Title	Credit	
	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	3	

(e) BACHELOR OF ENGINEERING NTA LEVEL 8

Semester II

Code	Module Title	Credit
GSU 08201	Entrepreneurship for Engineers	3

6.7.2 List of Academic Staff in the Department of General Studies

Lecturer and Head of Department

E.C. Rutalebwa, BSc.Ed. (UDSM), MSc. Math (UDSM), MSc. Statistics (K.U. Leuven, Belgium), PhD Statistics (K.U. Leuven, Belgium)

Senior Lecturer

N. Mtega, BSc. Ed. (UDSM), MSc. Math.(UDSM), PhD Math. (UDSM)

Lecturer

E. Massami, BSc. Ed.(UDSM), M. Phil (Stellenbosch, RSA), PhD (China)

Assistant Lecturers

- C. Ndimba BA Ed.(UDSM), M.A. DS (UDSM))
- **R.R. Elineema, BSc. Ed.(UDSM), MSc. Operational Research (Mexico)
- *A.R. Mtafya, BSc. Ed.(UDSM), MSc Comp Sc.(China)
- G. Gumbwa, BA (Ed) (Dar), M,A (Ed) (UDSM
- A. Msangi, BA Ed.(UDSM), M, A Linguistics (UDSM)
- *E. Mtisi, BSc. Ed.(UDSM), MSc (UDSM)
- R. Kiowi, B.A (UDSM), M.A (UDSM)
- *L. Gerson, BA Ed. (UDSM), MA Linguistics (UDSM)
- G. Sanga, , BSc. Ed.(UDSM), MSc (Math) (Stellenbosch, RSA)
- H. Seleman BA Ed.(UDSM), MA (Linguistics) UDSM
- A. Mnabe BA Statistics. (UDSM), MA (Statistics) UDSM

- *S. Mwalusepo, B.Sc (Ed) (Dar), MSc (Maths) UDSM
- F. Elias, BSc. Ed. (Dar), PGD Comp. Sc (UDSM), MSc (Maths) UDSM
- M. Mihayo, , BA Ed.(UDSM) MA (Linguistics) UDSM
- B. D. Rioba, BA Ed.(UDSM), MA (Linguistics) UDSM
- M. Ryoba, B Sc (Ed) (UDSM), MSc. Maths (China)
- T. Ngailo Bed (Maths) (Tumaini), MSc. Maths (UDSM)
- B. Malisa, BSc (Ed) (UDSM), MSc. Maths (China)

Tutorial Assistants

- R. Soko, BSc. (Ed) (UDSM)
- Z. Salawa BSc Ed. (UDSM)

Principal Instructor I

R.H.A. Kajwaula, BSc. Ed. (UDSM)

- * On study leave,
- ** On administration duties

6.7.3 E-LEARNING PROGRAMME

(a) Objective of the E-Learning Programme

eLearning 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

(c) Programme Coordinator

eLearning Coordinator: Vacant

PROFILES OF ACADEMIC RELATED DEPARTMENTS

7.1 RESEARCH AND PUBLICATIONS AND POSTGRADUATE STUDIES DEPARTMENT

The Department of Research and Publications is established purposely in order to implement the Policy for Research and Publications. The overall objective of the DIT Research and Publications Department is to put in place a clear and comprehensive institutional framework, which is conducive for stimulating and sustaining research and publication activities and coordinate the establishment /conduction of postgraduate programmes at the Institute. Specifically the Department has been established with the following objectives:

7.1.1 On Research and Publications

- 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 the 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.
- f) To have in place a functional mechanism for promoting research and monitoring the progress of research and publication activities at the DIT.

- g) To develop research acquisition strategic plan.
- h) To enhance dissemination of knowledge.
- To establish research and business links with public and private sector.
- j) To conduct workshops, conferences, etc.
- k) To be custodians of research reports and disseminate these reports, where appropriate, for academic and other use.
- 1) To coordinate acquisition of resources needed to conduct research.
- m) To establish means to coordinate research resources and activities.
- To establish mechanism for monitoring research funding and disbursement from different sources.
- o) To develop and enhance research capability and research.
- p) To develop intellectual property right policy and be custodian of patents and copyrights at the Institute

7.1.2 On Postgraduate Studies

- A. Enhance the existing as well as develop new educational links with other institutions of higher education within and outside the country
- B. Coordinate the establishment of postgraduate programmes in Civil Engineering, Mechanical Engineering, Electrical Engineering, Laboratory Technology, Electronics and Telecommunication Engineering, Computer Studies and such other discipline as the Institute shall implement as per strategic plan.
- C. Coordinate the Teaching, Examination and Research carried out at postgraduate level.
- D. Promotes implementation of Research for postgraduate students
- E. Collaborate with the Quality Control Department of the institute to ensure a quality delivery of postgraduate programmes

7.1.3 List of Staff in the Department of research, Publications and Psotgraduate Studies.

Head

F. A. Mamboya, BSc. Chemistry & Marine Biology (UDSM), MSc. Marine Biology (UDSM), PhD. Biology (Stockholm)

Assistant Head and Coordinator of Postgraduate Studies

Malisa, BSc. Eng (UDSM), MSc. Eng (UDSM), MSc, Eng. (UDSM), PhD Water Resources (UDSM)

7.2 INSTITUTE CONSULTANCY BUREAU

The Institute Consulting Bureau (ICB -DIT) was established/transformed from former RCB to administer and coordinate all Consultancy and Continuing Education including Pre-Entry Courses activities carried out by DIT.

Specifically, it was established with the following main objectives.

- b) To coordinate and promote Consultancy and Continuing Education and Pre-Entry Course activities among members of the DIT
- To oversee the quality of Consultancy and Continuing Education and Pre-Entry Course services and related assignments undertaken by DIT
- d) To develop DITis human capacity in Consulting Skills
- e) To coordinate and facilitate multi-disciplinary Consultancy activities being executed at the institute by staff members
- f) To link DIT-Consultancy and Continuing Education and Pre-Entry Course activities with Industries, National and International Professional Association.

7.2.1 Objectives:

The objective of the Bureau is to enhance the capability of Dar es Salaam Institute of Technology in order to contribute effectively to the industrial development of Tanzania through the provision of professional engineering consulting services, expert professional services and conduct and administer continuing professional development programmes

by using resources at the institute and hence generate revenue for the institute and its staff.

7.2.2 The specific objectives of the bureau shall be to:

- ii) Promote and administer the implementation of consultancy policies and procedures for all commercial activities in the institute that fall under its jurisdiction.
- iii) 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.
- iv) Enable the institute to generate funds to subsidies grants from the government and other donors for the institute to meet its financial needs.
- v) Enables the staff in DIT to supplement their income thus enhancing staff retention.
- vi) Optimize the use of DIT expertise and resource to solve engineering technology and related problems.
- vii) Provide means for academic and other DIT staff to gain professional experience that shall be transferred to students and thereby improve quality of outputs
- viii) 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
- ix) Acquire knowledge on new development and needs in the trade and adjust curriculum accordingly
- x) Provide expert technical support to existing industry operations and to facilities developments of new industries and their products.
- xi) Establish and offer regular professional development programs for the advancement of local engineering personnel in the industry.
- xii) Facilitate establishment and enhancement of contracts and relations between DIT staff and industries.
- xiii) Provide a platform through which DIT staff can transfer their knowledge and skills to industry and

xiv) Assist DIT staff to develop competencies in soliciting for jobs and in preparing winning proposals for consultancies and services

7.2.3 List of Staff in the Institute Consultancy Bureau

Manager

J.N. Mkilania MSc.Eng (Bulgaria) PhD Eng.Mngt (UDSM)

7.2.4 Available Courses for 2012/2013

The following short-term courses have been planned for the academic year 2013/2014. 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	TUTION 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 equipments and apparatus.	10 weeks 2hrs/day	260,000/=

Laboratory Instrumentation and Maintenance	Instrumentation, Maintenance and repair of scientific equipments, 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 handcut 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	TUTION 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 (Modeling; Solid works, Pro Engineering, etc)	History, definition, field of applications Introduction to parametric software Modeling of parts Modeling 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, Optimisation -Analysis of developed model -Drawings	8 Weeks 2hrs/day	300,000/=
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/=

Dania vyaldin -	Everdomental of Matallaria	6 xxx alva 2h ::-/	240.000/-
Basic welding	Fundamental of Metallurgy,	6 weeks 3hrs/	240,000/=
technology & Practice	Basic Electrical principles,	day	
Practice	Manual metal arc welding		
Intermediate	Workshop safety,	9 weeks 3hrs/	320,000/=
welding	Welding Science,	day	
technology	Metallurgy,		
	Oxy-acetylene welding,		
	Arc-welding Process,		
	Arc-welding Practice,		
	Oxy-acetylene welding		
	practice.		
1	-	6 1 21 /	200,000/
Modern welding	_	6 weeks 3hrs/	200,000/=
	Welding processes:	day	
	Welding hazards &		
	prevention.		
	Welding Techniques		
	Simple weld estimates		
Basic foundry	Tools and equipment for	6 Weeks	200,000/=
technology	moulding, patterns and core.	3hrs/day	
	Casting techniques and		
	finishing operations.		
T 1 1		2 377 1	00.000/
Industrial energy		3 Weeks	90,000/=
management	Electrical metering and tariffs,	3hrs/day	
	Insulation, Plant survey,		
	Refrigeration and heat pump		
	systems, Fuel fired equipment,		
	Steam generation and		
Advanced	Advanced Psychometric,	6 weeks	190,000/=
refrigeration and	T	3hrs/day	190,000/-
air condition	system-Design, Construction	Jin 8/day	
all collultion	and Maintenance.		
	Duct design and construction,		
	Cold room design and		
	construction		

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/=
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	TUTION 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/=
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, Trouble shooting 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/=

Electrical Engineering

COURSE TITLE	COURSE CONTENTS	DURATION	TUTION 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 windingsSingle phase winding -Three phase winding D.C winding.	3 months 3hrs/day	400,000/=
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. Non linear adaptive control.	3 months 3hrs/day	320,000/=
Digital circuits and converters.	Combination and sequential logics design, Analogue to digital and Digital to analogue converters	1.3 Months 2hrs/day	350,000/=

Building and Civil Engineering

COURSES OFFERED	DURATION	TUTION 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
Auto CAD for architectural design	4 weeks	350,000.00
Entrepreneuralship/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
Maap 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	COURSE CONTENT	DURATION	TIME	STARTING DATE	TUITION FEE (TSHS)
Revisions on Basic Mathematics	Fractions, Decimals and percentages. Compounding, Discounting and Amuty, Applied Calculus. Matrix operations. Time value of money. Cost Revenue and Profit	6 Weeks	4:30- 6:30 pm	Every first date of the month	250,000/=
Introduction to statistics	Introduction to Statistical measure. Statistics 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.	6 weeks	4:30-6:30 pm	Every first date of the month	400,000/=

COURSE	COURSE CONTENT	DURATION	TIME	STARTING DATE	STARTING TUITION FEE DATE (TSHS)
Operations	Operations Inventory control research Queing 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 Introduction to research. to research The research process. methods and Data analysis process. data analysis Hypothesis Testing. Technical of Data analysis. Data Interpretation.	8 weeks	6:30-8:30	Every first date of a month	400,000/=

For further information contact: Head of Continuing Education

P.o.Box 2958, **DAR ES SALAAM**, Telephone:022-2150902, Mobile: 0748-546634, Dar es Salaam Institute of Technology, Bibi Titi Mohamed/Morogoro Rd

Fax:022-2152504, Email: doce@dit.ac.tz

7.3 DEPARTMENT OF INDUSTRIAL LIAISON AND CAREER GUIDANCE (ILCG)

7.3.1 The main objective of the department is to provide guidance for efficient and effective coordination of Industrial Practical Training (IPT), career counseling 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 Counseling

The main link between the ILCG Department and other academic departments is through the Departmental IPT and Career 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 Instituteis graduates

(b) Career Counseling Section deals with:

- identifying and providing solutions to existing potential recruitment problems for the graduates
- ii. identifying, coordinating and streamlining professional requirements against industry employers 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

7.3.2 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 practical

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 2 nd Semester of NTA Level 5	10	10 weeks
IPT III	NTA level 7 (Third Semester)	End of 2 nd Semester of NTA Level 7	12	9 weeks
IPT IV	NTA level 8 (First Semester)	End of 4 th Semester of NTA Level 7	12	9 weeks

IPT Modules are treated as courses of succeeding year for all OD and Beng Programmes.

7.3.3 List of Staff in the Department of Industrial Liaison and Career Guidance

Head of Department

Anthony Thomas BSc Eng. (UDSM), MSc Eng. (UDSM), PhD (PRC)

7.4 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, Telecommunications Engineering. 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 3,000 documents. These include up-to-date textbooks, professional journals, theses, manuals, directories, bibliographies, reports, research papers, encyclopaedias 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 five thousand shillings (5,000/=) 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	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

Head of Library services

C. Komba, Cert. (SLADS BAGAMOYO), B.A in Librarianship (TUMAINI MAKUMIRA UNIVERSITY)

Senior Library Assistant I

- A. Nyenze, Cert & Dip. Librarian (SLADS Bagamoyo)
- A.Msofe, Cert & Dip. Librarian (SLADS Bagamoyo)
- F. Membe, Cert & Dip. Librarian (SLADS Bagamoyo)
- R. Makuyu, Cert & Dip. Librarian (SLADS Bagamoyo)
- O. Ndimbo, Cert (SLADS Bagamoyo), b.a in Librarianship TUMAINI MAKUMIRA UNIVERSITY

Senior Library Assistant II

*Kamtawa, Cert & Dip. Librarian (SLADS Bagamoyo)

^{*}on study leave

7.5 INFORMATION TECHNOLOGY (IT) SERVICES DEPARTMENT

The Department engages actively with the Institute community, soliciting its current and changing requirements in support of the Vision and Strategy in order to:

- Meet usersí expectation and needs for high quality service in ICT, Information resources and print
- Deliver those services effectively, efficiently and responsively
- Develop and enhance close partnership with department 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 it resource of people, money, space and equipment

7.5.1 The key objectives for the IT Services Department

- a) 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) play a leading role in developing and implementing the Institute's ICT/Information Strategy
- c) exploit the opportunities for the future Learning Resource Centre to improve support for teaching, learning and research
- d) Contribute to and enhance Institute initiatives in open and distance learning, lifelong learning, regional development and other outreach services
- e) Improve service quality to students (e.g. inter-library loans, enquiry handling, registration for ICT services etc.
- f) Improve robustness, resilience of ICT systems in the Institutes.

7.5.2 List of Staff in the ICT Services Department

Principle System Administrator (Acting)

O. Mnzava, Adv Dipl. Comp Science, MSc IT and Mgt. (IFM)

System Administrator

E. Munyagi, BSc. Network Computing (UK)

Web Master

- *N.M. Mwasaga, MSc Comp (Ukraine)
- *M. Mwangende Cert IT(DIT) Dipl. ICT (UCC) Assistant

Technician

- V. Sichirima, Cert.(Electrical), VETA
- N. Kimario, Dipl. Comp.Eng. (D.I.T)
- *E. Bebwa, Adv Dipl Comp Science, Macmaine School of Computing
- R. Nyangusi Dipl. Comp. Eng(DIT)
- B. Sonzogo, FTC, Comp. Eng (DIT)
- R. Angotike Dipl. Comp.Eng. (D.I.T)
- *David Kaaya, Dipl. Comp.Eng. (D.I.T)
- *H.M. Bakari, FTC Comp. Eng DIT, Dip Comp(China)
- E. Masawe FTC Comp. DIT
- A. Mrema, FTC Comp Eng. (DIT)
- D. Shija.

^{*} On study leave

7.6 INDIA - TANZANIA CENTRE OF EXCELLENCE IN INFORMATION AND COMMUNICATION TECHNOLOGY (ITCoEICT)

7.6.1 Introduction

The India-Tanzania Centre of Excellence in Information and Communication Technology (ITCoEICT) was established in 2009 as a result of bilateral relation and cooperation between the United Republic of Tanzania and Government of India. The project implementing agencies on behalf of Tanzania and India are Dar Es Salaam Institute of Technology (DIT) and India Centre for Development of Advanced Computing (CDAC) respectively. The principal objective of the Center is to promote development of Information and Communication Technology in the United Republic of Tanzania. In order to realize this noble objective, the Centre engages in various professional activities in ICT including provision of video conferencing, telemedicine & e-learning facilities, High Performance Computing and conducting modular short-term proficiency courses in Information Technology.

7.6.2 Vision And Mission And Functions Of The Centre

Vision:

To create a world class IT Centre for IT skills, problem solving and connecting people through cyberspace

Mission:

- 1. Conduct modular short-term proficiency training courses in Information Technology.
- 2. Provide training on the entire project life cycle i.e design, development, testing, trials debugging, customization, standardization, support services, etc.
- 3. To utilize the Centre and its and Communication Information centers (CICs) located in Posta offices countrywide for offering various services, such as distance learning.
- 4. Build capacity for, and promote the use of High Performance Computing in Tanzania.

5. To utilize the CoEICT as a Centre for Disaster Management and National Data Centre by government for making the data of national interest available to government and Public.

Functions of the Centre:

- 1. Develop and offer professional, tailor made ICT programs
- 2. Develop and offer e-learning programs and Telemedicine services
- 3. Attract and publicize the use of Supercomputer for leaning, research and business applications.
- 4. Collaborate with other institutions local or foreign to offer ICT related courses and services

7.6.3 Main Pillars of the Centre

The Center is divided in three units, namely High Performance Computing section, Telemedicine & e-Learning section and IT Professional Courses section.

(a) High Performance Computing Section

This section is equipped with a Linux (REDHAT) based supercomputing cluster code named iPARAM Serengetiî. The facility includes 20 TeraBytes of raw storage and 38 TeraBytes of tape backup along with relevant backup software. Currently the facility is installed with various scientific applications in Bioinformatics, Atmospheric Science, Oceanography, Computational Fluid Dynamics, Finite Element Analysis, Seismic Analysis, Materials Modeling, and Data Visualization Tools. Other applications can be installed as needed. Current visualization tools include Grads and Ferret.

Interconnect:

- 1. 8-ports PARAM III Primary interconnect
- 2. 24-ports infinitband Silver-strom secondary interconnect
- 3. 24-ports Nortel Gigabyte switch 1000BASE-T 1000Mbps for cluster management

Security:

1. A firewall designed to permit or deny network transmissions based

upon a set of rules to protect network from unauthorized access while permitting legitimate communications to pass.

2. Authentication server set up to provide authentication services to users or other systems.

(b) Telemedicine & E-Learning Section

This section is responsible for provision of telemedicine, e-learning and video conferencing services. To support these services, the Centre is equipped with state-of-the art facilities for telemedicine, e-learning, and Video-conferencing. Using available medical equipments and Sanjeevani software, doctors can conduct medical consultation and diagnosis, in Cardiology, Radiology and Pathology specialities. For E-learning, e-Sik Shak software developed by C-DAC, India, provides features like course organizer, Discussion/Bulletin board, Announcements, Assessment, Collaboration, Query Handler, Email, WhiteBoard, and Chat. In addition to e-Sik, the centre has deployed Moodle, the open-source elearning software.

To support these facilities, a video conferencing system is installed which allows real-time interactive video sessions to be held between central site (DIT) and other remote locations. The video conferencing system can also be used as an independent service for those who would like to use the facility. Currently DIT is connected to 10 remote locations namely:

- 1. Kibaha Education Center
- 2. Bagamoyo Post Office
- 3. Iringa Post Office
- 4. Mbeya Post Office
- Arusha Post office
- 6. Mwanza Post office
- 7. Kijangwani Post office (Zanzibar)
- 8. Morogoro Post Office
- 9. Dodoma Post Office
- 10. Mtwara Post Office

(c) It Professional Courses Section

The section is in charge of conducting modular short-term proficiency courses in Information Technology. These courses are designed to address various ICT challenges which our country faces such as low computer literacy rate among ordinary citizens and insufficient local IT workforce. Therefore, the training section offers variety of Information Technology professional certificate courses ranging from Computer Basics, Specialized Software packages to Advanced Computing. The courses target towards the Tanzania Citizens from varied background who aspire to make an intelligent use of computers or make successful career in the local IT industry.

Courses Objectives

- To provide ICT professional skills to individuals who aspire to make successful career in ICT industry as programmers, network administrators, website developers, Graphics designers, Desk Top Publishing operators, and so on.
- 2. To raise level of computer literacy among employees by providing relevant ICT skills that could enhance their job performance in their day-to-day operations.
- To provide hands-on skills in using specialized computer applications such as statistical and accounting packages in processing statistical and financial data.
- 4. To prepare would-be computer trainers such as school and college teachers.

Offered Courses

The following courses are offered at a certificate level ranging from one to six months duration of studies.

- 1. Professional Course in Information Technology
- 2. Professional Course in foundation of Website development
- 3. Professional Course in Statistical Package for Social Science (SPSS)
- 4. Professional Course in Tally Accounting Package
- 5. Professional Course in Desktop Publishing using Adobe Illustrator

and Photoshop

- 6. Professional Course in AUTOCAD
- 7. Professional Course IN Cisco Certified Network Associates (CCNA)
- 8. Professional Course in Computer Maintenance & Repair
- 9. Professional Course in Computer Networking
- 10. Professional Course in the Fundamentals of Computer Programming
- 11. Professional Course in the Fundamentals of JavaTM Programming
- 12. Professional Course in Advanced Java for Applications Development
- 13. Professional Course in .NET Programming using C#
- 14. Professional Course in .NET Programming using VB.NET
- Professional Course in Advanced Web Programming using ASP.
 NET
- 16. Professional Course in Database Programming Using Oracle
- 17. Professional Course in Java Wireless Programming for Mobile Applications

7.6.4 Research & Development Section

The section of ICT professional programs is not confined to training activities only. Plans are underway to open new section that will support research and consultancy activities in the area of ICT service support. The section will also engage in software production to meet demands of customized software packages for small-to-medium scale businesses in the local market.

7.6.5 List Of Staff In ITCoEICT

S/N	Name	Position	Qualifications
1	Dr. Amos Nungu	Head of the Centre	PhD, MSC - Telecommunication Systems (Sweden), BSc (UDSM).
2	Daudi Mboma	Instructor & Course Coordinator	Adv. Dipl Comp. (IFM), PGD in Advanced Computing (India)
3	Mariam J. Mlanzi	Course Coordinator & Instructor	Dipl. Comp Eng. (New Horizon), PGD in Embedded System & Design(India)
4	Damas A. Makweba	Instructor	Bs. C. Eng. DIT

GENERAL INFORMATION



8.1 BEST STUDENTS' PRIZES AND AWARDS

In order to promote learning competitions among students, the Institute, awards prizes to the best three students in each academic Department who have shown outstanding performance in academics for 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 from different Departments.

8.2 The following table indicates the type of Awards Offered by the Institute

Name of Assaud	Damafiatantaa		Amount	
Name of Award	Beneficiaries	IT	NTA 4-6	NTA 7-8
Ministerís Prize	First best student (1st, 2nd and 3rd)	200,000/=	250,000/=	300,000/=
DIT Council Chairman	Second best student (1st, 2nd and 3rd year)	100,000/=	130,000/=	200,000/=
DIT Principal	Third best student (1st, 2nd and 3rd year)	50,000/=	80,000/=	100,000/=
Deputy Principal Academic Research and Consultancy	Overal best students in mathematics NTA 6.		100,000/=	
Prof. C.W.M. Nyahumwa	Overal best female students in (NTA 6 and NTA 8)		100,000/=	100,000/=

8.3 The following table indicates the type of Awards Offered by different sponsors at DIT

Electronics and Telecommunications Engineering Department

Name of Award	Beneficiaries	Amo	ount
Name of Awaru	Deficial les	NTA 4-6	NTA 7-8
Tanzania Civil Aviation Authority (TCAA)	The best student in Electronics & Telecommunication Engineering, NTA 8		USD 300
Director General - TCAA	The best female B.Eng in Electronics and Telecommunication Engineering, NTA 8		USD 200

Name of Award	Donoficionica	Amo	ount
Name of Award	Beneficiaries	NTA 4-6	NTA 7-8
- Eng Mr. Mburuma M.M	The best student in Electronics & Telecommunication Engineering, NTA6, NTA 8	100,000/=	100,000/=
	The best student in Electronics & Telecommunication Engineering, NTA 6 and NTA 8	100,000/=	100,000/=
Ms. N.G. Nzowa	The Best female B.Eng in Electronics and Telecommunication Engineering, NTA 8		100,000/=
Dr. R Igangas	The Best Student in Eng. Electromagnetics moduleí		100,000/=
Mr. J. A. Msumba	The Best Student in Data communication moduleí		100,000/=

Civil Engineering Department

Name of Award	Beneficiaries	Amount	
Name of Award	belleficiaries	NTA 4-6	NTA 7-8
	The first best student in Foundation Engineering and Soil Mechanics		250,000/=
Geoprimosi Engineering Limited	The second best student in Foundation Engineering and Soil Mechanics		150,000/=
	The third best student in Foundation Engineering and Soil Mechanics		100,000/=
UNDI Consulting Co. LTD	The best student in Civil Engineering NTA 6 and NTA 8	100,000/=	100,000/=

Name of Award	Beneficiaries		ount
Name of Award	Beneficiaries	NTA 4-6	NTA 7-8
UNDI Consulting Co. LTD	The best student in final civil engineering NTA 6 and NTA 8	100,000/=	100,000/=
Geoprobe Engineering Limited	Overall best female Student in (NTA 6 and NTA 8) Civil Engineering	100,000/=	100,000/=
Water Eng. Section Civil Eng. Department, DIT	The first best student in Water Resource Supply Module		150,000/=
Eng. E. L. Mlavi	The best student in Structural Steel Design		100,000/=
M. D. J. G.	The best student in final year project in civil engineering Dept (NTA 8)		100,000/=
Mr. Daudi Singo	The best student in Basic Soil Mechanics, soil mechanics and Foundation	100,000/=	
Mr. I.M. Kanuti	The best student in Traffic and Transportation Engineering Module (NTA 6 and NTA 8)	100,000/=	100,000/=
Dr. Salha Kassim	The best female student in civil engineering (NTA 8)		100,000/=
Dr. S. Kazumba	The best student in open channel hydrolics module		100,000/=
Mining engineering	Section		
MTL Consulting Company	First best student in mining Engineering (NTA 6)	100,000/=	
Mr. Moses Kongola	First best student in mining Engineering (NTA 6)	100,000/=	

Name of Award	Beneficiaries	Amount	
	Beneficiaries	NTA 4-6	NTA 7-8
Mr. Ngala Ngowi	The First best student in Mining enginering (NTA 6)	50,000/=	
	The Second best student in Mining enginering (NTA 6)	30,000/=	
	The Third best student in Mining enginering (NTA 6)	20,000/=	

Computer Engineering Department

Name of Award	Beneficiaries	Amount		
		IT	NTA 4-6	NTA 7-8
Computer Department Academic Staff Prize	The best student in Computer Engineering (NTA 8)			100,000/=
	The best student in Final year Project			100,000/=
Mr. J. Y. Challo	The First best student in Computer Engineering (IT, NTA 6, NTA 8)	100,000/=	125,000/=	150,000/=

Mechanical Engineering Department

Name of Award	Beneficiaries	Amount	
		NTA 4-6	NTA 7-8
Kabiriti Engineering	The best student in Final year Project		100,000/=
UNDI Consulting Co. LTD	The best student in Final year Project		100,000/=

Name of Award	Danafistantas	Am	ount
Name of Award	Beneficiaries	NTA 4-6	NTA 7-8
Mechanical	The first best student in Mechanical Engineering (NTA 6 and NTA 8)	75,000/=	75,000/=
Department Academic Staff Prize	The second best student Mechanical Engineering (NTA 6 and NTA 8)	50,000/=	50,000/=
	The third best student Mechanical Engineering (NTA 6 and NTA 8)	25,000/=	25,000/=
UNDI Consulting Co. LTD	The first best student in Mechanical Engineering (NTA 8)		90,000/=
UNDI Consulting	The second best student Mechanical Engineering (NTA 8)		65,000/=
Co. LTD	The third best student Mechanical Engineering (NTA 8)		45,000/=
Dr. C.T. Mgonja	The best student in Material technology module		100,000/=
	The best student in Project Design		100,000/=
Mr. R.S. Nzumbi	The overall best students in Engineering Vibrationsii and Dynamics of Mechanical Structures Modules)		100,000/=
Mr. Namwelam	Project (NTA 6)	100,000/=	

Science and Laboratory Technology Department

Name of Award	Beneficiaries	Amo	unt
Name of Awaru	Deficienciaries	NTA 4-6	NTA 7-8
	The first best student in Sceince and Laboratory Technology (NTA 6)	300,000/=	
Healthy & Safety Ltd.	The second best student in Sceince and Laboratory Technology (NTA 6)	200,000/=	
	The third best student in Sceince and Laboratory Technology (NTA 6)	100,000/=	
D. I. II	First best student in Science and Laboratory Technology	100,000/=	
Dr. L. Henry	First best female student in Science and Laboratory Technology	100,000/=	

Electrical Engineering Department

N	D 6	Amo	ount
Name of Award	Beneficiaries	NTA 4-6	NTA 7-8
	The first best student in Electrical Engineering (NTA 8 and NTA 6)	110,000/=	200,000/=
UNDI Consulting Co. Ltd	The second best student Electrical Engineering (NTA 8 and NTA 6)	80,000/=	150,000/=
	The third best student in Electrical Engineering (NTA 8 and NTA 6)	60,000/=	130,000/=

NI CA I	D 61 1	Amo	ount
Name of Award	Beneficiaries	NTA 4-6	NTA 7-8
	The best student in final year project in Electrical Engineering (NTA 8 and NTA 6)	50,000/=	120,000/=
Director of Veta (Mrs. L. D. Lukindo)	The best female student in electrical engineering		100,000/=
	The best student in Control engineeringíí module		50,000/=
Dr. B. Saanane	The best student in electrical machines selection module		50,000/=
Mr. P. Mkiramweni	The best student in electrical measurements and instrumentation selectioní module	100,000/=	
	The best student in final year project	100,000/=	
Mr. T. Ndimba	The best student in engineering electromagnetic module		100,000/=
Mr. Phillemon Jacob	The best student in Industrial management module		100,000/=
Mr. T. Magessa	The best student in ëíelectronicsíí module	50,000/=	100,000/=

General Studies Department

N CA I	D. C. I.	Amo	ount
Name of Award	Beneficiaries	NTA 4-6	NTA 7-8
Mr Don Elmoomo	The overall best student in Mathematics (NTA 6, NTA 7)	100,000/=	100,000/=

8.4 STUDENTSÍ 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. Studentsí hostels are located within the DIT compound and Changíombe area.

Students secured accommodation in DIT hostels are required to bring with them; pillows, bed sheets, blanket and mosquito nets. The Institute's mattresses and beds are hired at the rate of seven thousands shillings (7,000/=) for NTA -Levels 4-6. B. Eng students are required to 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.

8.5 STUDENTS ADMINISTRATION

Most of the studentsí activities at the Institute are organised by the DIT Students Organisation (DITSO) under the coordination of the Office of the Dean of Students. The Organisation is concerned with the studentis academic, political, social and recreational activities. Every student becomes a member of DITSO (Dar es Salaam Institute of Technology Student Organisation) and students are advised to make their academic life meaningful by making their Organisation contribute positively towards the Institute Vision, Mission and its objectives.

8.6 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

8.7 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 fees structure. Students are directed to report at the Health Care Unit each time before they embark for any referral treatment.

8.8 GENDER MANAGEMENT UNIT (GMU)

The DIT- Gender Management Unit (DIT_GMU) was established in 2000 to advocates 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 2003/2004-2017/2018* sections 6.1.4, 6.5.6 and 6.6 under specific Goals number 4 and 5. Goal 5 emphasizes on improving Gender balance amongst staff and students.

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 counseling services to new students during the orientation period and whenever needed in collaboration with the Dean of Studentsí Office.

PROMOTING AND SUPPORTING FEMALE STUDENTS

a) Pre entry Programme

Through the GMU, DIT started Pre-entry course for students (especially female students) who have weak grades to qualify for direct admission to DIT programmes for Ordinary Diploma and Bachelor of Engineering. The aim of Pre entry course is to boost their educational grades to a level of admission requirement for the Government sponsored students, with a special focus of access to many female into the program. These efforts have shown a significant improvement on female enrolment at the Institute.

In collaboration with the Department of General Studies, GMU coordinates Pre-entry courses each year (for 10/12 weeks) for female and male students who aspire to join full time courses at DIT. Furthermore, the Unit is engaged in securing fund from various donors for female students to undergo Pre entry course and for those who successfully complete Pre-entry courses to join DIT for full time programs. The Ministry of Communication, Science and Technology every year donates fund which is used to sponsor 21 best female graduates of Pre entry into various OD programs for 3 years.

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 Studentsí office, GMU makes provision of *counseling 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 programs 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.

8.9 RENTAL SERVICES

DIT possesses a variety of renting facilities, which are available for use at reasonable charges. 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

MWANZA CAMPUS



Dr. Albert G. Mmari – Head, DIT - Mwanza Campus

MESSAGE FROM THE HEAD

It gives me great pleasure to share with you the current moments at our Mwanza campus as we have experienced steady growth and developments. The most notable of them has been in an increase of traineesí enrolment, introduction of Footwear Pattern Engineering and Application of Respective e-learning methodology course, as well tailor made trainings. More infrastructures have been rehabilitated, including, physical and chemical sciences laboratories, hostels and an establishment of Information and Communication Technology Laboratory. However, there have been some setbacks, resulting partly from limited available funds.

In academic year 2013/14, more specialized professional leather based and tailor made short courses are expected to be offered, commercial production of leather products, link up with local and international leather training institutions as well commencing of a long term competency based training programme, Basic Technician Certificate in Footwear Technology.

It is our anticipation that our developing partners, example, Ministry of Industry and Trade, Ministry of Livestock Development and Fisheries, United Nations Industrial Development Organization, Leather Association of Tanzania and other potential stakeholders will continue supporting us so as to achieve our set

Vision and Mission, and ultimate goal of becoming the Centre of Excellence in Leather and Leather products technologies in Tanzania, Eastern, Central and Southern Africa.

"A Good Deed Is Never Lost:

MAJOR CONTACT ADDRESSES

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+255 655 407023

Email: head@mwanzacampus.dit.ac.tz
Website: http://www.ditmwanzacampus.ac.tz

List of Staff Members

Head

Dr. Albert. G. Mmari, BSc. Ed. (UDSM), MSc. Physics (UDSM), MSc. (Seismology) (Norway), PhD Chemistry (RSA)

Assistant Head (Academics)

Mr. Yustin. J. Msigala, FTC (DTC), DTE (DTC), ADE (DTC), PGD Eng. (UDSM), MSc. Prod. Eng. (UDSM)

Senior Instructors

Mr. William Lohay BSc Ed (UDSM), MIEM (UDSM)

Mr. Issa Mwangosi, BSc Eng. (UDSM)

Mr. Moukhtar Ahmed, BSc.Chem (UDSM)

Mr. Marwa Wambura, BSc. Chemical and Process Eng (UDSM)

Artisans

Mr.E. Bamugaya

Mr. A.Shineni

Mr. A. Magosha

Mr. Z. Meshack

Supporting Staff

Mr. J. Manase

ACADEMIC CALENDAR FOR ACADEMIC YEAR 2013/2014

BACHELOR OF ENGINEERING (B.ENG) PROGRAMMES 1.0

1.1 Bachelor of Engineering (B.Eng 13) Programme 2013/2014

S/N	DATE	WEEKS	SEMESTER	EVENT	PARTICIPANTS
-	07/10/2013- 13/10/2013	1		ORIENTATION	FRESHERS 13
2	14/10/2013- 19/01/2014) i		LEARNING PERIOD	
3	20/01/2014 - 02/02/2014	10	Ι	END OF SEMESTER EXAMINATIONS	
4	03/02/2014 - 23/02//2014	3		VACATION	
5	24/02/2014 - 01/06/2014			LEARNING PERIOD	
9	02/06/2014 -15/06/2014	16	П	END OF SEMESTER EXAMINATIONS	
7	16/06/2013 - 22/06/2014	1		VACATION	
∞	23/06/2014 - 24/08/2014	6		INDUSTRIAL PRACTICAL TRAINING	

1.2 Bachelor of Engineering (B.Eng 12) Programme

S/N	DATE	WEEKS	WEEKS SEMESTER	EVENT	PARTICIPANTS
-	14/10/2013- 19/01/2014	71		LEARNING PERIOD	
2	20/01/2014 - 02/02/2014	01	Ι	END OF SEMESTER EXAMINATIONS	
3	03/02/2014 - 23/02//2014	3		VACATION	
4	24/02/2014 - 01/06/2014			LEARNING PERIOD	
5	02/06/2014 -15/06/2014	16	II	END OF SEMESTER EXAMINATIONS	
9	6 16/06/2013 - 22/06/2014	1		VACATION	
7	23/06/2014 - 24/08/2014	6		INDUSTRIAL PRACTICAL TRAINING	

1.3 Bachelor of Engineering (B.Eng 11) Programme

S/N	DATE	WEEKS	WEEKS SEMESTER	EVENT	PARTICIPANTS
	14/10/2013- 19/01/2014	71		LEARNING PERIOD	
2	20/01/2014 - 02/02/2014	01	I	END OF SEMESTER EXAMINATIONS	
С	03/02/2014 - 23/02//2014	3		VACATION	
4	24/02/2014 - 01/06/2014		F	LEARNING PERIOD	
5	02/06/2014 -15/06/2014	16	II	END OF SEMESTER EXAMINATIONS	

2.0 ORDINARY DIPLOMA PROGRAMMES 2013-2014

1 Ordinary Diploma (OD 13)

	DATE	WEEKS	SEMESTER	EVENT	PARTICIPANTS
-	07/10/2013- 13/10/2013	-		ORIENTATION	FRESHERS 12
2	14/10/2013- 19/01/2014	71		LEARNING PERIOD	
3	20/01/2014 - 02/02/2014	10	I	END OF SEMESTER EXAMINATIONS	
4	03/02/2014 - 23/02//2014	3		VACATION	
5	24/02/2014 - 01/06/2014			LEARNING PERIOD	
9	02/06/2014 -15/06/2014	16	П	END OF SEMESTER EXAMINATIONS	
7	16/06/2013 - 22/06/2014	1		VACATION	
8	23/06/2014 - 31/08/2014	10		INDUSTRIAL PRACTICAL TRAINING	

2 Ordinary Diploma (OD 12)

S/N	DATE	WEEKS	WEEKS SEMESTER	EVENT	PARTICIPANTS
1	14/10/2013- 19/01/2014	16		LEARNING PERIOD	
2	20/01/2014 - 02/02/2014	10	ı	END OF SEMESTER EXAMINATIONS	
3	03/02/2014 - 23/02//2014	3		VACATION	
4	24/02/2014 - 01/06/2014			LEARNING PERIOD	
5	02/06/2014 -15/06/2014	16	П	END OF SEMESTER EXAMINATIONS	
9	16/06/2013 - 22/06/2014	1		VACATION	
7	23/06/2014 - 31/08/2014	10		INDUSTRIAL PRACTICAL TRAINING	

3 Ordinary Diploma (OD 11)

LEARNING PERIOD	END OF SEMESTER EXAMINATIONS	VACATION	LEARNING PERIOD	END OF SEMESTER EXAMINATIONS
				=
	I		;	,
91	I 01	3	,	16
14/10/2013- 19/01/2014	20/01/2014 - 02/02/2014	03/02/2014 - 23/02//2014 3	24/02/2014 - 01/06/2014	02/06/2014 -15/06/2014
	LEARNING PERIOD	LEARNING PERIOD END OF SEMESTER EXAMINATIONS	END OF SEMESTER EXAMINATIONS VACATION	END OF SEMESTER EXAMINATIONS VACATION LEARNING PERIOD

ACADEMIC CALENDER FOR MASTER OF ENGINEERING IN MAINTENANCE MANAGEMENT (MEngMM) PROGRAMME 3.0

S/N	DATE	WEEKS	SEMESTER	EVENT	PARTICIPANTS
1	13/01/2014 - 19/01/2014	1		ORIENTATION	Postgraduate -FRESHERS 2013
7	20/01/2014 - 04/05/2014	-		LEARNING PERIOD	PG13
3	05/05/2014 - 18/05/2014	1/	Ι	END OF SEMESTER EXAMINATIONS	PG13
4	19/05/2014 - 08/06//2014	8		VACATION	PG13
5	09/06/2014 - 21/09/2014			LEARNING PERIOD	PG13
9	22/09/2014 - 05/10/2014	17	F	END OF SEMESTER EXAMINATIONS	PG13
7	06/10/2014 - 02/11/2014	4	=	VACATION	PG13
8	03/11/2014 - 10/05/2015	27		DISSERTATION	PG13

This Prospectus can be reviewed or amended from time to time as deemed necessary and approved by the DIT Council

The leading provider of high quality engineering education, research and consultancy

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Further Information Request Form	Request for further Information Please tick against the areas) on which you would like to receive additional	would like to receive additional
Title:MrMrs/ Miss/Ms/ OtherForename	information	
Surname/ Family Name :	My own copy of this prospectus	
Address	Student information	
	Open day	
	Accommodation facilities	
TownCountry	Sports facilities	
Telephone : Fax	Application form	
	Course leaflet (please list the course(s) you are interested in	are interested in
The leading provider of high quality	Admission information	
engineering education, research and consultancy	Other (please specify)	
www.dit.ac.tz	About this prospectus This prospectus is designed to be as	Please rate the prospectus 1 = very good.
	helpful and informative as possible.	2 = good.
About You	help us improve this publication in future.	5 – average. 4 = poor.
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Full Time Study (Evening)	• At the Institute	Ease to use Information on courses
Part Time Study (Evening)	• Conducted the institute	Admissions/Entry information Contact details
l am interested in (Programme):	• Requested via the website	How to Apply Facilities Information
Full Technician Certificate (FTC)	How does this prospectus compare to others you have used	Design & Presentation I would have liked more information
Advanced Diploma in Engineering (ADE)	• Better • Same	on:
Bachelor of Engineering (B.Eng)	Worse No common/only one seen	