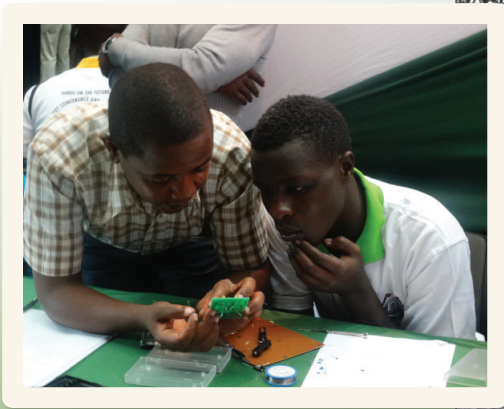




THE TECHNICAL UNIVERSITY OF KENYA



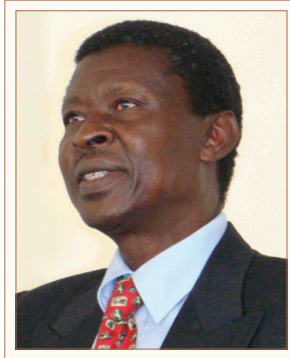
ANNUAL REPORT

2015-2016

Education and training for the real world

The Technical University of Kenya is ISO 9001:2008 Certified

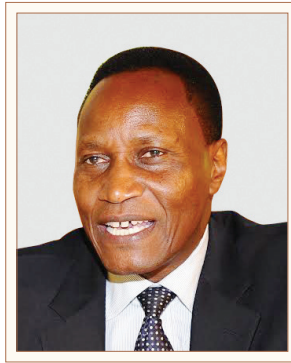
UNIVERSITY COUNCIL



Prof. George S. Eshiwani, MBS, EBS; B.Sc. (East Africa), M.A., Ph.D. (Stanford)
Chairman of Council



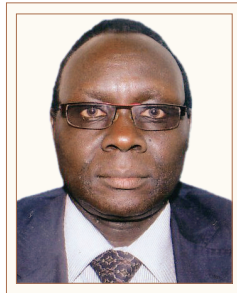
Hon. Henry Rotich
CS – Treasury



Prof. Joseph Kaimenyi
CS – Education



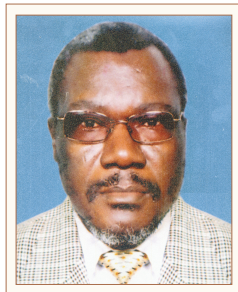
Ms. Isabella Ocholla-Wilson
Member



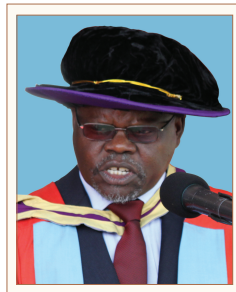
Dr. Philip Parklea
Member



Eng. Mercy Wambugu
Member



Eng. Protas A. Murunga
Member



Prof. Francis W. O. Aduol
Vice-Chancellor/Ex-officio



COUNCIL MEETINGS

JULY, 2015 TO JUNE, 2016

- 8th December, 2015
- 28th December, 2015
- 26th January, 2016
- 25th February, 2016
- 21st April, 2016
- 29th June, 2016

UNIVERSITY EXECUTIVE MANAGEMENT BOARD



Prof. Francis W. O. Aduol

Vice-Chancellor



Prof. Paul M. Shiundu

*Deputy Vice-Chancellor, Academics,
Research and Students*



Prof. Suki K. K. Mwendwa

*Deputy Vice-Chancellor, Technology,
Innovation and Partnerships*



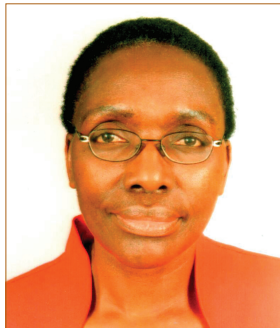
Prof. Joseph Kiplang'at

*Deputy Vice-Chancellor, Administration,
Planning and Infrastructure*



Prof. Michael L. Muia

*Executive Dean, Faculty of Applied
Sciences and Technology*



Prof. Emily A. Akuno

*Executive Dean, Faculty of Social
Sciences and Technology*



Prof. Alex M. Muumbo

*Executive Dean, Faculty of Engineering
Sciences and Technology*

CONTENTS

UNIVERSITY COUNCIL	1
COUNCIL MEETINGS	II
UNIVERSITY EXECUTIVE MANAGEMENT BOARD	III
EXECUTIVE SUMMARY	VI
CHAPTER ONE	1
OFFICE OF THE VICE-CHANCELLOR	1
CHAPTER TWO	5
DIVISION OF ACADEMICS, RESEARCH AND STUDENTS	5
2.1. MANAGEMENT OF ACADEMIC PROGRAMMES	6
2.2 LIBRARY AND LEARNING RESOURCE SERVICES.....	11
2.3 THE CENTRE FOR OPEN AND LIFELONG EDUCATION (COLE).....	12
2.4 THE DIRECTORATE OF RESEARCH & KNOWLEDGE EXCHANGE (ReKE)	13
2.5 SCHOOL OF GRADUATE AND ADVANCED STUDIES (SGAS)	14
2.6 OFFICE OF THE DIRECTOR STUDENTS SUPPORT SERVICES	16
CHAPTER THREE	20
TECHNOLOGY, INNOVATION AND PARTNERSHIPS	20
CHAPTER FOUR	26
ADMINISTRATION, PLANNING AND INFRASTRUCTURE DIVISION	26
4.1 Directorate of Human Resource Services.....	27
4.2 Directorate of Properties and Facilities Management	28
4.3 Directorate of Planning and Quality Management.....	30
4.4 Directorate of Health and Wellness Services	31
4.5 Directorate of University Campus Services	33
4.6 Directorate of Supply Chain Operations	34
CHAPTER FIVE	37
FACULTY OF APPLIED SCIENCES & TECHNOLOGY	37
CHAPTER SIX	51
FACULTY OF ENGINEERING SCIENCES AND TECHNOLOGY	51
6.1 SCHOOL OF ARCHITECTURE AND THE BUILT ENVIRONMENT.....	54
6.2 SCHOOL OF MECHANICAL AND PROCESS ENGINEERING	61



6.3 SCHOOL OF INFRASTRUCTURE AND RESOURCE ENGINEERING	62
6.4 SCHOOL OF ELECTRICAL AND ELECTRONIC ENGINEERING	65
6.5 SCHOOL OF SURVEYING AND GEOSPATIAL SCIENCES.....	67
6.6 CENTRE FOR ENGINEERING INNOVATION AND PRODUCTION (CEIP).....	71
CHAPTER SEVEN	73
FACULTY OF SOCIAL SCIENCES AND TECHNOLOGY	73
SCHOOL OF BUSINESS & MANAGEMENT STUDIES	74
SCHOOL OF HOSPITALITY AND TOURISM STUDIES.....	80
School of Social and Development Studies.....	86
CHAPTER EIGHT.....	90
<i>The Financial Report.....</i>	<i>90</i>
ANNEX 1	92
<i>Admission Statistics of students in Module I and Module II</i>	<i>92</i>
ANNEX 2	96
2015/2016 GRADUATION STATISTICS	96

EXECUTIVE SUMMARY

This 2015/2016 Technical University of Kenya Annual Report highlights the main activities of the academic departments and administrative units during the financial period. It is presented in eight chapters each detailing issues of academics, research, publications, staffing and physical infrastructure.

Chapter One details the activities and events in the Office of the Vice-Chancellor. The Office of the Vice-Chancellor is critical in the running of the university since the Vice-Chancellor is the administrative and academic head of the University. It has several support units which facilitate service delivery.

Chapter Two covers the Division of Academics, Research and Students. This Division, which is headed by a Deputy Vice-Chancellor. The Division of Academics, Research and Students is responsible for providing and overseeing effective and efficient coordination of teaching, learning and research resources.

Chapter Three is about the Division of Technology, Innovation and Partnerships. The Chapter gives an overview of the Division's mandate of promoting the application of technology in teaching and research as well as partnerships with industry, peer institutions and the community.

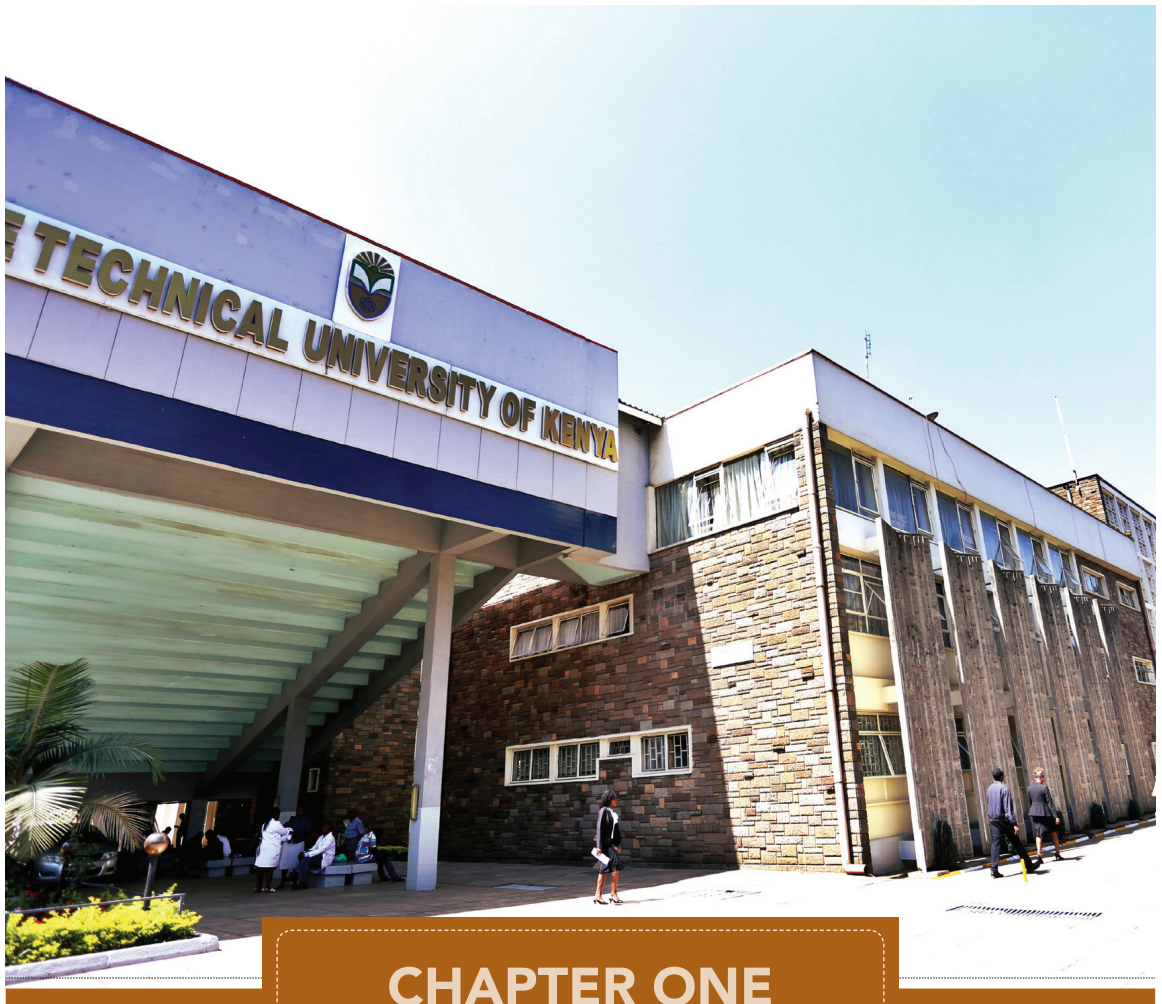
Chapter Four takes a look at the Division of Administration, Planning and Infrastructure. This Division is responsible for three major functions of the university; administration, finance, and infrastructure. Administratively, the Division is organised into six directorates namely: Human Resource Services; Planning and Quality Management; Supply Chain Operations; Properties and Facilities Management; Health and Wellness Services and University Campus Services.

Chapter Five is about the Faculty of Applied Sciences and Technology. The report highlights activities and events in the Faculty's five schools: Biological and Life Sciences; Physical Sciences and Technology; Computing and Information Technologies; Health Sciences and Technology; and Mathematics and Actuarial Sciences.

Chapter Six gives highlights on the Faculty of Engineering Sciences and Technology. The Faculty of Engineering Sciences and Technology covers the disciplines around engineering and the built environment. This chapter presents a synopsis of the status and developmental activities during the financial year in its five Schools namely: Architecture and the Built Environment; Electrical and Electronic Engineering; Infrastructure and Resource Engineering; Mechanical and Process Engineering; and Surveying and Geospatial Sciences.

Chapter Seven is about the Faculty of Social Sciences and Technology. The Chapter details activities and events in the Faculty's five Schools namely: Business and Management Studies; Creative Arts and Technologies; Hospitality and Leisure Studies; Information and Communication Studies; and Human and Social Studies.

Chapter Eight presents the University's Financial Report for 2015/2016.



CHAPTER ONE

OFFICE OF THE VICE-CHANCELLOR

The Office of the Vice-Chancellor is responsible for the academic and administrative leadership of the University. The office therefore offers strategic leadership to the institution in furtherance of its mandate and objectives. The Vice-Chancellor is responsible for the overall direction and organisation of the University and in this regard is responsible to Council and Government for proper governance and management of the institution. While the Council has established strategic and administrative divisions to work under the Vice-Chancellor, the Office of the Vice-Chancellor performs supervisory and control responsibilities over these divisions. The Office of the Vice-Chancellor has several departments which offer support services for the smooth running of the University.

University Secretariat

The University Secretariat is responsible for coordinating and facilitating the work of the organs of governance and aspects of management. The office is comprised of the following sections; *executive support and governance, legal and compliance office, integrity and equity office, statutory reporting, and records management service*. The office is headed by the University Secretary.

Financial and Accounting Services

This department is responsible for the prudent management of financial resources. The functions under this sub-division are organised into three departments: *Financial Systems and Control*, *Accounting and Treasury Services*, and *University Financial Services*. The Sub-division is headed by a Chief Financial Officer (CFO) supported by a Finance Officer, who also functions as the Deputy Chief Financial Officer. As the Deputy Chief Financial Officer, the Finance Officer is responsible for the general supervision of staff and projects within the sub-division.

Communications and Public Affairs

The Department is further responsible for communications and public relations including Government and institutional relations. The corporate communications function covers both the internal and external community including the preparation of university reports. Further, the section is also responsible for the articulation, development and maintenance of a definite institutional culture.

Information and Communication Technology (ICT) Services

The department is concerned with the provision of reliable and secure converged communications infrastructure that facilitate timely transmission of voice, data and video. It ensures that data, voice and video systems flow efficiently, machines run reliably and information stored securely. This entails the installation and maintenance of Local Area Networks (both wired and wireless) to carry data, voice and video signals; administration of the entire computer network to ensure that there is a reliable and secure end-to-end transmission medium (channel); maintenance of the computer network and telephony devices and equipment so the University fraternity can get best out of the acquired devices and ICT equipment; provision of user support administration across various divisions and campuses of the University for continuity of operations thereby increasing productivity in the University.

Internal Audit and Assurance

Internal financial audit is today virtually a standard requirement for any institution. This function is the first point of control within the institution to ensure that financial resources are applied according to the set out guidelines and expectations. Financial Audit involves reviewing the departmental records and reports in order to determine if financial transactions are properly recorded in the University's financial accounting and reporting system.

Administrative Support Sub-Division

The Administrative Support Services Section in the Office of the Vice-Chancellor endeavours to create a favorable environment for the Vice-Chancellor to deliver on his mandate, acting as a pivot for the enhancement of academic and administrative functions at the University.

ACTIVITIES IN THE YEAR 2015-2016

The TU-K Professorial Conference

From 17th – 20th February, 2016, the University held its 2nd University Academic Conference at Sarova Hill Hotel, Nakuru. The key recommendations were that a TU-K Professor needed to:

1. Provide effective leadership for the attainment of university vision and mission for effective service delivery
2. Adopt information and communication technology (ICT) in the university operations for efficient service delivery

3. To refocus on the core mandate of the TU-K mandate and provide leadership for the institutional role in the attainment of Vision 2030
4. Maintain and enhance the character of the TU-K as a poly-technical university while at the same time infusing of the university practice and tradition
5. Enhance the institutional capacity in industrial training by strengthening the TU-K's engagement with the industry
6. Enhance research capacity and reorient research activities towards innovation
7. Regularly review the course programmes and meet the stakeholders' expectations so as to assure the quality of the academic programmes
8. Improve on the supervision of staff and students in the discharge of their assigned duties and learning activities respectively
9. Enhance collaborative framework for academic engagements to enable staff engage more in multidisciplinary research
10. In their role as leaders of the university, professors will provide opportunities for academic mentorship of junior staff for individual and institutional growth
11. Actively engage in external resource mobilisation so as to mitigate the endemic capitation shortfall
12. Devise innovative strategies of utilising the ever limited institutional space
13. Champion the promotion of good corporate governance and be sensitive to ethical considerations by adopting the Mwongozo code of conduct
14. Institutionalise merit and equity in the procurement of resources including human resources
15. Create and promote a strong brand of the TU-K, while at the same time nurturing a unique and progressive university culture
16. Professors to conduct themselves with decorum and espouse the highest standards of discipline so as to inspire confidence and commitment upon staff and students

On its part, the University Management board needed to:

1. Establish strategic engagement with the Konza Technocity for the development and advancement of ICT within the framework of Vision 2030
2. Organise target leadership training so as to improve on the managerial and administrative skills of the professors
3. Develop a framework of implementation of the report of the TU-K 2016 Professorial and Academic Conference
4. Hold a follow up meeting to consider the report of the conference and determine the way forward.

VISITORS TO THE UNIVERSITY DURING THE PERIOD

- Thursday, 20th August, 2015: The VC hosted a meeting of 2 senior staff from the University of Nairobi to consider possible collaboration between TU-K and University of Nairobi in bidding for funding for Eastern and Southern Africa Higher Education Centers of Excellence Project (ACE II.)
- Friday, 30th October, 2015: The VC met and held discussions with Parliamentary Committee on Education, Research and Technology who included Hon. Sabina Chege, Hon. G. Odanga, Hon. M. Njagagua, Hon. Y. Chanzu, Hon. M. Kisoi and Hon. R. Makenga. Also present was the Dr. Kipkurui Langat, CEO, TVET Authority.
- Thursday, 18th June, 2016: Capital Connect Aviation Ltd, Cooperative Bank of Kenya and Jubilee Insurance held successful discussion touching on a joint collaboration on pilot training. They *explored various models of delivery, student selection, widening the collaboration etc.*
- Thursday 28th July, 2016: The Vice-Chancellor held consultations with UASU national officials on a wide range of issues affecting the Union including Union dues from the University. Those present included Muga K'Olale (National Chairman, UASU) Dr Constantine Wasonga (National Secretary General), Dr Jane Kumba (National Treasurer) Ratemo Nyaribo (National Assistant Treasurer), Dr George Osanjo

(National Trustee), Sawenja W Fred (TU-K Branch Chairman) and Jacob Musembi (TU-K Branch Secretary General)

COMPLIANCE WITH PERSONS WITH DISABILITY ACT OF 2003

In compliance with the Technical University of Kenya Statutes, 2013, the Vice-Chancellor each year, appoints members of the Technical University of Kenya Disability Committee.

The Committee has the following tasks; Act as a focal point on disability related issues in TU-K; Guarantee inclusion of PWD in all University operations; Ensure reasonable accommodation for people with disabilities in relation with employee support delivery; Promote continuous awareness creation on disability issues; and Make statutory reports to National Council for Persons with Disabilities (NCPWD).

In the year 2015/2016, members of the committee were as follows;

- | | | |
|-------------------------------|---|---|
| 1. Professor Joseph Kiplangat | - | Chairman |
| 2. Dr. Argwings Kodhek | - | Vice Chairman |
| 3. Dr Daniel Orwenjo | - | Member |
| 4. Ms Lydia Oriko | - | Member |
| 5. Ms Lucy Kangara | - | Member |
| 6. Arch. Reuben Kabbau | - | Member |
| 7. Jane Nasimiyu | - | Member |
| 8. Phillip Oduor | - | Member |
| 9. Robert Borter | - | Secretary (AR, office of the Vice Chancellor) |

Achievements in the year 2015/2016

- Carried out a successful two day sensitisation training for the committee members between 14th and 15th April, 2016
- Procured PWD awareness brochures, which were used in the sensitisation campaign
- Submitted all quarterly reports to the NCPWD
- Carried out an accessibility audit and produced a report which was shared with NCPWD
- For the year 2015/2016, the Committee met all the requirements of the National Council for Persons with Disability, scoring 74%. TU-K was awarded a compliance certificate.

Foreign Collaboration (Campus France)

In April 2016, the Vice-Chancellor nominated Prof. Faustine Ondore, Head of Department of Aeronautical Engineering and Mr. Cosmas Kanyadudi, Executive Officer to represent the University in Paris, France during the Kenya Day.

The event was organized by Campus France to enable selected Kenyan universities exhibit their programmes and hold strategic engagements with leaders of French Universities. The representatives later visited LENAC, ISAE SUPAERO and PMC, where TU-K is pursuing collaborations in Aeronautical and Chemical Engineering training.

Security and Public Safety

This Department is thus responsible for the security, safety, and emergency services within the University. The Head of Department is referred to as the Head of Security, Safety, and Emergency Services (HoSSMS) and is headed by the Chief Security Officer assisted in the first line by a Deputy Chief Security Officer, who is responsible for the administration of security services. The functions are organised within the section into three areas, namely: Administration and Operations, Security Services, and Emergency Services.



CHAPTER TWO

DIVISION OF ACADEMICS, RESEARCH AND STUDENTS

This Division provides and oversees effective and efficient coordination of teaching, learning and research resources to continually enhance the services in the academic division. The Division boasts of a supportive and dedicated strong team.

The Division is committed to providing leadership, oversight and technical assistance to enhance the management of teaching and learning, research and student support services institution in the areas of: *Management of Academic Programmes; Library and Learning Resource Services; School of Graduate and Advanced Studies; Research and Knowledge Exchange; Centre for Open and Lifelong Education; and Student Support Services.*

2.1. MANAGEMENT OF ACADEMIC PROGRAMMES

The Management of Academic programmes is a key area of strategic focus of any university and is responsible for the management of resources for teaching and learning programmes of the institution. The management of academic programmes comprises: Academic Secretariat and Coordination, Students Recruitment and Admission and Examinations and Certification. Each of the sub-sections is headed by a Senior Assistant Registrar and the activities in the three subsections are coordinated by the Registrar (Academic).

The Academic Management office has continued to improve on business process efficiency and effectiveness over the years with the aim of increasing customer satisfaction.

2.1.1 *The major achievements during the period*

- 1.) A number of activities were either automated or semi-automated. This runs from application for admission, selection of qualified applicants, delivery of students' admission letters, allocation of teaching space, invoicing students for fees payable, to compilation of examination results on semester basis.
- 2.) Two of our greatest innovations in the recent past are the development of examinations module which simulates the existing processes of reporting to Senate and in-house developed time-tabling software that incorporates FTSE computation.
 - a. The time-tabling software eases the process of sharing teaching space economically with zero clashes of classes. On the other hand, FTSE inbuilt module enables the university to determine the human resources requirement suitable for the number of enrolled students taking into account complexity of the programmes. When the entire programme is wholly implemented, the benefits that accrue are:
 - i. Rational way of distributing teaching load;
 - ii. A tool for determining extra teaching and compensation of staff participating in the teaching as either Sessional or full time;
 - iii. This formula considers that of the total time of working; 60% of the time shall be allocated to teaching, 30% for research and 10% for administration. This then translates to 1080 hours for teaching, 540 hours for research and 180 hours for administration. This allows the teaching staff time for research work.
 - b. The examination reporting module sets the responsibility of entering the marks of continuous assessment and ordinary examinations on the tutor (lecturer). This enables the lecturers to enter marks as soon as the marking is completed. Once the lecturer completes entry, grading is automatically done and the lecturer submits the marks electronically to the Chairperson of Department. This ensures that at the click of a button, the Chairperson is able to generate all required reports. The students are the major beneficiaries as they receive their results slips anywhere, even through their phones.
 - c. Beyond these modules, several other modules have been running for some time now. One simple innovation of delivering personalized admission letters has earned the Technical University of Kenya praises at national fora.

2.1.2 *Academic Secretariat and Coordination:*

The Academic Secretariat and Coordination office works towards high-level objectives that provide a clear direction for day to day operations, actions and initiatives which are fundamental to the university's future and how its vision is achieved. By so doing the office has achieved a good image and reputation by ensuring effective secretariat services.

The Academic Division has developed a time-tabling software. This brought a big leap in the preparation of teaching timetable at the University. The University has barely 100 teaching spaces against over 700 learning groups. Fitting these groups in the teaching spaces equitably with no clash could not be achieved manually.

The time-tabling software is an online application that enables the Timetable Officers at Schools to upload units for all programmes to be taught in the next semester. This data is then plotted centrally by the Database Officer and made accessible to the Timetabling Officers. In the third stage, the Timetabling Officers assign

lecturers to classes. It is expected that this third stage will eventually be automated to remove intervention of the Timetabling Officers.

The timetable application software has been used for the last three years and it has served the University well. Since it is web based, students and lecturers can download their timetables online. The software is capable of accepting requests online from the school timetablers. It can also give conflict reports which have reduced clashes in timetabling.

The office was also involved in ISO activities in the University including internal quality audits and surveillance audits by KEBS. The office has a trail of controlling records and management of the records by availing all the necessary documents.

2.1.3 Admission and Student Recruitment Section:

The process:

- Upon receiving the indents from the schools, the SAR (Student Recruitment and Admission) collates and compiles into a single document.
- The document is then submitted to graphic design centre for layout design.
- The document is returned to schools for proofreading.
- The final document is taken to the Vice-Chancellor through the Deputy Vice-Chancellor – ARS for approval.
- The document is placed on print media and the University website for the public.
- Applicants access the document on the University website, student portal.
- The applications portal is opened for the Chairmen of Departments, Directors of schools and the Faculty Deans to do shortlisting of the qualified applicants.
- The compiled lists are tabled to the Deans' committee for discussion and consideration for admission.
- The approved lists are forwarded to the Academic Registrar for issuance of calling letters and joining instructions to the successful applicants.
- The successful applicants download the calling letters and the joining instructions, follow the instructions therein and reports to the Admission Office for registration.
- Upon completion of registration process the students are issued with student identity cards.

The Major achievements

- 1.) For the first time, all applications and selection processes were paperless. Applicants submitted their applications together with supporting documents online. The databases were made accessible to programme managers at all levels for processing of online applications.
- 2.) The admission process has not only saved the University scarce resources but also made revenue through close monitoring of collection of application fees. Indeed, the revenue exceeded the cost of advertisement.
- 3.) The newly admitted students are issued with student identification (ID) cards within 48 hours upon completion of the registration process which has also been made easy on a user friendly online interface.
- 4.) Effective planning for registration practically eliminated the queues which used to build up on the reporting day.

2.1.4 Examination and Certification Section:

The Process

- Senate approves Schedule of Semester dates, including dates for end-semester, supplementary and special examinations latest four (4) weeks to commencement of succeeding academic year.
- The SAR –E&C provides CODs with guidelines on the examination process for the semester by the second (2nd) week of the semester.

- The COD forwards the externally moderated examination papers to the SAR-E & C, together with the examination timetable by the ninth (9th) week of the semester.
- The SAR-E&C invites the IE to proofread the examination papers by 10th week of the semester.
- The SAR-E&C does reprographic work, packs and seals final examination papers at least two (2) weeks before the commencement of the examination period.
- The COD or his/her appointee collects the examination materials from the office of the SAR, E & C at least half an hour before the start of the examination, provided that no examination materials are released more than one hour before the examination.
- The Executive Dean certifies and releases Provisional Examination results by the ninth (9th) week after end of the second (2nd) semester examinations.
- At the end of the programme, the SAR-E & C prepares and issues consolidated academic transcripts and academic certificates to candidates who graduated.

The Major achievements

- 1.) It was possible to print and issue certificates for the 2015 graduation cohort within the prescribed 3 months period after graduation as prescribed in the TU-K Service Charter.
- 2.) Candidates are now able to request for collection of certificates using forms available on the students' portal. This has enhanced efficiency in the issuance process and increased fee collection, since it is only students with zero fee balances that can download these forms.
- 3.) The University Management Board is considering the acquisition of an Examination Management System whose key modules are; secured question paper generation and delivery system, digital evaluation system, result processing and publishing system, and certificate authentication system.

2.1.5 Number of Students Graduated by Programme

a. Number of students graduating by programme (2013)

Bachelor of Engineering	Bachelor of Philosophy	Bachelor of Philosophy in Technology	Bachelor of Philosophy Technology	Higher Diploma	Advanced Diploma	Diploma	Diploma in Technology	Certificate	Total
55	49	107	156	4	20	466	867	722	2446

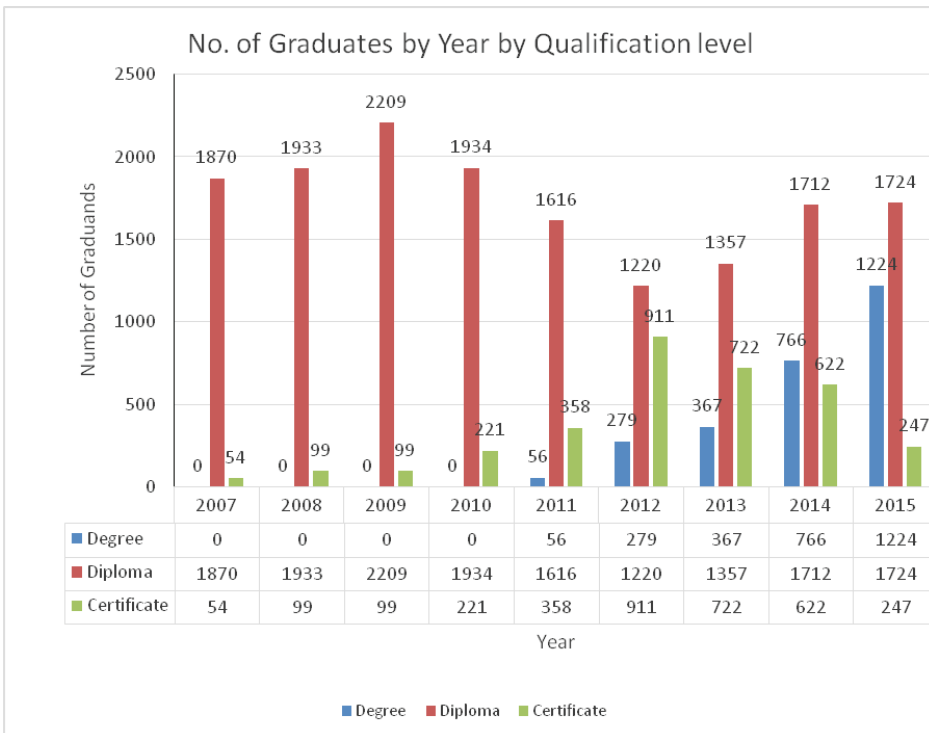
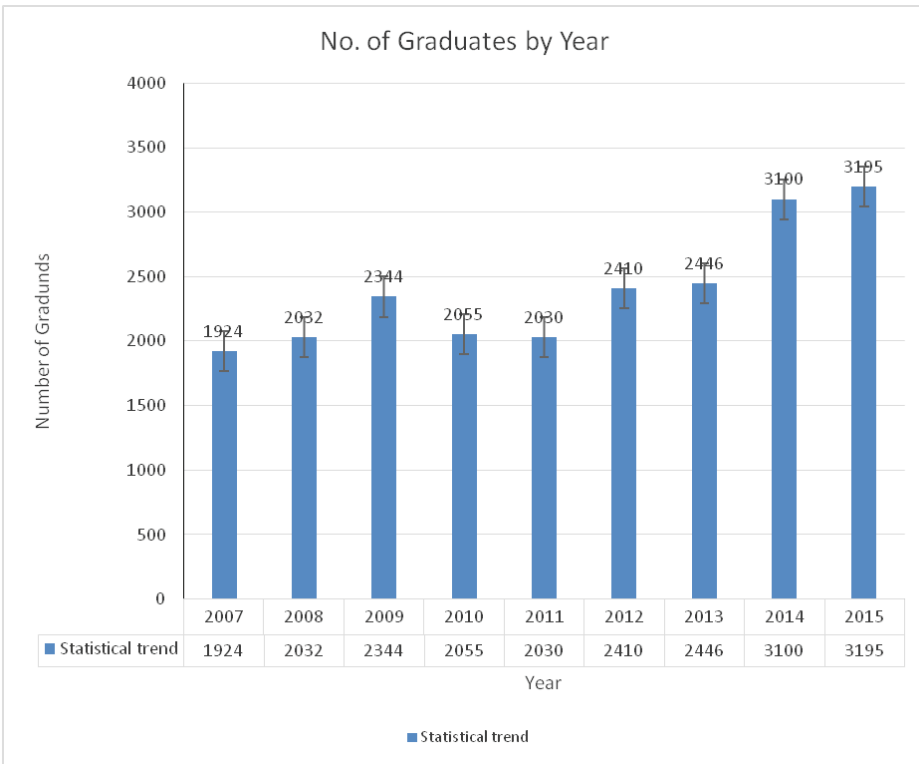
b. Number of students graduating by programme (2014)

Advanced Diploma	Bachelor of Architectural Studies	Bachelor of Arts	Bachelor of Commerce	Bachelor of Engineering	Bachelor of Philosophy	Bachelor of Philosophy in Technology	Bachelor of Quantity Surveying	Total
10	18	11	83	178	54	119	36	
Bachelor of Science	Bachelor of Technology	Certificate	Certificate in Technology	Construction Technician	Diploma	Diploma in Technology	Higher Diploma	Total
67	202	583	8	26	751	938	20	3100

c. Number of students graduating by programme (2015)

Bachelor of Architectural Studies	Bachelor of Arts	Bachelor of Commerce	Bachelor of Commerce	Bachelor of Engineering	Bachelor of Philosophy in Technology	Bachelor of Applied Science Geoinformatics	Bachelor of Economics	Bachelor of Real Estate	B. Built Environ. Construction Mgrt.
12	46	183	200	66	5	29	20	81	
Bachelor of Science	Bachelor of Technology	Certificate	Certificate in Technology	Diploma	Diploma in Technology	Total			
98	484	219	28	623	1101	3195			

2.1.6 Statistical Trend



2.2 LIBRARY AND LEARNING RESOURCE SERVICES

2.2.1 Introduction

The Library is an important resource for the development of any University which should be well organized and structured to achieve its mission and vision. To achieve the mission and vision of TU-K, the Library is organized into six major sections which include;

- 1) Technical Services
- 2) Circulation Services
- 3) Stack Management services
- 4) Information Desk Services
- 5) Special Collections and Periodicals Services
- 6) Security Services

The Major achievements during the period include:

1.) Institutional Repository Upload:

The Library has been able to upload a lot of content to the Institutional Repository. The repository content is as follows;

- Books & Books chapter [20]
- Conference/ Workshop/ Seminar/ Proceedings [19]
- Institutional Memory [26]
- Journal Articles [296]
- Past Examination Papers [187]
- Policies/ Reports/ Newsletters [2]
- Projects & Business plan [282]
- Theses & Dissertations [22]

2.) Staff Training and Workshops and Conferences:

A number of staff have attended workshops and seminars mostly organized by the Kenya Libraries and Information Sciences Consortium (KLISC). Two staff from Technical section attended workshops during the year as follows:

S/No	Name	Date/Month	Training attended and Where
	Christine Nehondo	15/04/2016	<ul style="list-style-type: none"> • Training on Open Access at University of Nairobi
	Sarah Kibugi	26 th – 27 th May 2016	<ul style="list-style-type: none"> • KLISC pre-AGM conference in Kisumu • Strategies of Personal Growth & Development workshop, US Embassy
	Sarah Kibugi	21 st April, 2016	<ul style="list-style-type: none"> • Inter-Disciplinary conference on Ethics in Higher Education, CUEA

3.) Computers:

The library acquired 10 computers which are being used for E-resources and OPAC.

4.) Establishment of an E-resources corner:

This corner has allowed users to access the e-resources available in the library.

5.) Establishment of an OPAC Area:

The users can now access the library's Online Public Access Catalogue.

6.) Training in Information Literacy to Library users:

The library set aside Wednesdays and Saturdays for individual and group training on use of the e-resources.

2.3 THE CENTRE FOR OPEN AND LIFELONG EDUCATION (COLE)

The Directorate is in charge of three sections namely: General Undergraduate Education, Professional and Continuing Education and Open Campus.

2.3.1 General Undergraduate Education

The Section coordinates University academic programmes which are designated as common to both undergraduate and diploma students. These are four: Communication Skills; Critical and Creative Thinking; Health Education; and Society and Culture. Each programme is under a coordinator who organizes the teaching processes.

COLE offers facilitation services through the assistance of the Academic Programmes section. These are then distributed to the Schools for consequent allocation to Departments; liaising with the Senior Assistant Registrar, Examinations, on semester examinations timetabling and related publicity; making available the Main Hall and Lecture Theatre for pedagogy; ensuring adequacy of furniture for both staff and students; providing teaching aids such as a public address system, projector and white board; and by ascertaining high standards of cleanliness and lighting.

The Major achievements during the period include:

- 1) Effective teaching activities which led to syllabus completion, normal conduct of examinations and release of results;
- 2) Required attendance of classes by students and lecturers;
- 3) Reduction of unwarranted interruption of academic endeavours;
- 4) Increased enrolment (both Module I and II) in General Undergraduate Education studies for both degree and diploma sectors. The situation for the past three years was indicative of the positive trend in line with the TU-K's expansion of academic activities; and
- 5) Robust activities of the TU-K Common Course Evaluation Committee which retained its membership as follows:
 1. Prof. Peter Matu - Chairperson
 2. Dr. Hesbon Nyagowa - Member
 3. Dr. Patrick Dikirr - Member
 4. Dr. Mary Mugambi - Member
 5. Mr. Cleophas Ondieki - Member
 6. Ms. Agnes Githinji - Secretariat

The Committee members held several meetings to discuss the development of the questionnaire to be used to gather information about the four Common Undergraduate Courses.

2.3.2 Professional and Continuing Education Programmes

The efforts made during the 2014/2015 academic year to establish professional and continuing education programmes continued into the 2015/2016 period. The programmes conducted were:

Faculty of Applied Science and Technology:

Hosts various departments namely; Chemical Science and Technology, Biochemistry and Biotechnology, Applied Technical Biology, Ecology and Conservation Biology and Food Science and Technology. The Faculty advertised a total of 29 courses:

Faculty of Social Sciences and Technology:

A total of 71 courses were advertised from School of Business Management Studies, School of Hospitality and Tourism Studies and School of Social and Development Studies.

The School of Business and Management Studies through the Department of Management Science and Technology offered a Certified Computer Application (CCA) Training in May 2016. The Department of Management Science and Technology provided resource persons, training materials, equipment and the Technical University of Kenya certificates for those who successfully completed the programme. Ten participants from the Kenya Accountants and Secretaries National Examination Board (KASNEB) received a certified Computer Application Course after the two week course.

2.3.3 Open and Lifelong Education

The Centre for Open and Lifelong Education additionally remained focused in promoting Open and Lifelong Education with two main objectives:

- To provide an opportunity for access to tertiary education to those who qualified for university education but could not enrol for the conventional residential and face-to-face delivery mode.
- To provide professional development and lifelong learning to various groups of people at their convenient time, pace and place.

The major achievements during the period were:

The Open and Distance and eLearning Committee, ODeL, which was constituted in September 2015 was active. Its membership was retained as follows:

1. Prof. Omondi Oketch	-	Chairperson
2. Dr. Hesbon Nyagowa	-	Member
3. Dr. Patrick Dikirr	-	Member
4. Dr. Austin Aluoch	-	Member
5. Dr. Patrick Karimi	-	Member
6. Mr. Derrick Osiro	-	Member
7. Mr. Cleophas Ondieki	-	Member
8. Ms. Jannet Ondulo	-	Secretariat

2.3.4 Human Resources

One of the major achievements in this area was the engagement of two members of staff namely; Mr. Dibe Omwega as Junior Administrative Assistant and Mr. Peter Onsongo as Office Messenger.

In conclusion, the Centre for Open and Lifelong Education experienced tremendous activities and a successful implementation of its mandate.

2.4 THE DIRECTORATE OF RESEARCH & KNOWLEDGE EXCHANGE (ReKE)

During the 2015/2016 academic year, the Directorate of Research & Knowledge Exchange focused on two key areas.

- a) Early Career Academic Staff Capacity Building.
- b) Knowledge Exchange:
 - 3rd Technical University of Kenya International Conference & External Speakers Seminars.
 - Identification and Dissemination of Research Grant and Collaboration opportunities.
 - Development of International Research Collaboration opportunities.

The major achievements during the period include:

- 1) Launch of the Strategic Training for African Researchers. This opportunity was provided by the Research Directorate in collaboration with the Association of Commonwealth Universities(ACU). Twenty five

- (25) early career researchers were recruited in September, 2015. The program ended in June, 2016.
- 2) The Directorate successfully held the 3rd Technical University of Kenya International Conference from 23rd – 25th February, 2016. Over 90 abstracts were submitted by delegates from the region and globally. The Technical University of Kenya provided support for 38 (thirty eight) academic staff members who presented their research findings.
 - 3) The Directorate hosted Prof. Amadi Echendu of the University of Pretoria who gave a seminar to staff.
 - 4) The Directorate has continued to actively provide research support for Technical University of Kenya staff. As a result, over 200 (two hundred) funding opportunities, both recurrent and upcoming are now available for easy staff access on the Technical University of Kenya research webpage. These opportunities are for large senior faculty grants, researcher development support and conference and independent research programme establishment.
 - 5) The Directorate in collaboration with Research Africa Professional conducted 4 (four) training activities. These were attended by 59 (fifty nine) academic staff who have shown increased competence in identifying appropriate funding opportunities and creation of automated alerts.
 - 6) A Memorandum of Understanding (MoU) was finalized between the Technical University of Kenya and The University of Greenwich (Natural Resources Institute). Initial programs developed by the TU-K's Research Directorate for execution under this MoU include capacity building and skills exchange in two key strategic areas: Biopesticide and Nutrition research and early career research academics capacity building. These aspects of the MoU will be spearheaded by the Research Directorate.

A number of members of staff have taken advantage of this resource and obtained research grants for various activities including PhD research projects. These include:

- 1) Ms. Linda Allan (PhD Student), Department of Biomedical Sciences and Technology. Awarded a National Commission for Science & Technology grant.
- 2) Ms. Phanice Khaseli Otieno, Department of Applied and Technical Biology. Awarded a National Commission for Science & Technology grant.
- 3) Mr. James Mogwambo, Department of Biotechnology and Biochemistry. Awarded a National Commission for Science & Technology grant.
- 4) Dr. Joyce Omwoha (Lecturer), Department of Journalism and Media Studies. Awarded African Peacekeeping Network (APN) grant.
- 5) Dr. George Okwadha (Lecturer), Department of Civil & Construction Engineering. Awarded an Association of Commonwealth Universities' Titular Fellowship for development of Research Collaboration with Swansea University, United Kingdom.

2.5 SCHOOL OF GRADUATE AND ADVANCED STUDIES (SGAS)

2.5.1 Policy documents:

The following policy documents are still awaiting approval by the University Management Board:

- i.) Regulations for Postgraduate Studies
- ii.) The organisation structure of SGAS (including duties of staff and their responsibilities).
- iii.) The Postgraduate Statutes
- iv.) Postgraduate Faculty and Committee Functions
- v.) Postgraduate Honoraria for External Examiners

Due to the increasing number of enquiries regarding the postgraduate admission procedures, various forms have been uploaded onto the SGAS website, namely:

- i.) Regulations for Postgraduate Studies
- ii.) Postgraduate Application Forms
- iii.) Postgraduate Fees structures

- iv.) Research Proposal format
- v.) Research concept format
- vi.) Acceptance forms
- vii.) Reference forms

The major achievements during the period include:

1.) Admission into Doctor of Philosophy Programme:

The School continued to admit students into Doctor of Philosophy (PhD) programmes by research and thesis in various departments. Currently, the procedure for admission is by filling in an Application Form which is submitted together with supporting documents such as Curriculum Vitae, Copy of Identification Card, Certified copies of degree certificates and transcripts, research concept note/research proposal signed by the supervisor(s) and payment slip of Sh.2,000 payment made to TU-K account for registration.

The application is passed through the respective Chair of Department, Director of School and Executive Dean of Faculty, to the Director, School of Graduate Studies. All the applications are processed and tabled before the Deans Committee for consideration and possible approval. A total of 37 PhD students were admitted in various departments between July 2015 and June 2016. This includes about 20 students admitted into PhD in International Relations and Security programme which is run under an MOU with other institutions.

In November 2015, ten (10) PhD students applied for NACOSTI funding for research grants. Four (4) were successful (i.e. One from the Department of Chemical Science and Technology, one from the Department of Applied and Technical Biology, one from the Department of Biochemistry and Biotechnology and one from the Department of Biomedical Science Laboratory).

SGAS held ten (10) research proposal defense seminars for 10 students between July 2015 and June 2016.

2.) Admission into Masters Programme:

A number of students were admitted into various Masters Programmes in the following departments during the 2015/2017 Academic year:

- 1) Department of Mechanical and Mechatronic Engineering
- 2) Department of Electrical and Electronic Engineering
- 3) Department Geosciences and the Environment
- 4) Department of Language and Communication Studies
- 5) Department of Information and Knowledge Management
- 6) Department of Governance and Public Policy
- 7) Department of Business and Administration Management
- 8) Department Applied and Technical Biology
- 9) Department of Biochemistry and Biotechnology
- 10) Department of Statistics and Actuarial Science
- 11) Department of Music and Performing Arts

3.) Postgraduate Curriculum Development:

A number of curricula for Master's Programmes were submitted to the Deans Committee for consideration and recommendations before approval by Senate. All the programmes were prepared in both the TU-K and Commission for University Education (CUE) formats.

4.) Postgraduate Scholarships:

During the period between July 2015 and June 2016, two (2) students in the Master of Technology in Mechanical Engineering Technology and one (1) student in the MBA programme received full scholarships from DAAD. These scholarships were granted on a competitive basis. They cover tuition and statutory fees,

monthly upkeep/stipend and research grants.

5.) Information and Support on Academic and Research Activities:

The School continued to provide support by circulating documents on research activities, internal and external funding opportunities and conferences/workshops to all members of staff, often through the Directors of Schools. SGAS also continued to provide guidance on curriculum development.

6.) ISO Internal Audit:

The School was assessed by Internal Auditors in June 2016 and SGAS is now compliant especially on filing and customer care procedures.

7.) SGAS Website:

This is under development and already some information has been uploaded.

2.5.2 List of Postgraduate students: 2015-2016 Academic year:

1.) Department of Mechanical and Mechatronic Engineering: Master of Technology in Mechanical Engineering Technology Programme

Second year

S/No.	Student Name	Admission Number	Sponsor
1	Yucabed Moraa Gwaya	EMMU/06486P/2015	DAAD
2	Moses Gichana Nyang'au	EMMU/06487P/2015	DAAD
3	Nicholas Mugambi Gikunda	EMMU/06488P/2015	DAAD
4	Julius Nambuki	EMMU/06489P/2015	DAAD
5	Mosom Kerubo Everlyne	EMMU/06490P/2015	DAAD
6	Ndonye George Kimuli	EMMU/06480P/2015	Self
7	Ruga John Kiende	EMMU/06482P/2015	Self
8	Muri Mwangi Alex	EMMU/06483P/2015	Self
9	Thuku Patrick Waweru	EMMU/06484P/2015	Self
10	Kagia Joseph Njuguna	EMMU/06485P/2015	Self

2.) Department of Music and Performing Arts: i.) Master of Music in Music Education: Second year

S/ No.	Student Name	Admission Number	Sponsor
1	Ndung'u Anne Mercy	ACM/06494P/2015	Self
2	Sambu Alice Chepkirui	ACM/06495P/2015	Self
3	Bulinda Dorothy Muchere	ACM/06496P/2015	Self

ii.) Master of Music in African Music: Second Year

S/No.	Student Name	Admission Number	Sponsor
1	Wahome Lydia Wamuyu	ACMU/06491P/2015	Self
2	Malaki Grace Lynne Akhamuru	ACMU/06492P/2015	Self
3	Cheruto Linda	ACMU/06497P/2015	Self
4	Onyango Oliver Omondi	ACMU/06497P/2015	Self

2.6 OFFICE OF THE DIRECTOR STUDENTS SUPPORT SERVICES

The Directorate of Students Support Services offers support in counselling, accommodation & catering, sports & co-curricular activities, chaplaincy and disbursement of limited bursaries to students. Other obligations include coordination of students' union matters and other services that enhance students' welfare and personal growth.

2.6.1 Catering and Accommodation

The University has three kitchens and two hostels providing catering and accommodation services to students. One kitchen is located in the Main Campus while two are situated in the Men's and Women's hostels respectively. The fourth kitchen situated at the Senior Staff Common Room caters for an average of 200 members of staff daily.

Catering: The catering facilities operate on a Pay As You Eat system, based on a cyclic à la carte menu. The students' meals are highly subsidized. On average, the main canteen serves about 450 breakfasts and an equal number of lunches. The location of the Technical University of Kenya enables students to access other food service providers in the neighborhood.

Accommodation: The University offers limited accommodation to 153 female and 272 male students at the Women's and Men's hostels respectively. Currently, the room occupancy is at 100%. The University also provides information on suitable, convenient and affordable private hostels.

Alternative Hostels: Due to the challenge of housing all students enrolled in the University, the department was instrumental in sourcing for alternative accommodation for the students. The process targeted the September intake and over 500 students are residing in hostels around Nairobi, namely: Ngara, Pangani and Upper Hill at acceptable rates.

2.6.2 Spiritual and General Wellbeing

Chaplaincy Services

The Catholic Chaplain, Protestant Chaplain and Muslim Imam provide spiritual guidance. These services are open to the entire University community and include guidance and counselling, worship services and coordination of other spiritual activities.

The Young Catholics Association (YCS), the Christian Union (CU), Christian Outreach Programme, the Muslim Students Association and the Seventh Day Adventists (SDA) participate in various charitable activities both within and outside the University. These activities include symposia, religious retreats at local and regional holy sites, visiting children's homes and supporting persons with various physical challenges including the poor. These activities were supported by the student union funds.

Counselling Services

Confidential counselling is available to students who are distressed or confused about any aspect of life. Counsellors are accessible on demand and flexible appointments are agreed upon before the counselling process begins.

Bereavement of Students

In 2015/2016, eight (8) student deaths were reported to the DSSS. The University facilitated transport of students and staff attending those burials in various counties.

2.6.3 Students Leadership Affairs

Student Association of Technical University of Kenya (SATUK) is a students' body given the legal mandate to represent student matters under the Students Constitution. This is also in line with the University Statutes and the University Act of 2012.

Supervision of SATUK Elections and Power Transition

The SATUK constitution guides the electoral processes of the students' body. On expiry of the 2014/2015 office bearers' term, the Electoral Board and Director's office successfully facilitated free and fair elections on Thursday 8th October, 2015. There were no objections or petitions received within the stipulated seventy-two (72) hours after the Electoral Board announced the results. The swearing-in ceremony of the incoming officials was thus conducted on Friday 9th October, 2015.

Participation of Female Students' in Student Leadership

Out of the one hundred and fifty eight (158) contestants for the 2015/2016 SATUK elections, forty-five (45) were female candidates. Twenty (20) of the forty-five (45) elected union leaders were female students, four of whom were members of the SATUK Council. These were the Deputy Chairperson, Finance, Gender and Special Needs Secretaries.

Strengthening Leadership of Students' Organisations

In order to gain more insights into leadership, integrity and performance, the Director's office organised an orientation workshop for the student leaders from 15th to 17th October, 2015 at the Cooperative University College in Karen. The Congress debated on and approved a budget of KSh.12 million to fund union activities.

2.6.4 Bursaries and Scholarships

The students union allocated Sh. 1,000,000 from the SATUK kitty to fund needy students. The University matched it at the ratio of 1:2 and gave KSh2,000,000. The monies were disbursed as follows: Sh. 1,140,000 during the September-December semester, Sh.1,125,000 during the January-April semester and Sh. 1,249,000 during the May-August semester.

The Rattansi Education Trust Fund also awarded bursaries worth Sh. 715,700 with Sh. 315,700 going to ten (10) beneficiaries directly and Sh. 400,000 disbursed to forty-eight (48) needy students in TU-K. The Higher Education Loans Board (HELB), Constituency Development Funds (CDF), and TVET funds for Diploma students comprise other sources of funding to students'.

2.6.5 Clubs, Associations and Societies

Students are encouraged to take part in co-curricular and recreational activities according to their interests, needs and abilities. The Technical University of Kenya has clubs and associations that are academic, professional and faith-based in nature. The clubs and associations empower students through academic and other fora. In 2015/2016, the associations were required to register online for recognition by the university.

The major achievements during the period include:

- 1) The YCS, CU, Christian Outreach Programme, Muslim Students and the SDA groups participated in various charitable activities both within and outside the university.
- 2) SATUK funded religious groups' activities with Sh200,000.
- 3) Over 400 students were settled in private hostels in Ngara, Pangani and Upper Hill at acceptable rates as recommended by the Assistant Director, Students Accommodation and Catering.
- 4) The student's elections successfully took place on Thursday 8th October, 2015 followed by the swearing-in of the forty two officials on Friday 9th October, 2015.
- 5) There were no objections or petitions received within the stipulated seventy-two (72) hours after the Electoral Board announced the results.
- 6) Twenty (20) of the forty-five (45) elected SATUK 2015/2016 union leaders were female students, four of whom served in the previous SATUK Council.
- 7) Student leaders attended a three day orientation workshop at the Cooperative University where congress approved a budget of Sh.12 million for union activities.
- 8) The Students Union disbursed bursaries totaling to Sh. 3,514,000 to needy students between September 2015 and August 2016.
- 9) The Rattansi Education Trust Fund awarded bursaries worth Sh715,700 to fifty-eight (58) beneficiaries.

2.6.6 Sports and Co-Curricular Activities

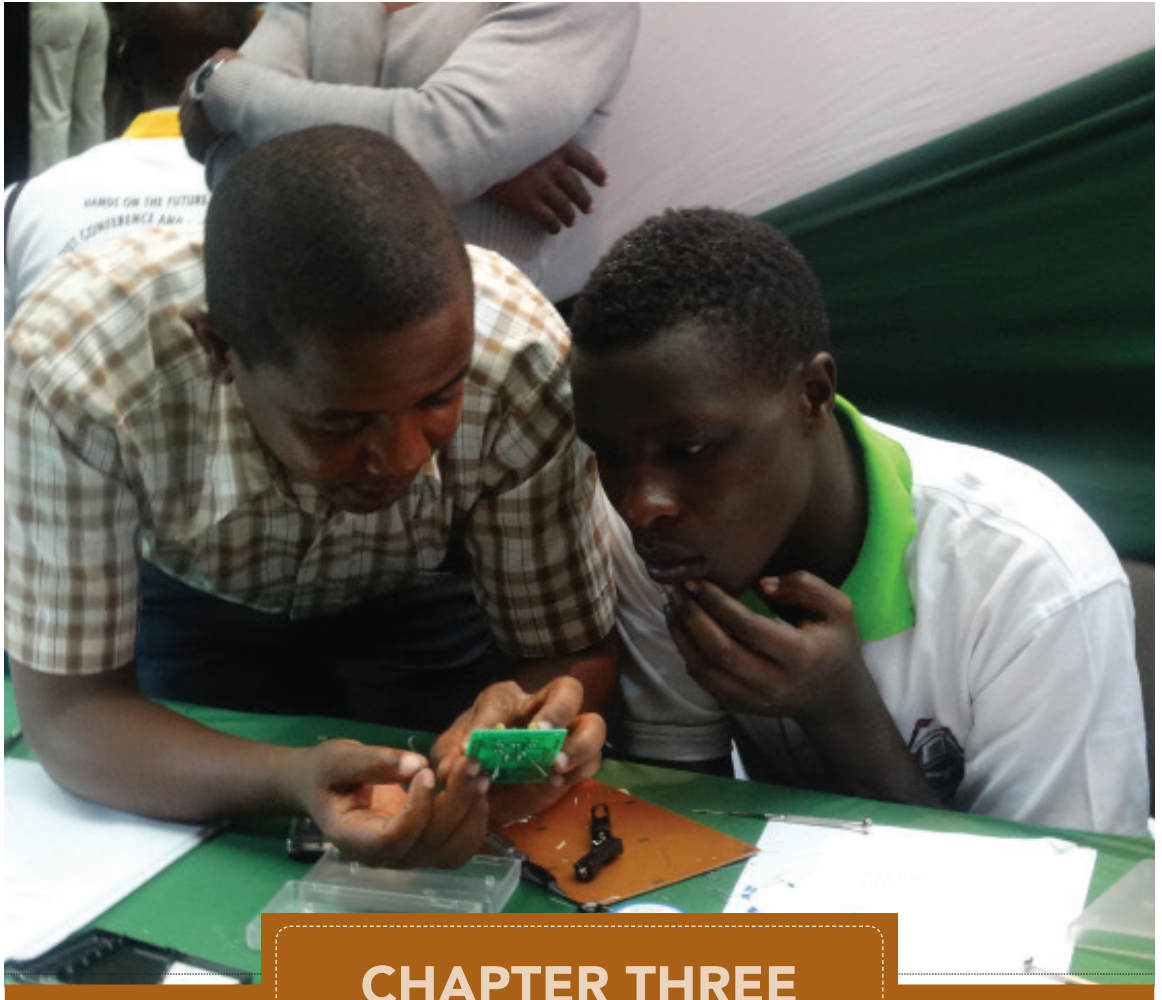
Below are some of the outstanding recent achievements in Sports and Co-curricular activities by students and teams over the 2015/2016 period.

International Arena:

- 1) Our handball Men's team won last year's 2014-2015, Kenya Handball Federation Premier league and hence qualified to represent Kenya in the Africa Handball Championships in Maputo, Mozambique.
- 2) The same handball became the current National Universities champions and also the East Africa Universities Sports Champions after winning in Kampala, Uganda.
- 3) In Rugby, our player/student, Mr. Robert Aringo, was called up into the National Rugby 7S team and was in the team that had won the IRB World Rugby 7S in Singapore early this year. We were invited to the State House for trophy presentations.
- 4) Our chess team is the current Universities' National champions. One of our students, Miss Joyce Nyaruai, who is in the Chess Kenya National team represented the country to the International Chess Olympiad championships held from 1st to 15th October, 2016 in Baku, Arzerbaijan. She emerged the best Kenyan lady performer and is now ranked the second best female Chess player in the country. She was later awarded the with higher level grading of "Human candidate master ranking".
- 5) In football (soccer) – our men's team won the Nairobi Extreme SportPesa League champions and were awarded with a big trophy, Sh500,000 and a galla night a the Carnivore Hotel by the organisers.
- 7) Mr. Michael Olunga, our own student and Harambee Stars team player, moved to Jourgaden, a football club in Sweden.

National Arena:

- 1) Mr. Erick Ouma, our student is ta dependable fullback of Gor Mahia FC and Harambee Stars. Mr. Ouma is studying Bachelor of Arts in International Relations.
- 2) Many other students are playing for various clubs in the Kenya Premier League.
- 3) Our Taekwondo team had the best female National team player, Miss Zainab Isaac who plays in the Fly Weight category. The women team is currently the Kenya Universities' National champions 2015-2016.
- 4) In the Inter-Universities Athletics, the 5000m champion was our own Mr. Gerald Wanjagi who qualified to represent Kenya in the World Universities International Federation championships in Rome in Italy in 2015 and 2016.
- 5) The Inter-Universities Games champion in swimming was Miss Michelle Bisonga, a student from the Department of Music and Performing Arts. She qualified to represent the Kenya National swimming team in South Korea in 2015.



CHAPTER THREE

TECHNOLOGY, INNOVATION AND PARTNERSHIPS

INTRODUCTION

The Division's mandate includes-

- i. Promoting the application of technology in all aspects of university operations
- ii. Development of strategic partnerships with industry, higher education institutions (HEIs), research institutions, as well as the community
- iii. Conducting outreach and extension to schools and communities
- iv. Coordination of industry based learning for students and staff
- v. Coordination of implementation of joint activities as per signed collaboration agreements

The Technology, Innovation and Partnership Division co-ordinates its activities through its Directorates, as shown below:

1. Global and Community Engagement
2. University Industry Partnerships
3. Technical Vocational Education and Training (TVET)
4. Institutional Advancement and Development

The following activities were carried out by the Division in the 2015/2016 Financial Period.

S/N		Activities carried out
1.	<i>Strategic Linkages and Collaborations</i>	<p><i>MoU signed with</i></p> <ol style="list-style-type: none"> i. Mbagathi District Hospital ii. Kenya Airways iii. Cape Peninsula University, South Africa- for joint research, staff and student exchange. iv. Centre for Conflict Research and Training Thirty Three Consortium- for joint research and innovation. <p><i>MoUs awaiting signature</i></p> <ol style="list-style-type: none"> i. Jimma University, Ethiopia - Staff and student exchange, joint research. ii. Samsung – Training, IBL placements iii. Quavatel Ltd. – IBL placements and internships, staff exchange, training. iv. I-Hub – Joint research and innovations, joint publications and IBL placements, sharing of facilities and resources. v. NEMA – IBL placements, capacity building vi. Habitat – IBL and capacity building, technology transfer, competency assessment and certification vii. Geothermal Development Company – Joint research, IBL placements, joint consultancy and capacity building, training. viii. Numerical Machining Complex (NMC) – IBL placements, joint research, technology development and transfer, capacity building, sharing of physical resources, and joint innovations. ix. Centurion Systems Ltd. – Student and staff IBL. x. TU-K/De La Rue Currency and Security Print Ltd (K) – technical training, IBL placements. <p><i>MoUs awaiting legal confirmation for finalisation</i></p> <ol style="list-style-type: none"> i. Strathmore University – Joint research, staff exchange, training. ii. Nairobi Institute of Technology – staff exchange, training. iii. Housing Finance Foundation – banking services. iv. Gertrude’s Children’s Hospital – IBL placements, training, sharing of resources, joint ventures. v. Hope for the sick and poor (Slovak Mission) – Training. vi. Kenyatta National Hospital –IBL placements, training. vii. Equity Bank – banking services. viii. Murang’a County Government ix. Kenya Investment Authority

S/N		Activities carried out
2.	<i>Collaboration with Industry</i>	<p><i>i. Linking Industry with Academia (LIWA)</i> Forum for discussion-“<i>Innovative Manufacturing Ecosystem in Kenya</i>” on <i>26th March, 2016</i>, in Nairobi.</p> <p><i>ii. Permanent Working Group (PWG) TVET</i> Meeting held to discuss way forward for enhanced and effective TVET training in Kenya.</p> <p><i>iii. Linking Industry with Academia (LIWA)</i> Linkages workshops -“<i>Industry-Government-Academia linkages for Economic Prosperity</i>” on <i>8th April, 2016</i>, <i>26th April, 2016</i>, and <i>7th – 9th June, 2016</i>, in Nairobi.</p> <p><i>iv. Kenya Pipeline Company (KPC) –</i> Participated in Stakeholders forum for curricula validation, held at Panari Hotel, Nairobi, on <i>31st May, 2016</i>.</p> <p><i>v. 7th Round Table Meeting of the Permanent Working Group (PWG) on Vocational, Technical and industrial Training –</i> held on <i>21st June, 2016</i>, attended by Director, Global and Community Engagement.</p>
3.	<i>Project Activities</i>	<p><i>i. ENERGISE Project –</i> EU funded, ongoing MSc. Sustainable Energy Curriculum Development Workshop held from <i>30th – 31st July, 2015</i>. Management meeting held from <i>26th to 27th November, 2015</i>, in TUM, Mombasa. Curriculum Development Workshop held from <i>8th – 9th February, 2016</i>. One (1) member of staff from the Department of Mechanical and Mechatronic Engineering sponsored to undertake studies at Politecnico di Milano, Italy.</p> <p><i>ii. Kilifi County Spatial plan-</i> ongoing (GOK funded).</p> <p><i>iii. Augsburg Project –</i>DAAD funded, ongoing <i>Art Workshop, Nairobi-</i> <i>21st September, 2015 to 2nd October, 2015</i>. Participants included staff and design students from TU-K and University of Augsburg, Germany. <i>Capacity building -</i> 1 Lecturer from the School of Computer Information Technology and 1 Lecturer from the School of Creative Art and Technology received scholarships to undertake <i>postgraduate studies in Augsburg, Germany</i>.</p> <p><i>iv. GIZ –Skills for Oil and Gas (SOGA) –</i> Training of Master Trainers on CBET pedagogical skills, held from <i>24th August to 11th September, 2015</i>, held at <i>Kenya Institute of Curriculum Development (KICD)</i>. Twenty technologists and technicians from TU-K were trained. Selected sessions were attended by relevant Directorates including TVET. Strategic Planning meeting <i>8th to 11th September, 2015</i>. Attended by Deputy Vice Chancellor, TIP.</p>

S/N		Activities carried out
3.	<i>Project Activities... Continued</i>	<p>Consultation with industries conducted by TU-K Master Trainers, to discuss and receive input for CBET curriculum development, <i>October, 2015.</i></p> <p>Training of Master Trainers on CBET pedagogical skills, held from <i>26th to 30th of October, 2015</i>, Darajani Hotel in Mombasa.</p> <p>Planning consultative meeting held at GIZ offices on <i>4th February, 2016.</i></p> <p>Meeting with Principals of TTIs at Pride Inn, Nairobi on <i>7th March, 2016.</i></p> <p>First TU-K/ GIZ Private Sector Co-operation Workshop Held On <i>30th November, 2015</i>, at the Samsung Lab, TU-K SOGA-CDACC Training Workshop for ToMTs in CBET-Curriculum development held at Technology Development Centre (NTTA)</p> <p>Conference Centre – Athi River- <i>18th- 24th April, 2016.</i></p> <p>Meeting with ToMTs on <i>27th May, 2016.</i></p> <p>Meeting with CBET International Training Consultants on <i>28th June, 2016.</i> Attended by TU-K ToMTs.</p> <p><i>v. NUFFIC – Finalisation of Consultancy Policy</i></p>
4.	<i>Innovations</i>	<p>Compilation of database of students and staff innovations.</p>
5.	<i>Number of staff who attended international conferences</i>	<p>i. <i>9th Annual University of KwaZulu Natal (UKZN), Durban, South Africa- Teaching and Learning in Higher Education Conference. 21st – 23rd September, 2015.</i> Attended by Prof. Suki Mwendwa, DVC, TIP</p> <p>ii. <i>Innovation Africa, 30th September – 3rd October, 2015, Kampala, Uganda.</i> Attended by Prof. Suki Mwendwa, DVC, TIP</p> <p>iii. <i>Human Capacity Development (HCD) “The German Dual System of TVET”, from 3rd -11th October, 2015, Germany.</i> Attended by Prof. Suki Mwendwa, DVC (TIP)</p> <p>iv. <i>International Design Week “Werkwoche” and one week training programme at Augsburg University from 8th to 22nd November, 2015. Attended by</i> Prof. Suki Mwendwa – DVC (TIP) Winifred Oyuko Mbeche - Lecturer, SCAT Melisa Allela - Lecturer, SCAT Esther Kute - Lecturer, SCAT Robinson Omol - Student, SCAT</p> <p>v. <i>The Second Stakeholder Forum of the Africa-EU Energy Partnership (AEEP) - “Business and Science: Leading the way to sustainable energy”- on 16th – 17th May, 2016, Milan, Italy.</i> Forum attended by Dr. Eric Ogur, Director, CEIP and ENERGISE Project team member.</p>

S/N		Activities carried out
6.	<i>Compliance with constitution and other statutory requirements – Gender Mainstreaming</i>	<p>Draft Gender Policy submitted to VC. Awaiting approval by UMB.</p> <ul style="list-style-type: none"> i. Gender mainstreaming documentary finalized. ii. Brochure in final stage of completion.
7.	<i>Directorate of University Industry Partnerships</i>	<ul style="list-style-type: none"> i. CV's of selected students submitted to <i>Car and General</i> for consideration for attachment and/or internship. ii. Discussions with <i>National Machining Complex (NMC)</i> ongoing for skills upgrading for technicians in Mechanical Engineering Department.
8.	<i>Directorate of Global and Community Engagement</i>	<ul style="list-style-type: none"> i. Visit by students from <i>Kaplong Boys' High School, Wote-Machakos</i> – The students had a guided tour of the university, and participated in Career talks. ii. Students from <i>Mogoma Secondary School, Kericho County</i>, visited the University on Friday 6th November 2015. They had a tour of various schools and were shown the different laboratories and workshops. They also were able to have hands on experience in some engineering workshops aided by the technicians. iii. Outreach visit to <i>St. Austin's School, Nairobi</i> – the students were given a talk on “Demystifying Science”, and also had a career talk. Outreach visit to primary schools, the TU-K Outreach team was accompanied by Prof. Rachel Ndonye from Montgomery College, Maryland, USA. iv. <i>Heshima Primary School, Nairobi</i> – Simple chemistry demonstrations were done to kindle their interest in science subjects. v. <i>Murura Primary School, Muranga County</i> – Simple chemistry demonstrations were done to kindle their interest in science subjects. Extension to welfare groups- <ul style="list-style-type: none"> vi. <i>Kajiado Womens Group</i> The group members were taught safe methods of Detergent Making and introduced to Solar Energy as an alternative sustainable energy for domestic needs. vii. <i>Mazeras Women's Group, December 2015</i> – TU-K team members spoke to the women about the benefits of safe drinking water and demonstrated on the use of Alum to purify water. They also demonstrated on how to make detergent using locally obtained materials.

S/N		Activities carried out
9.	<i>Directorate of TVET</i>	<ul style="list-style-type: none"> i. Application made to TVETA for accreditation with TVET for TU-K programmes. TU-K B.Tech. programmes to be offered by TU-K and KATII from January, 2016. ii. Two (2) engines donation received on behalf of the university from Car and General for TVET training. iii. Facilitation and supervision of construction of Kasarani TTI building project. Construction schedule implemented. iv. Kenya – China TVET project – Awaiting commissioning of new power station. Visit by Chinese Diplomats for presentation on status of the project, on 17th May, 2016.
10.	<i>Directorate of Institutional Advancement and Development</i>	<ul style="list-style-type: none"> i. Training on university graduate tracer studies held at Moi University, Nairobi, on 22nd -30th Oct. 2015, and 1st -5th Feb. 2016. Attended by Director, IAD. ii. Training on income generation and proposal writing, held at Kenya School of Monetary Studies from 7th – 9th June, 2016. Attended by Director, IAD.
11.	<i>IBL</i>	IBL audit conducted to document the current status of implementation of the programme at Department level, and to establish areas that need to be enhanced.



CHAPTER FOUR

ADMINISTRATION, PLANNING AND INFRASTRUCTURE DIVISION

4.0 INTRODUCTION

This Division is responsible for the coordination and management of the University's human and physical resources in support of the University's mandate of teaching and learning, research and community engagement. The Division is key in complementing other University units in ensuring that their needs are met to be able to achieve their mandate.

The Division executes its mandate and functions through six Directorates namely: Directorate of Human Resource Services; Directorate of Planning and Quality Management; Directorate of Supply Chain Operations; Directorate of Property and Facilities Management; Directorate of Health and Wellness Services and Directorate of University Campus Services.

This report focuses on the operations of the Division through the six Directorates in the 2015/2016 financial year.

REPORTS FROM DIRECTORATES

4.1 Directorate of Human Resource Services

The Directorate of Human Resource Services is responsible for attraction, recruitment, induction and placement of highly qualified and competent staff, both teaching and non-teaching, necessary for smooth operations of the University. The Directorate also puts in place mechanisms for retaining the human resource through continuous training and provision of a conducive working environment for the staff.

Other areas that the Directorate is responsible for include:

1. Workforce planning/forecasting
2. Human Resource Information Management Systems (TUSOFT)
3. Labor/industrial Relations
4. Performance appraisal
5. Retirement benefits administration

During the 2015/2016 financial year, the Directorate made major developments and achievements as highlighted here below;

a) Recruitment and staffing

During the period under review, the Directorate facilitated recruitment of 238 members of staff as shown in the tables below;

Table I

RECRUITMENT	Number
Teaching Staff on Permanent and Pensionable Terms	
Associate Professors	2
Senior Lecturers	3
Lecturers	18
Tutorial Fellows	31
Administrators/ Technicians on Permanent and Pensionable Terms	
Various Positions	54
Staff on Contract	
Various Positions	130
Total	238

Table II

PROMOTION OF STAFF	Number
Professors	6
Associate Professors	7
Senior Lecturers	7

b) Labour/Industrial Relations

The Directorate successfully facilitated the negotiation and signing of the first Collective Bargaining Agreements (CBA) between TU-K Management and the following three unions.

- i) University Academic Staff Union (UASU)
- ii) Kenya Union of Domestic, Hotels, Educational Institutions, Hospitals and Allied Workers (KUDHEIHA)
- iii) Kenya University Staff Union (KUSU)

The signing of the CBAs was a historic milestone for the TU-K community and is geared towards the promoting and enhancing of harmonious industrial relations. These agreements were operationalized in the 2015/2016 financial year.

c) Training

The Technical University of Kenya is committed to the continued training and development of its employees. The University recognizes the importance of personal and professional development which enables individuals to achieve their full potential and contribute to provision of excellent teaching, research and administration in the University.

Competent staff perform better, which in turn leads to employee satisfaction, and better engagement. Advancement in technology also requires staff to update their skills in order to cope with the changes. During the year under review, the Directorate facilitated the training of 85 members of staff; they were equipped with diverse skills all aimed at improving service delivery to our customers.

d) Development of Human Resource Information System

The Directorate of Human Resource is also charged with the maintenance of employment records for all members of staff. In order to enhance efficiency in service delivery, the Directorate in conjunction with the Directorate of Information Communication Technology (DICTS) has continued to implement the TUSOFT system where individual information of all employees is captured from their manual files and stored. The System saves time during retrieval of information hence enhances timely decision making.

e) Development of Training Guidelines

The Directorate participated in the development of training policy guidelines upon which approval by the University Management will facilitate training of different cadres of staff.

f) Retirement Benefits Administration

During the year under review, a total of 9 employees attained the mandatory retirement age and all their retirement entitlements and benefits were processed. The Directorate facilitated training for 18 employees due to retire to help them transit smoothly into retirement.

4.2 Directorate of Properties and Facilities Management

This Directorate is responsible for expansion and maintenance of the University facilities to ensure a good learning and working environment. During the 2015/2016 Financial Year, the University undertook various capital projects. Repair and maintenance works were carried out as need arose and based on the maintenance schedule for the year. Some of the achievements of the Directorate are detailed here below;

a) On-going capital projects

Block 'R'

This was conceived as an Economic Stimulus Programme project championed by the Ministry of Education in the 2011/2012 financial year. It is a 5-storey building consisting of offices, classrooms and studios. The work was awarded to M/s Tinfra Engineering Ltd at a Contract Sum of Ksh. 60,750,742.20. Sectional occupation has been effected by the School of Architecture and the Built Environment. The major outstanding works are mechanical & electrical services, in particular lift installation, power connection and water reticulation.

Block 'S'

This is a 10-storey building consisting of offices, classrooms, computer rooms and studios for the School of Surveying and Geospatial Sciences. It is funded by the Government of Kenya. The Project is divided into two (2) phases as follows:

Phase 1:

This involved construction of frame work up to 7th floor at a contract sum of Ksh. 113,000,000. The commencement date: was 15th December 2011 and the expected completion date was June 2013. The work was completed by the close of the Financial Year.

Phase II:

This involved the construction of frame work from 7th to 10th floor, partitioning work, finishes including mechanical and electrical services at a contract sum of Ksh. 348,690,000. The commencement date was September 2014 with the anticipated completion date being December 2016. The project so far is 85% complete.

Kasarani Technical Training Institute

The development works at Kasarani Technical Training Institute (KTTI) is amongst sixty (60) Technical Training Institutions undertaken by Ministry of Education. Having successfully supervised the construction of Mandera Technical Training Institute from inception to completion in 2011 / 2013, TU-K was again appointed to supervise and mentor KTTI in the 2015 / 2016 financial year. The Contract sum of the project was Sh51,943,492.00 with a commencement date of February 2015 and an anticipated completion date of December 2016. 95% of the work has been done so far.

b) Proposed capital projects

Block 'T' (The ICT Centre)

This was initially proposed as a 10-storey building but was upgraded to 13-storey framed construction with light weight infill materials. The building will house computer rooms, studios, lecture theatres, offices including a gym and body wellness section. The estimated cost of the building is Ksh. 600 Million. Approval for the initial 10-storey construction was given by County Government of Nairobi (CGN). Request for approval of the three (3) extra floors will be submitted to CGN upon payment of the requisite amount. Tender documentation preparation for building works including specialist sub contract works are in progress. The Project Consultants have already been appointed. The work is 5% complete and this includes architectural designs, structural designs, preparation of Bill of Quantities and approval of the drawings by the CGN.

Senate Tower

This is a 5-storey framed construction consisting of Central Administration offices, the Senate Room, lounge and conference rooms estimated to cost Sh175 million. Approval by Nairobi County Government has been granted and tender documentation for building and specialist subcontract works are in progress. The work is 5% complete and this includes architectural designs, structural designs, and preparation of bill of quantities and approval of the drawings by the CGN.

c) Completed small works

- a) Security access control at the Main Gate
- b) Upgrading of Room C 3A to offices for use by the School of Social and Development Studies.
- c) Construction of washrooms in South C Sports ground.
- d) Upgrading of Room D 21 to Offices for use by the School of Computing and Information Technology.
- e) Fixing of metal grillwork to Computer Labs in Block R.
- f) Painting of classrooms within the Main Campus, Student Hostels and Staff Houses in South 'B'
- g) Upgrading of Offices in Room E9 and E10
- h) Upgrading of offices in Room N108 and N 109.
- i) Replacement of broken glasses
- j) Upgrading of offices in Room N 106 for purpose of accreditation by the Kenya Nutritionists and

Dieticians Institute.

d) Environment sustainability assessment

In the 2015/2016 Financial year, the Directorate of Properties and Facilities Management in conjunction with the Department of Geosciences and the Environment developed a plan on environmental sustainability interventions. The plan was used as a guide for the environment audit which was done in June 2016 and an Environment audit report prepared. In addition, the Directorate came up with a draft Environmental Policy which is still under consideration to facilitate implementation of the report.

e) Lease of space

The Directorate acquired the following office spaces to address the shortage of office space in the University;

- Extelcoms House, 3rd and 4th Floor for use by TU-K Lecturers (total area 1210m²).
- 30 Masaba Road, Upper Hill for use by the Centre for Creative and Cultural Industries.
- ACK Garden House (Office of the Chairman of University Council).

f) Staff

The Directorate received additional staff in the maintenance section. These included painters, electricians, plumbers and masons to help address the shortage of artisans in the workshop.

4.3 Directorate of Planning and Quality Management

The Directorate of Planning and Quality Management was established to promote quality as a means of achieving the vision of the University. The mandate of the Directorate is to identify and facilitate implementation of good practices within the university and to act as the change agent in developing and entrenching a culture of quality in the institution. During the 2015/2016 financial year, the Directorate facilitated the following activities;

a) Strategic Plan: 2016-2020

The Directorate coordinated the development of the draft Strategic Plan 2016-2020 through stakeholder engagement including the University Management. The focus and the goals of the Strategic Plan were developed through the guidance of the Vice-Chancellor after which working groups were formed to develop content for the various goals. The compiled and final draft was presented to Council and it is expected that the Strategic Plan will be launched for implementation by the end of the year 2016.

b) Performance Contracting

During the 2015/2016 financial year, the Directorate successfully conducted the following;

- Coordinated the drafting, negotiation and vetting of the TU-K 2015/2016 Performance Contract in line with the set guidelines.
- Facilitated the implementation of the TU-K 2015/2016 Performance Contract and prepared and submitted quarterly progress reports to the Council and relevant Government agencies as required. The quarterly reports were also used for purposes of monitoring progress of performance and for annual evaluation of performance.
- Coordinated the self and external evaluation of the Performance Contract 2015/2016.

c) ISO 9001: 2008 Certification

The Technical University of Kenya became an ISO certified institution in May 2016 after implementing the Quality Management System based on the ISO 9001:2008 Standard. During the 2015-2016 Financial Year, the Directorate facilitated the following activities;

- Coordinated the Pre- Certification Audit by Kenya Bureau of Standards (KEBS)

- Monitored the implementation of the Corrective Action Plan for the non-conformities identified during the Pre-Certification Audit
- Coordinated the Certification Audit by KEBS
- Monitored the implementation of the Corrective Action Plan on the nonconformities identified during the Certification Audit.

d) Course Unit Lecturer Evaluation

During the 2015-2016 financial year, the Directorate undertook Course Unit Lecturer Evaluation. A report was compiled and submitted to the Deans for necessary action and implementation. The evaluation was done through an online Course Unit Lecturer Evaluation System.

e) Tracer studies

The Directorate initiated a tracer study for the 2013 cohort of the Technical University of Kenya and was to submit a report of findings in September 2016.

4.4 Directorate of Health and Wellness Services

The strategic objectives of the Directorate in view of the 2015-2020 Strategic Plan are;

- i) Expand University Health and Wellness infrastructure
- ii) Diversify clinical and general health services
- iii) Review medical scheme services for staff and students

In the 2015-2016 financial year, the UHWS continued to serve the TU-K community with diligence and commitment. Achievements have been made in the Directorate as detailed here below:

a) Clinical Services

i. In and Outpatient Services

The UHWS continued to reach out to more students and staff members with the daily clinic attendance rising to an average of 100 clients each working day (staff being 35%, students 64% and others 1%). The category of others include emergencies from the Nairobi Central Business District and visitors. Inpatient utilisation also increased, especially among the staff. A total of 252 inpatients were attended to during the year.

ii. Specialised Clinics

In order to reach more staff and students, and to improve efficiency and effectiveness, the UHWS opened the following clinics:

- a) Comprehensive Care Clinic for those living with HIV/AIDS
- b) Chronic disease clinic handling non-communicable diseases including hypertension and diabetes.
- c) Tuberculosis clinic
- d) Family planning clinic

iii. Range of Clinical Services

The Directorate continued to develop cutting edge diagnostics. Its medical laboratory, apart from being affiliated to the International Human Quality Assurance body, started to do some of the sophisticated tests for easier biochemical diagnosis. These included;

- a) General Biochemistry: Uric acid, Lipid Profile, LFTs, UEC's
- b) C-reactive Proteins
- c) Prostate Specific Antigen
- d) Procalcitonin
- e) Serum Protein

The pharmacy included drugs for non-communicable diseases and paediatric use to ensure that all clients get the best service possible.

b) Public Health Services

The UHWS increased activities in public health services. These include but not limited to:

- i. Health talks: These were held for both students and staff, targeting non-communicable diseases as well as reproductive health services where 150 cases were handled.
- ii. HIV/AIDS programmes: Continuous Voluntary Counselling and Testing was carried out, whereby 2,170 staff and students received the services.
- iii. Sensitisation on the impact and mitigation of HIV/AIDS and Alcohol and Drug Abuse have been ongoing through a message on pay slips of staff members every month. Capacity building for peer counsellors amongst staff and students has been done.
- iv. Tuberculosis screening camp where 300 students were screened.
- v. Hepatitis B vaccination for health sciences students
- vi. Cancer screening for staff and students targeting cervical, breast and prostate cancers.
- vii. Training of students and staff on medical emergency rescue services, including First Aid during graduation was done.
- viii. Training members of staff on medical challenges during the post-retirement period was also carried out.

c) Statutory Obligations

i) Health related

The Directorate collaborated and satisfied requirements of the following government agencies in their respective jurisdictions.

1. National Aids Control Council. All the HIV/AIDS related reports were prepared and submitted.
2. National Agency for the Control of Alcohol and Drug Abuse Authority (NACADA). All the alcohol and drug abuse reports were submitted and compliance requirements were met.
3. National Council for Persons with Disabilities Most requirements are being addressed and the relevant policies were developed.
4. Reports to the District Health Management Team on mortality, morbidity, surveillance, workload, TB management, malaria reporting and all other reporting tools were submitted as required by the Ministry of Health on a monthly basis.

ii. Professional Obligations

The Directorate complied with the following professional requirements;

1. The Health Centre acquired a valid practice license from Kenya Medical Practitioners and Dentists Board for the year 2016.
2. All its professional members of staff were duly registered and licensed.

d) Partnerships

The UHWS partnered with the following institutions in the delivery of its mandate and services:

1. Hospitals including KNH, Sinai in Rongai, Nairobi West and Ngaira Health Centre. The Directorate fostered good working relationships with major private hospitals to improve in-patient services.
2. County Government of Nairobi through the District Health Management Team.
3. Non-Governmental Organisations, including Family Health Options Kenya, Aids Health Foundation among others.
4. Other government bodies like Kenya Medical Supplies Agency (KEMSA) and Teachers Service Commission (TSC).

As a result of the partnerships, the UHWS benefited greatly and received the following subsidies:

- i. Free HIV/AIDS test kits and vaccines
- ii. Malaria drugs, ARVs and family planning drugs
- iii. Antiseptics and disinfectants
- iv. Antibiotics like septrin
- v. Training on malaria, HIV/AIDS and commodity management
- vi. VCT services
- vii. Standardisation of clinical techniques and services through benchmarking

4.5 Directorate of University Campus Services

a) General observations

The core mandate of the Directorate is to ensure a safe and clean working and learning environment in the University. It also deals with workplace occupational safety and transport services for both students and staff. The Caretaker Services Section in the Directorate is charged with the responsibility of ensuring cleanliness of the facilities and open grounds at all times.

During the financial year under review, the Transport Section maintained over 80% vehicle availability through timely repairs and proper maintenance of vehicles. This also enabled the Section to minimize costs and thus was able to operate within the set budget. To further minimize costs, most of the minor repairs and maintenance works were carried out internally. To further save on the operation costs, all University vehicles were fueled using Kenya Shell cards and data for each vehicle maintained including data on vehicle maintenance. This also helped to determine any vehicles that were uneconomical to operate. To ensure compliance with statutory regulations, all vehicles were inspected as required and fitted with speed governors and safety belts whose effectiveness was assessed from time to time. All the passenger buses and mini buses had TLB licences.

On the other hand, a number of vehicles in the University fleet were old and therefore their spare parts were not readily available yet the vehicles were prone to breakdowns and extended downtime. One major accident was witnessed in the year under review rendering vehicle No. KBQ 614D to be written off.

b) Recommendations

1. Purchase of additional vehicles: Ambulance; 51-seater mini bus; 16-seater micro bus; Standard pick-up; water bowser; utility vehicle for transporting officers on short distances; official vehicle for the DVC, ARS.
2. Provision of benches at identified locations in the compound where students and staff can relax during free time.
3. Installation of tissue and soap dispensers in all washrooms within the Main Campus and Hostels.
4. Installation of litter bins in the Hostels.
5. Training of staff on modern cleaning technologies.
6. Procurement of modern cleaning equipment like a manual sweeper for cabro and pavement.
7. Modernize the washroom facilities in collaboration with the Directorate of Property and Facilities management.

4.6 Directorate of Supply Chain Operations

a) Objectives of the Directorate

- i. Ensure an open, transparent and compliant procurement process
- ii. Achieve continuous improvement on all categories of expenditure through a transparent and fair procurement process
- iii. Achieve value for money in all procurement activities

- iv. Promote equality of opportunities for all businesses and in particular SMEs
- v. Work in partnership with the private sector and other organisations to achieve value for money, quality and effective service delivery
- vi. Promote innovation
- vii. Encourage environmental and social sustainability through effective procurement policies and practices.
- viii. Ensure that goods and/or services are acquired from the right source, right quality, right quantity, at the right time and the right price

b) Training

The Directorate organized training for its staff and various Heads of Sections as well as the University Management on the Public Procurement Act, 2005 and Public Procurement and Disposal Regulation 2006. Following the revision of the existing procurement laws and the subsequent enactment of the Public Procurement and Asset Disposal Act, 2015, the Directorate again organized training for the same category of staff.

c) Implementation of the Government Directive on Procurement Opportunities for Youth, Women and Persons with Disability

Implementation of the Governments' directive on award of Tenders to Youths/Women and Persons with Disability was emphasized and the Directorate has endeavoured to avail the 30% tender allocation on the following reserved categories

- Supply and delivery of flowers
- Provision of cleaning services
- Provision of garbage collection services
- Supply and delivery of newspapers, journals and magazines
- Supply and delivery of airtime
- Provision of printing services
- Supply and delivery of office common use items
- Provision of labor contracts
- Provision of motor vehicle repair
- Provision of repair services for office equipment and machines
- Event organizing

The annual expenditure for Youth/Women and Persons with Disability for the year 2015/16 was Sh.108,931,794.84 (One hundred and eight million, nine hundred and thirty one thousand, seven hundred and ninety four shillings, eighty four cents). To achieve this, the Directorate organized a supplier sensitisation forum in December 2015 and sensitized the Youth/ Women and persons with Disability on the tendering process and other requirements within the category.

c) Procurements in the 2015/2016 Financial Year

The table below shows procurements undertaken with a threshold of Sh. 500,000 and above

Description	Amount	Firm awarded	Year
Award of contract for upgrading of Room C3	692,034	M/S Fontana	2015
Award of contract for small works at ACK Garden House	1,662,628	M/S Fontana	2015
Award of contract for replacement of university windows and door panes as a result of student disturbance	566,980.20	M/S Blue Grain	2015
Award of contract for security services	13,641,600	M/S Lavington Security	2015
Award of contract for security staff uniform	531,950	M/S Georgeous General	2015

Description	Amount	Firm awarded	Year
Award of contract for Examination booklet	2,055,000	M/S Pressline	2015
Award of contract for collection of sanitary bin services	970,080	M/S Benken Hygiene Services Ltd	2015
Award of contract for supply of medical equipment	1,216,500	M/S Elisatech Diagnostics EA Ltd	2015
Award of contract for supply of graduation gowns	1,605,800	M/S Pamo Garments	2015
Lease of 1,060 square feet at the ACK Gardens premises	961,555	M/S NW Realite Ltd	2015
Award of contract for supply of graduation tents/ chairs /portable toilets and decoration	1,985,630	M/S Wonderjoy Party World	2015
Award of contract for supply and delivery of Pick-up for Kilifi Geo Spatial Project	4,116,600	M/S General Motors East Africa	2015
Award of contract for supply of Computers for Kilifi Project	4,500,000	M/S Transbusiness Machines	2015
Award of contract for supply of Walk-through detector	1,000,000	M/S Security World	2015
Award of contract for supply of Library computers	720,000	M/S Massatech Ltd	2016
Award of contract for upgrading of Electrical Department Room E3,E9,E10	1,925,600	M/S Fontana	2016
Award of contract for painting of Men's Hostel/ Women/Main Campus	1,106,408	M/S Waka Suppliers	2016
Award of contract for baseline surveys	1,112,000	M/S Sigmund Peak International Ltd	2016
Award of contract for upgrading of 5 offices	3,092,107	M/S Mwembe and Mwembe Associates	2016
Award of contract for provision of office space at the Ex-Telcom Kenya	7,694,400	M/S Ex-Telcom	2016
Award of contract for TU-K conference	2,860,000	M/S Laico	2016
Award of contract for TU-K motor vehicle Insurance	1,055,663	M/S Pelikan Insurance Brokers	2016
TOTAL	55,072,535		

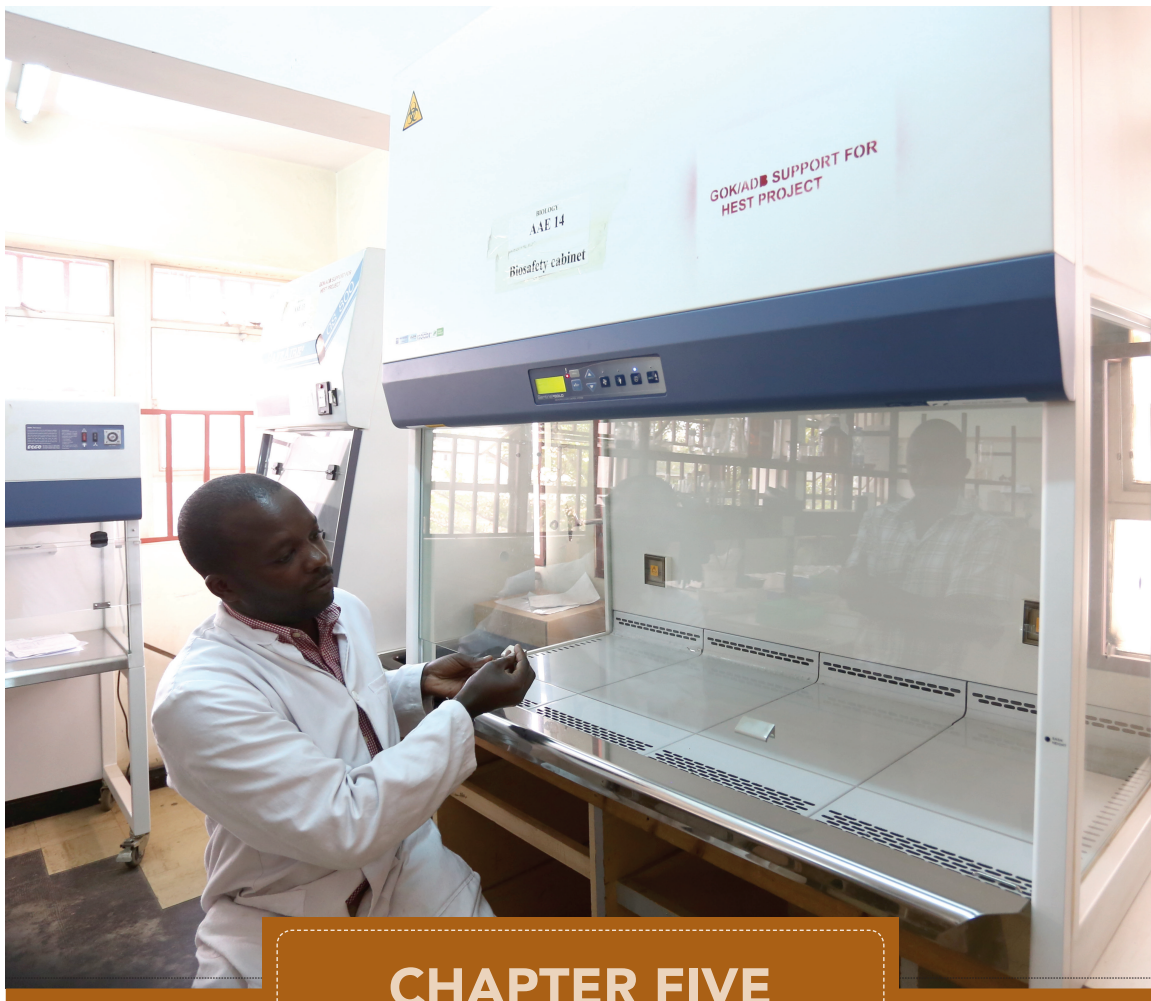
The contracts were deliberated by the Procurement Committee which was by then a legal requirement as per the Public Procurement and Disposal Act 2005 and the Public Procurement and Disposal Regulations 2006.

Summary of requisitions processed in the year under review

Month	Requisitions executed	Amount in Sh.
January	10	2,123,308
February	21	1,849,152
March	41	5,621,848
April	67	9,235,033.4
May	29	4,186,392.80
June	16	2,601,869.00
July	25	3,147,828.74
August	62	6,259,559.42
September	44	4,244,286.38
October	15	989,931
November	66	6,080,437.79
December	30	2,661,830.06

Other activities carried out in the year include:

- **Tendering:** The Directorate was able to award tenders for various categories of goods and services. At least twenty (20) suppliers from various categories were awarded tenders.
- **Pre-qualification of suppliers:** Pre-qualification of over one hundred and fifty (150) suppliers of various categories with the majority being Youth/ Women and Persons with Disability was done.
- **Inventory management:** This was done at the end of the financial year as required and a report compiled.
- **Disposal of assets:** Identification of unserviceable and obsolete assets and other items was done with a view of disposing the same.



CHAPTER FIVE

FACULTY OF APPLIED SCIENCES & TECHNOLOGY

Introduction

In the Academic Year 2015/2016, the Faculty of Applied Sciences and Technology comprised of 5 Schools and 1 Centre namely:-

- i. School of Biological and Life Sciences
- ii. School of Computing and Information Technology
- iii. School of Health Sciences and Technology
- iv. School of Mathematics and Actuarial Sciences
- v. School of Physical Sciences and Technology
- vi. Centre for Science & Technological Studies

5.1 Directors Management Board

- | | |
|-----------------------------|--|
| 1. Prof. Francis K. Gatheri | - Executive Dean/Chairman (February, 2016 – June , 2016) |
| 2. Prof. Michael L. Muia | - Executive Dean/Chairman (July, 2015 - January, 2016) |
| 3. Prof. Dorcas Yole | - Director, School of Biological & Life Sciences |
| 4. Prof. Patrick Ogao | - Director, School of Computing & Information Technology |
| 5. Prof. Thomas Onyango | - Director, School of Mathematics & Actuarial Sciences |
| 6. Prof. Paul Baki | - Director, School of Physical Sciences & Technology |
| 7. Prof. Isaac Alfred Orina | - Director, School of Health Sciences & Technology |
| 8. Dr. Patrick Dikirr | - Director, Centre for Science & Technology Studies |

5.2 Faculty Academic Board Members

In the 2015/2016 Academic Year, the Faculty Academic Board Membership was aligned to the University statutes to include the Directors, Chairs of Department, Professors in the Faculty and representatives of the School Academic Boards.

5.3 Faculty Office

- | | |
|-----------------------------|---|
| 1. Prof. Francis K. Gatheri | - Executive Dean (February 2016 – June, 2016) |
| 2. Prof. Michael L. Muia | - Executive Dean (July, 2015 – January, 2016) |
| 3. Mr. Stephen Karanja | - Assistant Registrar |
| 4. Mr. Timothy Muthuuri | - Administrative Assistant |
| 5. Ms. Rahab Mathula | - Assistant Executive Secretary |
| 6. Mr. George Maloba | - Faculty Accountant |

5.4 Faculty Meetings

5.4.1 Faculty Board Meetings

In the year 2015/2016, the Faculty Academic Board met twenty one (21) times to discuss various issues in the Faculty including curriculum approvals, results and issues affecting staff and students in the Faculty. The Minutes of the meetings can be availed upon request. The dates of the meetings are as listed below:

- i. 8th July, 2015
- ii. 9th July, 2015
- iii. 14th July, 2015
- iv. 21st July, 2015
- v. 28th July, 2015
- vi. 4th August, 2015
- vii. 15th September, 2015
- viii. 6th October, 2015
- ix. 21st October, 2015
- x. 29th October, 2015
- xi. 11th November, 2015
- xii. 18th November, 2015
- xiii. 15th March, 2016
- xiv. 19th April, 2016
- xv. 11th May, 2016
- xvi. 8th June, 2016
- xvii. 9th June, 2016

- xviii. 13th June, 2016
- xix. 22nd June, 2016
- xx. 24th June, 2016
- xxi. 30th June, 2016

5.4.2 Directors Board Meeting

The Board met four (4) times to deliberate on the issues that needed to be addressed in the Faculty. The Minutes of the meetings can be availed upon request. The dates of the meetings are listed below:

- i. 2nd March, 2016
- ii. 1st April, 2016
- iii. 17th May, 2016
- iv. 30th June, 2016

5.4.3 Consultative Meetings with the Vice Chancellor

The Executive Dean led the Directors, School of Health Sciences and Technology, Chair, Department of Human Nutrition and Dietetics and staff members for a consultative meeting with the Vice Chancellor on curriculum development. They also discussed issues on registration of their programmes with professional bodies. The meeting was held on 10th July, 2015.

The Faculty was approached by members of staff from the Kenya Medical Training College with an intention of introducing a Bachelors programme on Radiography because the College offers the programme at Diploma level. Two consultative meetings were held to discuss on the way forward on 10th May, 2016 and 20th May, 2016.

5.5 Results Discussed and Approved

The Faculty discussed and approved examinations for the programmes tabulated below:

Table 1: 2015/2016 Results Approved by Faculty Academic Board

SCHOOL OF BIOLOGICAL AND LIFE SCIENCE		
Course Code	Year	Programme
SBBQ/2015	Year 1	Bachelor of Science in Biochemistry
SBBI/2015	Year 1	Bachelor of Technology in Biotechnology
SSAEX/2015P	Year 1	Diploma in Technology in Biochemistry
SBAI/2015P	Year 1	Bachelor of Technology in Applied Biology
SBAI/2015	Year 1	Bachelor of Technology in Applied Biology
SBFK/2015P	Year 1	Bachelor of Philosophy in Food Science & Technology
SBFI/2015	Year 1	Bachelor of Science in Food Science & Technology
SSBJ/2014	Year 1 Investigation	Bachelor of Technology in Science Laboratory Technology
SSAE/2014P	Year 1 Supplementary	Diploma in Technology n Biotechnology
SBBQ/2014	Year 1 Supplementary	Bachelor of Science in Biochemistry
SSBI/2013S	Year 1 Supplementary	Bachelor of Technology in Applied Biology
SSBJ/2014	Year 1 Supplementary	Bachelor of Technology in Science Laboratory Technology
SBAE/2014P	Year 1 Supplementary	Diploma in Technology in Industrial & Applied Biology
SBBI/2014	Year 2	Bachelor of Technology in Biotechnology
SSBM//2014	Year 2	Bachelor of Philosophy in Biotechnology
SBBI/2015P	Year 2	Bachelor of Technology in Biotechnology
SBBQ/2014	Year 2	Bachelor of Science in Biochemistry
SSAE/2014P	Year 2	Diploma in Technology in Biochemistry

SBAI/2014P	Year 2	Bachelor of Technology in Applied Biology
SBAM/2014P	Year 2	Bachelor of Philosophy in Applied Biology
SBAE/2014P	Year 2	Diploma in Technology in Industrial & Applied Biology
SBAJ/2014	Year 2	Bachelor of Technology in Science Laboratory Technology
SBFI/2015P	Year 2	Bachelor of Science in Food Science & Technology
SBFI/2014	Year 2	Bachelor of Science in Food Science & Technology
SBFE/2014P	Year 2 (Deferred)	Bachelor of Science in Food Science & Technology
SSAQ/2013S	Year 2 Supplementary	Bachelor of Science in Biochemistry
AB518113	Year 2 Supplementary	Bachelor of Technology in Biotechnology
SBBI/2014P	Year 3	Bachelor of Technology in Biotechnology
SSBJ/2013S	Year 3	Bachelor of Technology in Science Laboratory Technology
SSBI/2013S	Year 3	Bachelor of Technology in Applied Biology
SBFI/2014P	Year 3	Bachelor of Science in Food Science & Technology
Ab513112	Year 3 Supplementary	Bachelor of Technology in Biotechnology
AB519113	Year 3 Supplementary	Bachelor of Technology in Biotechnology
AB513112	Year 4	Bachelor of Technology in Biotechnology
AB511112	Year 4	Bachelor of Science in Biochemistry
AB514112	Year 4	Bachelor of Technology in Applied Biology
AB517112	Year 4	Bachelor of Technology in Science Laboratory Technology

SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGIES

Course Code	Year	Programme
SCCJ/2015	Year 1	Bachelor of Technology in Communication & Computer Networks
SCCI/2015	Year 1	Bachelor of Technology in Computer Technology
SCIE/2015P	Year 1	Diploma in Technology in Information Technology
SCII/2015	Year 1	Bachelor of Technology in Information Technology
SCEE/2015P	Year 1	Diploma in Technology in Computer Technology
ECSE/2013S	Year 2	Bachelor of Technology in Computer Technology
ECCI/2013S	Year 2	Bachelor of Technology in Communication & Computer Networks
SCII/2013PS	Year 2	Bachelor of Technology in Information Technology
ECII/2013S	Year 2	Bachelor of Technology in Information Technology
Db502113	Year 3	Bachelor of Technology in Computer Technology
SCIJ/2014P	Year 3	Bachelor of Technology in Communication & Computer Networks
ECIE/2014P	Year 3	Diploma in Technology in Information Technology
SCII/2014P	Year 3	Bachelor of Technology in Information Technology
Db501113	Year 3	Bachelor of Technology in Information Technology
Db506112	Year 3 Supplementary	Bachelor of Technology in Computer Technology
Db506112	Year 4	Bachelor of Technology in Computer Technology
Db505112	Year 4	Bachelor of Technology in Information Technology

SCHOOL OF HEALTH SCIENCES AND TECHNOLOGY

Course Code	Year	Programme
SHCI/2015	Year 1	Bachelor of Technology in Community & Public Health
SHNE/2015P	Year 1	Diploma in Technology in Nutrition & Dietetics
SHNI/2015	Year 1	Bachelor of Science in Nutrition & Dietetics
SHBI/2015	Year 1	Bachelor of Science in Laboratory Medical Science
SHNE/2015P	Year 1	Diploma in Technology in Nutrition & Dietetics
SHBI/2014S	Year 1 Special	Bachelor of Science in Laboratory Medical Science

SHBI/2014S	Year 1 Supplementary	Bachelor of Science in Laboratory Medical Science
SHCI/2014	Year 2	Bachelor of Technology in Community & Public Health
SHNF/2013PS	Year 3	Diploma in Technology in Nutrition & Dietetics
Hb501113	Year 3	Bachelor of Science in Laboratory Medical Science
SHBE/2013P	Year 3	Diploma in Medical Laboratory Sciences
SHCE/2013P	Year 3	Diploma in Technology in Community & Public Health
SHNF/2013PS	Year 3	Diploma in Technology in Nutrition & Dietetics
HB506112	Year 4	Bachelor of Science in Nutrition Dietetics
Hb505112	Year 4	Bachelor of Science in Laboratory Medical Science

SCHOOL OF MATHEMATICS AND ACTUARIAL SCIENCES

Course Code	Year	Programme
SMSI/2015	Year 1	Bachelor of Technology in Applied Statistics
SMSE/2015	Year 1	Diploma in Technology in Actuarial Science
SMSI/2013S	Year 1 Supplementary	Bachelor of Technology in Applied Statistics
SMSG/2013PS	Year 2	Diploma in Technology in Applied Statistics
SMSI/2014	Year 2	Bachelor of Technology in Applied Statistics
SMSE/2014P	Year 2	Diploma in Technology in Actuarial Sciences
SMSF/2014P	Year 2	Diploma in Technology in Applied Statistics
SMPQ/2014	Year 2	Bachelor of Science (Mathematics)
SMSI/2013S	Year 2 Supplementary	Bachelor of Technology in Applied Statistics
SMSG/2013PS	Year 3	Diploma in Technology in Applied Statistics
SMSE/2013PS	Year 3	Diploma in Technology in Actuarial Sciences
SMSE/2013PS	Year 3	Diploma in Technology in Actuarial Sciences
SMSI/2013S	Year 3	Bachelor of Technology in Applied Statistics
SMMQ/2013S	Year 3	Bachelor of Science (Mathematics)
Xb503112	Year 4	Bachelor of Technology in Applied Statistics
Xb505112	Year 4	Bachelor of Science (Mathematics)

SCHOOL OF PHYSICAL SCIENCES AND TECHNOLOGY

SPCE/2015P	Year 1	Diploma in Technology in Applied Chemistry (Industrial Chemistry)
SBEI/2015	Year 1	Bachelor of Technology in Environmental Resource Management
SSEA/2015PS	Year 1	Certificate in Environmental Studies
SSEE/2015PS	Year 1	Diploma in Technology in Environmental Resources Management
SPCF/2015P	Year 1	Diploma in Technology in Applied Chemistry (Analytical Chemistry)
SPPI/2015	Year 1	Bachelor of Technology in Technical & Applied Physics
SSPI/2013S	Year 1 Repeat	Bachelor of Technology in Technical & Applied Physics
AB521113	Year 1 Repeat	Bachelor of Technology in Technical & Applied Physics
AB508113	Year 1 Special	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
SPCF/2014P	Year 1 Supplementary	Diploma in Technology in Analytical Chemistry
SPCI/2014	Year 1 Supplementary	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
SPCE/2014P	Year 1 Supplementary	Diploma in Technology in Industrial Chemistry
SBEI/2014	Year 2	Bachelor of Technology in Environmental Resource Management
SPCE/2014P	Year 2	Diploma in Technology in Applied Chemistry (Analytical Chemistry)
SPCI/2014	Year 2	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
SPCF/2014P	Year 2	Diploma in Technology in Applied Chemistry (Industrial Chemistry)
SPCI/2015P	Year 2	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
SPCM/2014P	Year 2	Bachelor of Philosophy in Applied Chemistry Analytical Chemistry)
SPPI/2014	Year 2	Bachelor of Technology in Technical & Applied Physics

SSCI/2013S	Year 2 Supplementary	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
SPCI/2014P	Year 2 Supplementary	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
AB508113	Year 2 Supplementary	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
SSPI/2013S	Year 3	Bachelor of Technology in Technical & Applied Physics
AB508113	Year 3	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
SSCF/2013PS	Year 3	Diploma in Technology in Applied Chemistry (Analytical Chemistry)
SSCE/2013PS	Year 3	Diploma in Technology in Applied Chemistry (Industrial Chemistry)
SBEI/2015P	Year 3	Bachelor of Technology in Environmental Resource Management
SSEE/2013PS	Year 3	Diploma in Technology in Environmental Resources Management
SSEI/2013S	Year 3	Bachelor of Technology in Environmental Resource Management
SPCI/2014P	Year 3	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
SSCI/2013S	Year 3	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
AB521113	Year 3	Bachelor of Technology in Technical & Applied Physics
Ab515112	Year 4	Bachelor of Technology in Technical & Applied Physics (Instrumentation Option)
Ab515112	Year 4	Bachelor of Technology in Technical & Applied Physics (Energy Option)
AB516112	Year 4	Bachelor of Technology in Applied Chemistry (Industrial Chemistry)
AB512112	Year 4	Bachelor of Technology in Environmental Resource Management

5.6 Curriculum Development

The following new curricula were developed, discussed and approved by the Faculty Academic Board:-

- i. Master of Public Health Curriculum, Department of Community & Public Health, School of Health Sciences and Technology, discussed on 6th October, 2015.
- ii. Master of Laboratory Science Curriculum, Department of Biomedical Sciences & Technology, School of Health Sciences and Technology, discussed on 11th May, 2016.

5.7 Selected Publications and Conference Attendance by Faculty staff

5.7.1 Conferences/Seminars Attended by Faculty Staff

The following members of staff attended local and International Conferences in the academic year 2015/2016:

1. **Alice Nyambura Gichuhi**, Presentation on 22nd July 2015 in China at WIV, CAS. **Title:** Exploitation of phages as biocontrol agents against food borne pathogens.
2. **Alice Nyambura Gichuhi**, Laboratory work in China at Wuhan Institute of Virology, Chinese Academy of Sciences for three Months as a PHD student from 1st May 2015 to 1st August 2015.
3. **Angelica M. Kimwele** - E-learning resourcing seminars at Kenyatta University- Jan 2016.
4. **Angelica M. Kimwele** - Academic proposal writing seminar at Kenyatta University-April 2016.
5. **Anyango Loyce Joyce** - Current and emerging issues on aflatoxin management in the context of climate change scholarly writing and publishing workshop.
6. **Anyango Loyce Joyce** - Research professional Africa training.
7. **Anyango Loyce Joyce** - Food safety, nutrition, Agro-processing and innovation conference.
8. **Austine Awuor**, Attended a workshop on Wetlands environmental Management in Dar Tanzania, conducted by Thomas More University College (Belgium), University of Dar and Nelson Mandela Institute of Science and Technology-14th – 29th November, 2015.
9. **Awuor Adero**, 17th – 19th May, 2016, Sensitisation Workshop in Earth Science and Curriculum, Kenya School of Monetary Studies, Nairobi, Kenya.

10. **Catherine N. Muya**; Geoffrey N. Kamau; Peterson M. Guto; Wanjau Tabitha Wangui. East and Southern Africa Environmental/Analytical Chemistry Conference and the 11th Theoretical Chemistry conference in Africa (TCCA) on 15th - 17th June, 2016: Reef Hotel, Mombasa, Kenya.
11. **Charles Wangati**, 30th May – 10th June, 2016; JUAMI 2016, Summer School on Materials for Sustainable Energy, Arusha Tanzania.
12. **Chasia Stanley**, Attended a training/Workshop on Digital image processing in India January to February, 2016.
13. **Dr Collins Handa** Climate change. September, UNEP, Nairobi.
14. **Dr Collins Handa** Nile Basin Initiative. Projects in Nile basin countries.
15. **Dr Collins Handa** Status of rivers in Nile Basin Projects. Early 2016, Rwanda.
16. **Dr Collins Handa** The Status of Environment, September, NEMA, Embu.
17. **Dr Collins Handa**, Intergovernmental Biodiversity and Ecosystems Services. August 2015, South Africa.
18. **Dr. Grace Nyambati** – “National scoping workshop for the strategic environmental and social Assessment (SESA) for the petroleum sector in Kenya” Nairobi Intercontinental Hotel. **2016**.
19. **Dr. Mary Mugambi** - Global Nutrition Report Launch – MOH June 2016.
20. **Dr. Mercy Mwaniki**, Conference on *Role of Legumes in Food and Nutrition Security: Case of The Hard to Cook Defect in Common Dry Beans* held on 25th September 2015 at JKUAT.
21. **Dr. Mercy Mwaniki**, Monitoring and Evaluation Curriculum Review Workshop and Training of Trainers Workshop held from 4th to 14th October, 2015 at Hotel Waterbuck, Nakuru.
22. **Dr. Mercy Mwaniki**, Symposium on Capacity Building in Sustainable Resource Development in Africa held on 24th March, 2016 at the Japan Information and Culture Centre of the Embassy of Japan.
23. **Dr. Mercy Mwaniki**, The 4th National Monitoring and Evaluation Week held on 8th – 13th November 2015 at the Laico Regency Hotel, Nairobi.
24. **Dr. Naomi Waiganjo** - KMLITB workshop on medical lab issues.
25. **Gladys King’ori**, 30th May – 10th June, 2016; JUAMI 2016, Summer School on Materials for Sustainable Energy, Arusha Tanzania.
26. **Holiness Nose** and M. T. Rodgers. “Collision Induced Dissociation Studies (CID) of 1,10-Phenanthroline Complexes: Competition between Simple CID and Coulomb Fission Processes.” The East and Southern Africa Environmental & Analytical Chemistry Conference and the 11th Theoretical Chemistry Conference in Africa (TCCA), Reef Hotel, Mombasa, Kenya, **June 15th to June 17th, 2016**.
27. **Holiness Nose** and M. T. Rodgers. “Collision-Induced Dissociation Studies of 1,10-Phenanthroline Complexes: Determination of the Third Sequential Binding Energies.” The 3rd Technical University of Kenya International Conference on Innovative Technologies for Development, Laico Regency Hotel, Nairobi, Kenya, **February 23rd to 25th, 2016**.
28. **Holiness Nose**, Prof. Graham E. Jackson, Prof. Kevin J. Naidoo, and Prof. Gerhard A. Venter. “Proposed Programme for: Master of Science in Computational Chemistry.” University of Cape Town, Rondebosch 7701, South Africa, Department of Chemistry, PD Hahn Building, Chemistry Honours Seminar Room, 7.29, **November 11th, 2015**.
29. **Holiness Nose** and M. T. Rodgers. “Experimental and Theoretical Studies of Binding Interactions in Divalent Transition Metal Cation-N-Donor Ligand Complexes: Structures, Sequential Bond Dissociation Energies, Mechanisms and Energetics of Collision-Induced Dissociation.” University of Cape Town, Rondebosch 7701, South Africa, Department of Chemistry, PD Hahn Building, Chemistry Honours Seminar Room, 7.29, **October 7th, 2015**.
30. **James Owuor**, Nanomedicine Training Program at ANDi Centre of Excellence in Nanomedicine based at Council for Scientific and Industrial Research (CSIR), Pretoria, South Africa. **4th – 16th August, 2015**.

31. **Janet Kajuju Mala** - KNDI Examination Moderation Workshop (13th - 14th June 2016).
32. **Janet Kajuju Mala** - Aflatoxin Management workshop (30th March 2016).
33. **Janet Kajuju Mala** - African Journal of Food, Agriculture, Nutrition and Development (AJFAND) Scholarly Writing Workshop (29th March 2016).
34. **Janet Kajuju Mala** - Food safety, Nutrition, Agro-processing and innovation conference (29th March - 1st April 2016).
35. **Janet Kajuju Mala** - Induction & Training workshop for KNDI Professional examinations (12th May 2016).
36. **Juma Benard**, Characterisation of Flood Menace in Nairobi slums: Frequency, Intensity and Impact-July, 2016 at the WMO-RTC, Nairobi.
37. **Lizbeth Kageni Karani** - launch of Global Nutrition Report 2016 Conference by the first lady/UNICEF & world bank at Safari Park Hotel Nairobi, 24th June 2016.
38. **Lizbeth Kageni Karani** - Nutrition and Dietetics Professional core areas evaluation workshop ACK Guest House Nairobi, by KNDI 23rd October 2015.
39. **Lizbeth Kageni Karani** - Professional Examinations Workshop (Nutrition and Dietetics) at United Kenya Club Nairobi, by KNDI 8TH -9TH DEC 2015.
40. **Lizbeth Kageni Karani** - Technical Panel Workshop (Diploma & Certificate In Nutrition And Dietetics Syllabus) By KNEC , NAIROBI, 25TH APRIL TO 5TH MAY 2016.
41. **Lucy M. Waititu** - ISO 9001:2015 Quality Management System Transition – 21st – 22nd April 2016 in Kisumu.
42. **Lucy M. Waititu** - RVTTI 2016 International TVET and Interdisciplinary Research Conference held in Eldoret from May 25th- 28th 2016.
43. **Lynda Allan** – “ UNESCO - Ethics Teacher Training Course (ETTC)” in Njoro, Kenya (10-14 August 2015).
44. **Lynda Allan** – “Association of Commonwealth Universities- Structured Training for African Researchers (ACU-STARS) Training”. (September 2015 to June 2016).
45. **Lynda Allan** – “The 3rd TU-K International Conference on Innovation Technologies for Development” in Nairobi.(23rd – 25th February, 2016).
46. **Margaret Mwaura**, 30th May – 10th June, 2016; JUAMI 2016, Summer School on Materials for Sustainable Energy, Arusha Tanzania.
47. **Mercy S. N. Muriuki** - 6th November 2015 attended a Post graduate Seminar held at Technical University of Kenya, Nairobi. “*Writing a Research Proposal*”.
48. **Mercy S. N. Muriuki** - 11th March 2016 attended a Post graduate Seminar held at Technical University of Kenya, Nairobi. “Sharing Research Findings”.
49. **Mercy S. N. Muriuki** - 20th November 2015 attended a Post graduate Seminar held at Technical University of Kenya, Nairobi. “*Science and Technology Studies*”.
50. **Mercy S. N. Muriuki** - 23rd October 2015 attended a Post graduate Seminar held at Technical University of Kenya, Nairobi. “*Rationale of Drug Therapy*”.
51. **Mr. Hillary Adawo**, Scientific Communication and Publishing, UoN.
52. Nicholas N. Nduti, 3rd TU-K International Conference – 23rd – 25th February, 2016.
53. **Nicholas N. Nduti**, Agri-Food Canada, Brescia College, University of Western Ontario, University of Western Ontario *Correspondence: Nicholas Nduti, TU-K, Department of Food Science and Technology, Mobile: 0721 335653, email nnnduti@gmail.com Sub-theme: Food Security and Agriculture.
54. **Nicholas N. Nduti**, Department of Food Science and Technology, Technical University of Kenya, Lawson Health Research Institute – Canada.

55. **Nicholas N. Nduti**, Nutrition and Terminally Ill People From Gender Based Violence Point Of View; Lukenya Lodge.
56. **Nicholas N. Nduti**, Understanding Nutrition and Zero Deaths from HIV; Nairobi, Deputy President's Office.
57. **Odhiambo Mildred Awuor** - Breastfeeding Conference organized By Nestle Nutrition Institute Africa.
58. **Odhiambo Mildred Awuor** - Launch of Global Nutrition Report 2016 Conference by the First Lady/UNICEF & World Bank at Safari Park Hotel Nairobi, 24th June 2016.
59. P. M. Wanjau, **F. K. Gatheri** and J. K. Koske (2015)Developing a Numerical Simulation of Vascular Brain Tumor Using 1-Dimensional Partial Differential Equation Journal of Disease and Global Health, 6(1): 43-50, 2016 *ISSN: 2454-1842*.
60. P. M. Wanjau, **F. K. Gatheri** and J. K. Koske (2015)Developing a Numerical Simulation of Vascular Brain Tumor Using 2-Dimensional Partial Differential Equation Journal of Disease and Global Health, 6(1): 7-14, 2016 *ISSN: 2454-1842*.
61. **Pamella Kageliza Kilavi**, 23rd to 27th May, 2016, International Conference on Advancing the Global Implementation of Decommissioning and Environmental Remediation Program, Madrid Spain.
62. **Pamella Kageliza Kilavi**, 25th to 30th July, 2016 International Youth Nuclear Congress Conference, Hangzhou, China.
63. **Peris Cheruiyot** – “Global Nutrition Report Launch” 2016.
64. **Peter Gichuhi** - Nestle Breastfeeding Practices Conference.
65. **Prof. George Amolo** and Nicholas, Electronic Structure Calculations for Materials for Energy Conversion, Invited talk joint United States and Africa Materials Initiative (JUAMI), 7th – 9th June 2016, Nelson Mandela Institute for Science and Technology, Arusha Tanzania.
66. **Prof. George Amolo**, 4th African School on Electrical Structure Methods and Applications (ASEMA): Part Organizer and pre –school facilitator: 11th – 25th June, 2016, Accra, Ghana.
67. **Prof. Jackson Odote**, February 23rd -25th 2016, looking back in time through a radio telescope: the square kilometer array. Third TU-K International Conference on Innovative Technologies for Development, Nairobi.
68. **Prof. Jackson Odote**, July 21st -22nd 2016, Training on new Procurement and Disposal Act, 2015, Nairobi.
69. **Prof. Jackson Odote**, Soft skill training of the Enlarged Network in the Education and Research for Growing Impact of Sustainable Energy Engineering Local Development (ENERGISE).
70. **Prof. Joseph Lalah**, Received IUPAC Funding for the TU-K/IUPAC Workshop on Ecological Risk Assessment of Pesticides, **February 25-26, 2016**, Technical University of Kenya. Coordinated and participated in the workshop.
71. **Samson H. Omondi** , Connective Cities Urban upgrading learning exchange workshop ‘Rethinking urban upgrading-The Urban Nexus Approach to promote Green inclusive settlements ‘Learning Exchange’; 21st -23rd June 2016, Durban, South Africa.
72. **Samson H. Omondi** ,National Scoping Workshop for The Strategic Environment and Social Assessment (SESA) for the Petroleum sector in Kenya held on 30th June 2016 at the Intercontinental Hotel, Nairobi.
73. **Sitoki L.M.**, C. Nyamweya & H. Lungaiyia 2016. Developing local phytoplankton identification keys using biometric and morphometric measurements in Lake Victoria. The 3rd Technical University of Kenya Annual International Conference on Innovative Technologies for Development, February 23rd – 25th, 2016.
74. **Sitoki Lewis** “National Scoping Workshop for the Strategic environmental and Social Assessment (SESA) for the petroleum sector in Kenya”- Nairobi Intercontinental Hotel-June, 2016.

5.7.2 Publications by Faculty Staff

The following members of staff published their research papers in peer reviewed journals/books in the academic year 2015/2016:

1. **Angelica, M. Kimwele** - Complementary Feeding and the Nutritional Status of Children 6-23 Months attending Kahawa West Public Health Center TO IISTE-Food Science and Quality Management Journals waiting reviews.
2. A.W Ndegwa , M.M Kinyanjui , **I. Chepkwony**. Mathematical Modelling of Water flow for irrigation in a permeable Pipe of Elliptical Cross-section, British Journal of mathematics and computer sciences, Vol.5. Issue. 2. 2015. Pp159-178.
3. Babu, J. M, **Sitoki L. M**, et al. (2015). Effects of point source pollution on water quality, phytoplankton diversity and abundance in lake Victoria, Kenya. International Journal of Fisheries and Aquatic Studies 2015; 2(5): 57-64
4. **Catherine, N. Muya-Wambugu** Electrocatalytic Decomposition of (3*a*,7*a*)-2-[(Trichloromethyl)Sulfanyl]-3*a*,4,7,7*a*-Tetrahydro-1*b*-Isoindole-1,3(2*b*)-Dione (Captan) Pesticide Residue Using Cyanocobalamin On Glassy Carbon Electrode. The International Journal of Biochemiphysics, Vol 23, **December 2015**.
5. D. Kihuga, M. **Kimathi Mark**. Kinyanjui. Investigation of temperature distributions for a finial Elasto-Hydrodynamic Journal Bearing Lubricated by Ferro fluids with couple stresses, journal of computations and modelling Vol.5 No.3 2015. Pp 81-97.
6. D.O. Owego and **N.B. Okello**, Relationship between the classical Numerical Range and the Essential Numerical Range. International Journal of Research and Development organisation, Vol2 Issue 9 September 2015 paper 4.
7. **Gikonyo, JN (2016)** Prevalence of group A rotavirus, enteric adenovirus, norovirus and astrovirus infections among children aged five years and below in Mukuru slums Nairobi Kenya. *The African Journal of Health Sciences*.
8. **Gitau, GW (2015)** *Plasmodium falciparum* Hop (PfHop) Interacts with the Hsp70 Chaperone in a Nucleotide-Dependent Fashion and Exhibits Ligand Selectivity. *PLoS one*.
9. **Joan M. Nyika**, (2015). Geomorphoc and hydrologic effects of constructing a reservoir on Mbagathi river. Journal of Sustainable Development in Africa, 17 (7): 107-117.
10. J.O. Kawino, **T. Onyango** and N.B.Okello (2015), A review of mathematical modelling of carbon pollution by vehicles on highways with huge embankments, IJR Vol 2issue 9(3).
11. J.O. Kawino, **T. Onyango** and N.B.Okello (2015), Development and Analysis of a mathematical model of carbon pollution level on Kenyan highways with huge embankments, IJR Vol 2 issue 9(2).
12. **Janet Kajuju Malla** - Obesity and Factors that Contribute to Obesity among Pre- adolescents Attending Day Private Primary Schools in Nairobi, Kenya (2015).
13. Kariuki E. **Kimathi Mark.**, Mwenda E. Vehicular Traffic flow model with Driver Aggressiveness component in a Multilane Road Journal of Applied and computational mathematics Vol.5, No3. 2016.
14. Kosiyo Paul Mboya, Peter Odada Sumba, Nyamuni John Oluoch, Abdallah Fatmah K, Elly Munde, **Grace K. Nyambati**, and Albert Onyango Mala (2015). Correlation between Thrombocytopenia and Anaemia in *Plasmodium falciparum* malaria among patients in Kisumu County-Western Kenya. *African Journal of Health Sciences*.
15. **Magero**, O.Victor, Dorcas S.Yole, Mbaruk A. Suleiman, **Grace K. Nyambati**, Naomi Waiganjo, Joseph Moilo, Tom Osebe (2015). **Assesment of Molluscicidal, Cercaricidal and Miracinal Activities of Crude Extracts of *Ocimum americanum*, *Bridelia micrantha* and *Chenopodium ambrosoides***. *Journal of Biology, Agriculture and Healthcare*, ISSN (Paper) 2224-3208 ISSN (Online) 2225-093X. Vol 5, No 22, 2015.
16. **Mbonde**, A. S., **L. Sitoki** & R. Kurmayer (2015): Phytoplankton composition and microcystin concentrations in open and closed bays of Lake Victoria, Tanzania. *Aquatic Ecosystem Health & Management*, 18:2, 212-22
17. **Michael**, O. Atambo, N. W. Makau, **G. O. Amolo** and Ryo Maezono, QMC and Phonon study of super-hard cubic boron carbon nitride; Mater. Res. Express 2 (2015) 105902; October 2015.

18. **Musila, F.M (2015)**. Ethnobotanical study of Medicinal Plants used by Tharaka people of Kenya International Journal of Ethnobiology an Ethnomedicine. IJEE 14/Volume 1/issue /2015.
19. **Nyambati, G.K.,** Lagat Z. O., Maranga R. O., Ozwara, H., (2015). Anti-plasmodial activity and toxicity of selected crude plant extracts from Kenya, against *Plasmodium berghei* in BALB/c mice. *International Journal of Current Research*. Vol. 7 Issue, 09, pp. 19893-19900. September 2015.
20. **Nyamweya, C.,** C. Desjardins, S. Sigurdsson, T. Tomasson, A. Taabu-Munyaho, **L. Sitoki** & Gunnar (2016). (Simulation of Lake Victoria Circulation Patterns Using the Regional Ocean Modeling System (ROMS). *PLoS ONE* 11(3): e0151272. doi:10.1371/journal.
21. **Oduor, A.M.O (2016)**. Invasive plant species are locally adapted just as frequently and least as strongly as native plant species. *Journal of Ecology, British Ecological Society*. 104:957 – 968.
22. **Ondika, S.N (2015)**. Effects of Fungal infection on feeding and survival of *Anopheles gamabiae* (Diptera: Culicidae) on plant sugars . *Research Article Journal* 12273.
23. Oguna, J. A, Owuor P. O, Kowenje C. O, **Lalah J. O (2016)**. Effect of copper (II) on the adsorption/desorption of chlorsulfurn in five wheat growing regions of the Mara River basin, Kenya. *American Journal of Experimental Agriculture* 10 (5): 1-9, DOI 10.97341/AJEA/2016/21528; Article No. AJEA 21528.
24. Orony, D. N. A, **Lalah J. O,** Jondiko I. O (2015). Carcinogenic Polycyclic Aromatic Hydrocarbons (PAHs), Aflatoxins and Nitrosamines in Processed Fish from the Winam Gulf area of Kenya. *Polycyclic Aromatic Compounds* (published on line on **30th July 2015**); DOI:10.10801.10406638.2014.980433.
25. **Ondiaka, S.N (2015)**. Sunflower as a trap crop for European tarnished plant bug (*Lygus rugulipennis*). *Journal of Applied Entomology*
26. **Orina, Isaack Alfred –** Scientific Writing for Students and Young Scientists ISBN: 13:978 – 1514289617 -10: Create a space: 1st Edition 2015
27. S.K Mutua, M.E **Kimathi,** J.K Kwanza comparisons of Godunov’s and relation schemes approximation of solutions to the Euler equations *Journal of Applied Mathematics and Bioinformatics*, Vol.5. No 2 2015. Pp 69-83.
28. **T.T.M Onyango, M. Kimathi and M.G .Abidha (2015)**, Control volume for modelling slightly compressible flow in reservoir, *Intr Jr. Of mathematic s Sciences & Applications* Vol. 5, No. 2, ISSN No 2230-9888.
29. **Yole, D. S (2015)**. Brine Shrimp Lethality Test of soluble Proteins from *Biomphalaria pfeifferi* Snail as Preliminary for Vaccine Development for *Schistosoma Mansoni* *American International Journal of Research in Science, Technology, Engineering and Mathematics*. ISSN 2328 – 3491
30. **Yole, D.S (2016)**. Molluscicidal Activity of Selected Plant Extracts in Kenya *Journal of Natural Sciences Research*. ISSN 2224-3186
31. **Yole, D.S (2015)**. Assessment of Molluscicidal, Cercaricidal and Miracididal Activities of Crude Extracts of *Ocimum Americanum*, *Bridelia Micrantha* and *Chenopodium ambrosides* *Journal of Biology, Agriculture and Health Care*. ISSN 224- 3208

5.8 Postgraduate Studies

The following members of staff are pursuing studies at the Technical University of Kenya

5.8.1 Doctor of Philosophy

1. **Alice Ojwang Ndong** – Department of Nutrition & Dietetics
2. **Charles Wangati** – Department of Physics and Space Science
3. **Fred Sawenja** – Department of Chemical Sciences & Technology
4. **Gladys Kin’gori** – Department of Physics & Space Sciences
5. **Gladys Kitui** – Department of Geo-science and the Environment
6. **Hillary Adawo:-** Department of Food Science & Technology

7. **James Owuor** - Department of Chemical Sciences & Technology
8. **Lydia Gachahi** – Department of Geosciences & the Earth
9. **Mildred Aduma** - Department of Geosciences & the Earth
10. **Nicholas Nduti**: Department of Food Science & Technology
11. **Ruth Omole** - Department of Chemical Sciences & Technology

5.8.2 *Master of Science*

1. **Austine Awuor** - Department of Geosciences & the Earth
2. **Clement A. Miruka** - Department of Chemical Sciences & Technology
3. **Joan Nyika** - Department of Geosciences & the Earth
4. **Naomi Gichunge** - Department of Geosciences & the Earth
5. **Pesila Odera** - Department of Chemical Sciences & Technology
6. **Simon Adede** - Department of Chemical Sciences & Technology

5.8.3 *Postgraduate Students Supervision to Completion by Members of Staff*

1. **Prof. Thomas Onyango** - Mathematical modelling of soil acidification of soil contamination through the process of acidification, by H.P. Manoti Reg no. 10216658 (CUEA 2015).
2. **Prof. Thomas Onyango** -Mathematical modelling of the effect of Biology control of cereal aphid population dynamic, J.E.J Ojal Reg no.1021596, (CUEA 2015).
3. **Prof. Thomas Onyango** -Mathematical modelling of carbon pollution by vehicles on highways with huge embankment, J.O. Awino Reg no. 1021949, (CUEA,2015).
4. **Prof. Thomas Onyango** -Dynamical system for analyzing the effects of cigarette smoking on lung cancer risks, by F. Kigwai Reg no 1023789, (CUEA, 2015).
5. **Dr. Mark Kimathi** - A. Magua. Simulating the effect of Dam Breakage on the downstream topography: Morphological Evolution of mounds and forrow, Ph.D Thesis Kenyatta University, Kenya graduated in December 2015.
6. **Dr. Levi Mbugua** - Vivian Masiga Rakuomi (2016) (Masters in pharmaco epidemiology and phamacorigilance, University of Nairobi), assessment of cost effectiveness of pre-referral malaria treatment using decision Analytical modelling.
7. **Dr. Levi Mbugua** - Gerald Ochieng Wara (2016) cost effectiveness study of metformin monotherapy and metformin /DPP4 inhibitors combination therapy in drug naive type II diabetic patients (master of Pharmacy in Pharmaco-epidemiology and Pharmaco-vigilance) University of Nairobi.
8. **Dr. Levi Mbugua** - Wilson Mugwe (2016) the delaminates of efficacy of succession planning in public service sector with special focus or the Ministry of Education master of Arts MKU.
9. **Dr. Levi Mbugua** - Joseph Warutere (2016) the determinate of logical fame work adoption among Kenya Banks Corporate social responsibilities program, MSc in Monitoring & Evaluation, MKU.

5.9 Research Funding

1. **Awuor Adero**, National Commission for Science Technology and Innovation (NACOSTI) Research fund Ksh. 500,000/-.
2. **Dr George F. O. Obiero** , Postdoctoral Research Fellowship at Max Planck Institute, Jena Univerity Germany, Alexander von Humbolt Foundation – selected in February 2016.
3. **Hillary Adawo**:- National Commission for Science, Technology and Innovation Quantitative Microbiological Risk Posed by Pathogenic Bacteria from Fish in Kenyan Fish Value Chains.
4. **Kennedy W Chepukosi**, Science Technology and Innovation Research Grant for PhD, Sh. 700, 000 – 22nd April 2016.
5. **Oduor A. M. O.**, Post-doctoral Research Fellowship Alexender von Humbolt (foundation)500 EUR, September 2015.
6. **Oduor A. M. O.**, Testing adaptation of native plant population to invasive plant species Research

Grant for Ecologist in Africa, British Ecological Society £7250.00, December 2015.

7. **Phanice Kheseli Otieno**, Science Technology and Innovation Research Grant (PhD), National Commission for Science, Technology and Innovation (Nacosti) Sh. 900,000 on 22nd April 2015.
8. **Prof. A. I. Orina** - Obtained funding of USD 20, 000 from TWAS and Ksh. 700, 000 from NACOSTI for a study entitled “ Determining how khat use affects brain vulnerability to neurotoxins in aging users in a mouse model”.
9. PhD Student **Mildred Aduma** got funds from NACOSTI in the tune of Ksh 820,000 to undertake her research.

5.10 Staff Development

5.10.1 Academic Promotions

The following members of staff were promoted in the Faculty:

1. Prof. Isaac Orina from Senior Lecturer to Associate Professor.
2. Prof. Thomas Onyango from Senior Lecturer to Associate Professor.
3. Dr. Lewis Sitoko from Lecturer to Senior Lecturer.

5.10.2 Administrative positions Promotions

1. Prof. Francis Gatheri was appointed as the Executive Dean, Faculty of Applied Sciences & Technology, after the term of Prof. Michael Muia ended in February, 2016. Prof. F. Gatheri was the immediate former Director, School of Mathematics & Actuarial Sciences.
2. Dr. Grace Gachigua was appointed as the Chair, Dept. of Pure and Applied Mathematics
3. Dr. Mark Kimathi was moved from the Chair, Department of Pure & Applied Mathematics to Chair, Department of Industrial & Engineering Mathematics
4. Prof. Thomas Onyango was appointed as the Director, School of Mathematics and Actuarial Sciences, He was the immediate former Chairman, Department of Industrial & Engineering Mathematics
5. Dr. Peris Amwayi was appointed as the Chair; Department of Biochemistry & Biotechnology after Dr. Eric Lelo left the University.

5.10.3 New Appointments

1. Ayub Oduor – Lecturer, Department of Applied & Technical Biology
2. Dr. Sopher Ondiaka – Lecturer, Department of Applied & Technical Biology
3. Phanice Kheseli - Assistant Lecturer, Department of Applied & Technical Biology
4. Fredrick Musila – Tutorial fellow, Department of Applied & Technical Biology
5. Janet Kosgey – Tutorial Fellow, Department of Applied & Technical Biology
6. Trizah Koyi – Tutorial fellow, Department of Biochemistry & Biotechnology
7. Kephas Mita Mita – Technician, Department of Applied & Technical Biology
8. Sophia Atingo Kuve – Technician, Department of Applied & Technical Biology
9. Violet Akinyi – Technician, Department of Food Science & Technology
10. David Mututa – Technician, Department of Food Science & Technology
11. Dr Winnie Kiiru – Lecturer, Department of Ecology & Conservation Biology
12. Dr. George Obiero – Lecturer, Department of Biochemistry & Biotechnology
13. Dr. Peninah Wairagu – Lecturer, Department of Biochemistry & Biotechnology
14. Dr. Anthony Kamau – Lecturer, Department of Biochemistry & Biotechnology
15. Mr. Fredrick Mbui – Tutorial Fellow, Department of Biochemistry & Biotechnology
16. Kipchumba Biwott – Graduate Assistant, Department of Biochemistry & Biotechnology

5.10.4 Recognition and Development

1. **Prof. George Amolo**, Inducted as a member, Kenya National Academy of Science (MKNAS), 30th November, 2015
2. **Prof. George Amolo**, Received citation in Marquis Who is Who in the World, March 2016
3. **Prof. George Amolo**, Appointed visiting Associate Professor, University of the Witwatersrand, Republic of South Africa, 1st January 2016 to 31st December, 2018.
4. **Prof. George Amolo**, Appointed as a peer-reviewer by Commission for University Education (CUE) on a 4 year contract from July, 2015

5.10.5 Completion of Studies

1. Saru Mwaighacho, Egerton University, 2015 MSc.
2. Sophia Kirite, Technical University of Kenya(2015) Bachelor of Technology in Food Science Technology.

5.11 Graduation

In the year 2015/2016, the Faculty graduated 677 students for the various awards. The students were in five schools as listed below and were distributed for award of Certificates, Diplomas and, Bachelors degrees as indicated. This was an increase from the previous year where the Faculty graduated 497 students.

Table 2: 2015/2016 Graduates

SCHOOL	CERTIFICATE	DIPLOMA	BACHELORS	TOTAL
FACULTY OF APPLIED SCIENCE AND TECHNOLOGY				
School of Biological and Life Sciences	16	70	92	178
School of Computing and Information Technologies	36	58	46	140
School of Health Sciences and Technology	43	144	33	220
School of Mathematics and Actuarial Science	0	30	41	71
School of Physical Sciences and Technology	0	23	45	68
Total	95	325	257	677

In the December 2015 graduation ceremony, the Faculty produced the best candidate **Victoria K. Mwaeni** who graduated with a Bachelor of Technology in Biotechnology from the Department of Biochemistry & Biotechnology, School of Biological and Life Sciences. The Faculty has produced the best candidate two years running.



CHAPTER SIX

FACULTY OF ENGINEERING SCIENCES AND TECHNOLOGY

PREAMBLE

The Faculty of Engineering Science and Technology prides itself in producing technical expertise in the fields of Engineering and the Built Environment, with a focus on training Engineers, Technologists, Technicians and Artisans for the industry in line with the University Motto – *Education and Training for the Real World* and the *Vision 2030*.

The Faculty comprises five (5) Schools and one (1) Centre namely:

- (1) School of Architecture and the Built Environment (SABE)
- (2) School of Electrical and Electronic Engineering (SEEE)
- (3) School of Infrastructure and Resource Engineering (SIRE)
- (4) School of Mechanical and Process Engineering (SMPE)

- (5) School of Surveying and Geospatial Sciences (SSGS)
- (6) Centre for Engineering Innovation and Production (CEIP)

6.1 Faculty Management

The Faculty has two (2) Boards that facilitate the running and management of the Faculty namely:

- (a) Faculty Management Board
- (b) Faculty Academic Board

During the period under review, the Faculty Management Board held six (6) meetings to discuss Management issues affecting the Faculty while the Faculty Academic Board held fourteen (14) meetings to discuss examination results and curricula.

6.2 2015/2016 Graduation

In the 2015/2016 Academic Year, the Faculty graduated a total of 1087 students in various disciplines. This was an increase from 923 graduated in the year 2014/2015. The graduands were distributed as follows:

S/No	PROGRAMME	SCHOOL					TOTAL
		SABE	SEEE	SIRE	SGSS	SMPE	
1	Bachelor's Degree	165	121	56	100	81	523
2	Diploma	108	72	82	24	217	503
3	Certificate	-	2	10	31	18	61
TOTAL		273	195	148	155	316	1087

6.3 Curriculum Review and Development.

During the period under review, the Faculty Academic Board discussed the curricula for the following programmes:

- i. Bachelor of Engineering in Electrical and Electronic Engineering - that was revised to CUE format.
- ii. Master of Engineering in Electrical and Electronic Engineering (Power Systems Option).
- iii. Doctor of Philosophy in Electrical and Electronic Engineering.
- iv. Center for Engineering Innovation and Production (CEIP) Short Courses

6.4 Collaborations

During the 2015/2016 Academic Year, the Executive Dean, FEST participated in the following meetings, Workshops and Activities aimed at establishing and building collaborations/partnerships with various stakeholders and publics.

Meetings/workshops & Activities Attended by the Executive Dean – FEST (2015/2016)

S/No	Date	Meeting	Venue
1	21/9/15	Career & Higher Education Fair organized by the French Embassy. The idea was to bring Kenyan and French institutions of higher learning together with a view to forging collaborations.	Alliance Francoise
2	29/9/15	Meeting with Parliamentarians The meeting was sponsored by TU-K to sensitize Members of Parliament on the proposed KE'TTB bill which was before parliament then.	Hotel Intercontinental

S/No	Date	Meeting	Venue
3	15/10/15	Meeting with Hilton Hotel Officials The meeting was planned to showcase the achievements the collaboration achieved between TU-K and Hilton Hotels, especially on the production of Bio-diesel from waste vegetable oil. Hilton Hotels promised to continue supporting the project with a view to sponsoring similar pilot projects within the slum areas.	Director's Office – CEIP
4	22/10/15	SOGA presentations This was the culmination of a training held for a group of Master Trainers who had undergone a two weeks training on TVET curriculum development under the sponsorship of GIZ – SOGA programme. The Master trainers were able to demonstrate progress in development of curricula in the following areas:- <ul style="list-style-type: none"> • Instrumentation and Control • Mechanical Maintenance • Heavy Machinery (Plant) Maintenance • Welding • Networking 	Samsung Studio
5	30/10/15	Engineering Education Forum The meeting was sponsored by KENET for Heads of Departments, Engineering Faculty Deans to promote candid discussions that could improve Engineering Education without the risk of external critics, raking agencies or even the regulators CUE or EBK. The discussions and report was to be distilled into a policy brief for Vice Chancellors, Government, Industry and the regulators.	Safari Park
6	26/11/15	3 rd Heads of Engineering meeting Meeting organized by the Engineering Deans Caucus to discuss matters touching on Engineering education and training in Kenya	Kenyatta University
7	3/12/15	Engineering Council meeting Meeting organised by the Engineering Deans Caucus to discuss matters touching on Engineering education and training in Kenya	Kenyatta University
8	3/12/15	Kenya Airways Career Fair The meeting was organized to sensitize students on the KQ activities and job opportunities. Through this contact a number of Aeronautical students were given internship positions at KQ.	Main Hall
9	4/12/15	Public Lecture – France Ambassador to Kenya This was a follow-up meeting to the earlier reported career fair. The French Ambassador was able to demonstrate French Government's willingness to support collaborations between TU-K and French Universities. He promised to sponsor the VC to tour France for the same.	Main Hall
10	26/1/16	Career Talk – Konza Techno City The meeting was graced by the CEO Konza City Development Authority who outlined the vision and mission of Konza, and the initiatives that were on-going then. He promised to work with TU-K to establish a center of excellence in training and manufacturing within Konza City.	Main Hall
11	2/3/2016	Meeting with Principals of TTIs Sponsored by GIZ-SOGA project and was organized to drum up support for the Master Trainers programme and the need to develop internationally acceptable TIVET curriculum.	Pride Inn Hotel
12	11/3/2016	Presentation of laboratory Equipment for STEM by Amatrol Ltd and Nirvrana Ltd	Samsung Lab

S/No	Date	Meeting	Venue
13	15/5/16	Printing International Conference and Exhibition. Meeting was sponsored by Kenyatta University to sensitize participants on 3D printing technology	Kenyatta University
14	17/6/16	Visit by BORAQS This was an accreditation audit visit for Bachelor of Architecture and Bachelor of Quantity Surveying programmes in TU-K	TU-K
15	12/8/16	Meeting with Swedish Embassy and Volvo Meeting organized to bring together the official re-seller of Volvo automobiles and equipment in the country and TU-K with a view to forging a collaboration towards training to maintenance personnel	Conference Room
16	15/8/16	Meeting UBRICA Officials This was the first meeting between UBRICA and TU-K to showcase the proposed UBRICA project in SUSWA. The project is sponsored by International Union of Architects - Public Health Group (UIA-PHG) • Global University Programs in Healthcare Architecture (GUPHA) Ustawi Biomedical Research Innovation and Industrial Centers of Africa (UBRICA) Co-sponsored by Departments of Architecture, and Landscape Architecture & Urban Planning • Center for Health Systems & Design • Texas A&M University School of Public Health Texas A&M Health Science Center • NSF Center for Health Organisation Transformation (CHOT)	Dean's Board Room
17	19/8/16	Meeting with Toyota Academy organized to discuss possibilities of collaboration in the development of vehicle testing centers across Kenya. TU-K was ready to lend a hand when called upon to do so, especially in the training of inspectors.	Conference Room -TU-K

6.1 SCHOOL OF ARCHITECTURE AND THE BUILT ENVIRONMENT

PREAMBLE

The School of Architecture and the Built Environment (SABE) offers cutting edge professional and academic training in the built environment. The School aspires to be a centre of excellence in learning creativity and enterprise, promoting economic, social and cultural well-being of people through well conceived and managed built environments. The School of is composed of two broad thematic areas; Architecture and Environmental Design. The Architecture part of the School concentrates on training of Architects and allied fields such as Landscape Architecture, Interior Design and Architectural Construction area of focus develops application in environmental building physics and sustainable building construction. Professional programmes in the School are being subjected to local and international accreditation through the Board of Registration of Architects and Quantity Surveyors, Commonwealth Association of Architects (CAA) and the International Union of Architects (UA). These accreditations will enable our graduates to practice in any part of the world.

Graduation

In the Academic Year 2015/2016, the School graduated a total of 273 candidates in various programmes as listed below:

S/NO	PROGRAMMES	NUMBER OF STUDENTS
1	Bachelor of Architectural Studies	12
2	Bachelor of Technology (Building Construction)	30
3	Bachelor of Philosophy in Technology (Construction Management)	21
4	Bachelor of Built Environment in Construction Management	10

S/NO	PROGRAMMES	NUMBER OF STUDENTS
5	Bachelor of Built Environment (Urban Design and Development)	13
6	Bachelor of Built Environment in Real Estate	20
7	Bachelor of Quantity Surveying	59
8	Diploma in Technology – (Architecture)	29
9	Diploma in Technology (Building Construction)	33
10	Diploma in Technology (Construction Management)	16
11	Diploma in Technology (Quantity Surveying)	30
	TOTAL	273

At the beginning of the 2015/2016 Academic year, the School held numerous School Academic Board meetings and Executive Board meetings. In addition, SABE was privileged to host inspection teams from the Board of Registration of Architects and Quantity Surveyors, and the Commission for University Education on 17th June, 2016.

A DEPARTMENT OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

Background Information:

The Department of Architecture offers the following programmes: -

- 001. *Diploma in Technology in Architecture*
- 002. *Bachelor of Architectural Studies (B.A.S)*
- 003. *Bachelor of Architecture (B. Arch.)*

The Professional program in the Department is currently undergoing local accreditation by the Board of Registration of Architects and Quantity Surveyors (BORAQS). International accreditation by the Commonwealth Association of Architects (CAA) is planned for 2017. This accreditation will enable our graduates to practice in any part of the world.

In the 2015/2016 academic year, the Department held monthly Departmental Academic Board meetings.

1 Curriculum Review:

The first lot of B. Arch students shall complete the program this year and graduate in December 2016. Our B. Arch curriculum shall therefore be due for the first full review in 2017.

In the ongoing discussions regarding accreditation of the B.A.S/B. Arch programme by The Board of Registration of Architects and Quantity Surveyors (BORAQS), recommendations were given on areas of the curriculum that require to be reviewed.

2 Admissions:

In the 2015/2016 academic year, the Department admitted 30 students in the Dip Tech (Architecture) programme and 36 students in the B.A.S/B. Arch programme. This brought the total student enrolment in the department to 275 split as follows; 183 for degree programmes and 92 for diploma programmes.

3 Graduation:

12 students completed their Bachelor of Architectural Studies (B.A.S) Degree programme and graduated in December 2015; two (2) with First Class honours seven (7) with Second Class honours - upper division and three (3) with Second Class honours - lower division.

In the Diploma in Technology in Architecture programme, 29 candidates graduated after completing their three years of study. Five (5) graduated with distinctions, seventeen (17) with credit – upper division and seven (7) with credit – lower division.

4 Conferences and Seminars Attended:

All members of staff who are registered Architects attended the annual BORAQS continuous Professional Development 2-day workshop in September 2015 at Safari Park Hotel.

Arch. Mutua together with Prof. Dr. QS. Masu, the Director of SABE, attended two stakeholder consultative workshops between July and August organized by the BORAQS to discuss common issues affecting teaching of Architecture and Quantity Surveying professional programmes in Kenya. In attendance were CUE, KNQA, AAK, IQSK and all Universities offering the above programmes.

5 Publications:

Arch. Martin Tairo, a Professional Teaching Fellow in the Department published three (3) articles in the BUILDDesign Magazine that has wide readership in Architectural professional circles. He is also the Chief Editor of the Magazine. The articles were: -

Steel Vs Concrete; which wins? - BUILDDesign Magazine Issue 15

Should Architects advertise their services? - BUILDDesign Magazine Issue 17

Corruption in construction projects - BUILDDesign Magazine Issue 18

6. Staff Development

- Arch. Patrick Karugo, a Professional Practice Fellow successfully defended his PhD Thesis at the University of Nairobi and he is expected to graduate in December 2016.
- James Mworira (Tutorial Fellow) has successfully completed his M. Arch Degree at the University of Nairobi and will be graduating in September 2016.
- Arch Nelly Yungo (Tutorial Fellow), Arch. Joel Oyuga (Technologist), and Michael Mutuku (Technologist) are also pursuing their Masters' degree programmes at various universities.

7. Staff Distribution:

Positions	Qualification	No
Senior Lecturer	PhD	1
Senior Lecturer	Masters	1
Lecturer	PhD (ongoing) / Masters	1
Lecturer	Masters	3
Assistant Lecturer	Masters	6
Tutorial Fellow	Masters (ongoing) / Bachelors	2
Technologists	Masters (ongoing) / Bachelors	2
Professional Practice Fellow	PhD (ongoing) / Masters	1
Professional Teaching Fellow	Bachelors	1

B DEPARTMENT OF CONSTRUCTION ECONOMICS AND MANAGEMENT

The Department of Construction Economics and Management trains professionals in Quantity Survey and Construction Project Management. These are key professionals in the building industry. They are regulated nationally through the Board of Architects and Quantity Surveyors of Kenya (BORAQS) and are professionally organized around the Architectural Association of Kenya and the Institute of Quantity Surveyors of Kenya (IQSK). Internationally, they will be accredited by Chartered Institute of Building (CIOB) and Royal Institute of Chartered Surveyors (RICS). The programme of Quantity Surveying prepares the candidates to function as Construction Cost Consultants whereas the program for Construction Management prepares the candidates to function as Construction Project Managers.

During the Academic year 2015/2016, the Department had 432 students registered in various programmes. The following programmes were offered in the Department:

1. ADMISSIONS

During the period under review, the Department admitted student into various programs as indicated below:

Programs	No of students admitted
Bachelor of Quantity Surveying (EABR/2015)	37
Bachelor of Quantity Surveying (EABI/2015P)	52
Bachelor of Built Environment in Construction Management EABQ/2015	33
Bachelor of Built Environment in Construction Management EABQ/2015P	24
Diploma in Technology (Quantity Surveying)	35
Total	181

2. GRADUATION

During the period under review, the Department graduated students as indicated below:

Programs	No of students admitted
Bachelor of Quantity Surveying	59
Bachelor of Built Environment in Construction Management	10
Bachelor of Philosophy in Technology (Construction Management)	21
Diploma in Technology (Quantity Surveying)	35
Total	125

3. Seminar Attended

Mr. Absalom H.V. Lamka presented a Seminar Paper entitled: Resource Leveling Management practices by Construction Firms in Kenya in a Seminar held at the School of Graduate and Advanced Studies, TU-K on 26th April, 2016.

4. Publications by Staff

Lamka , A.H.V. (2015) Investigation of Factors Influencing Construction Sites Labour Productivity In Nairobi County, Kenya MSc. Thesis, Nairobi: JKUAT.

5. Staff Distribution

By the end of 2015/2016 Academic Year, the Department had a total of fifteen members of staff as indicated below:

Absalom H.V. Lamka	AC0092	M	MSc. Const.Mgt, HND (MP), Dip (MP)	XIIA	Technologist (Chairman)
Erastus Gitari Njeru	AC0140	M	M. Env (KU, HND (MP), Dip. Ed (KTTC), Dip (KP)	XIIA	Lecturer
Samuel K. Ngunyi	AC0215	M	M.A. Construction Mgt (UoN), BSc. (MU)	XI	Teaching Assistant
Peter Njagi Githinji	AC0235	M	M.A. Construction Mgt., B. Ed	XIA	Assistant Lecturer
Joachim E.O. Wafula	AC0446	M	MSc. Building Science, BA. Building Economics	XIA	Assistant Lecturer
Paul Kimani Kairu	AC0059	M	B. Phil. Tech (Construction Mgt)	XI	Technologist
George King'ori	AC0150	M	B. Phil. Tech (Construction Mgt) HND (KP), Dip (KP)	XI	Technologist
Edmund Muthigani	AC0142	M	B. Phil. Tech (Const. Mgt) HND (KP) Dip (KTTC)	Xi	Technologist
Harrison Wachira	AC0578	M	MSc. (Construction Project Mgt)	XIA	Assistant Lecturer
Edward K. Mbugua	CT0336	M	B. (Construction Mgt) - On 2 years contract		Graduate Assistant
David Choka	CT0397	M	MA (Construction Mgt) – On 2 years contract	XIIA	Professional Practice Fellow

6. Staff Development

During the period under review, Mr. Absalom H.D. Lamka completed his MSc. Construction Project Management at Jomo Kenyatta University of Agriculture and Technology (JKUAT)

7. Promotion and New Appointments

During the period under review, the following members were appointed and/or promoted to various positions as indicated against their names:

- Mr. Peter Njagi Githinji promoted from Teaching Assistant to Assistant Lecturer
- Mr. Harrison K. Wachira – joined the Department as Assistant Lecturer
- Mr. David Choka – joined the Department as Professional Practice Fellow
- Mr. Edward Kiiru Mbugua – joined the Department as a Graduate Assistant
- Mr. Michael Achieng’ – joined the Department as an Assistant Lecturer

C DEPARTMENT OF BUILDING SCIENCE AND TECHNOLOGY

The Department of Building Science and Technology is the only University Department in the Country, and in the Eastern and Central African region, that offers Bachelor of Technology (B.Tech) in Building Construction. The philosophy of the Department is to develop and advance the technologies and practices of Building Construction, with graduates from this Department expected to devote a substantial part of their professional career to rationally solving problems of how to make Kenya technologically advanced as well as break new grounds in all aspects of building construction.

To this end, the following programmes are currently offered in the Department of Building Science and Technology:

- Bachelor of Technology (Building Construction)
- Diploma in Technology (Building Construction)
- Certificate in Building Construction and Construction Technician Parts (i), (ii), and (iii); as well as Short courses in the Building Construction Trades.
- The Department is in the process of developing a graduate programmes, M.Tech. (Building Technology).

The programmes are packaged to equip graduates at all levels (Construction Technician, Diploma in Technology and Bachelor of Technology) with the necessary skills for employment in construction industry, banking sector, oil sector, teaching and research, as well as self employment. They are structured to enable graduates at all levels (Construction Technician, Diploma in Technology and Bachelor of Technology) progress to the highest level of professional development based on their ability.

1. Students Enrolment Matrix

Code	Programme	Year of Study	Male	Female	Total
DEGREE					
Cb516112	B. Tech. (Building Construction)	4 th	21	3	24
EABI/2013PS	B. Tech. (Building Construction)	4 th	6	1	7
Cb527113	B. Tech. (Building Construction)	4 th	17	2	19
EABI/2013S	B. Tech. (Building Construction)	3 rd	24	3	27
EABI/2015PS	B. Tech. (Building Construction)	3 rd	3	0	3
EABI/2014S	B. Tech. (Building Construction)	2 nd	31	5	36
EABI/2015S	B. Tech. (Building Construction)	1 st	30	5	35
Total Bachelors Degree Students					152
DIPLOMA					
EABE/2013P	Dip. Tech. (Building Construction)	3 rd	17	0	17
EABE/2013PS	Dip. Tech. (Building Construction)	3 rd	31	3	34

Code	Programme	Year of Study	Male	Female	Total
EABE/2014PS	Dip. Tech. (Building Construction)	2 nd	15	4	19
EABE/2014PS	Dip. Tech. (Building Construction)	1 st	13	3	16
Total Diploma Students					86
Total Enrollment					238

2. Ongoing initiatives

The Department continued to pursue possibilities of partnering with different stakeholders in the construction industry. This was aimed at ensuring that the course content offered was proper and appropriate to equip our trainees with the necessary skills that will make them self reliant to venture into self employment and to drive the construction industry towards the realisation of Vision 2030.

The Department has the potential of becoming a regional focal point in specialised building and construction trades training which will enhance the furtherance of TU-K's mandate of educating and training for the real world as guided by our motto.

3. Flagship Programs

The department has two flagship programs

- i) Bachelor of Technology (Building Construction)
- ii) Diploma in Technology (Building Construction)

D DEPARTMENT OF REAL ESTATES AND PROPERTY MANAGEMENT

1. Preamble

The Department of Real Estate and Property Management (RE&PM) trains professionals in Real Estate, Property Agency and Marketing, Property Valuation and Management and Land Administration. In the 2015/2016 academic year, the Department had 175 students. Upon graduation, the students can be engaged in several property related careers including but not limited to work in Valuation; Facility Management, Estate Portfolio Management, Real Estate Agency and Marketing and in Land Administration and Management.

The following programs are offered in the Department:

- Bachelors of Real Estate and Property Studies (Both regular and Module II)
- Diploma in Technology- Real Estate (Module II).

The key professionals in Real Estate and Property Management are regulated nationally by the Institution of Surveyors of Kenya (ISK) under the following member chapters: Valuation and Estate Management Surveyors, Building Surveyors and Land Management Surveyors.

2 Academic Board Meetings

During the 2015/2016 academic year, the Department held a total of ten (10) Departmental meetings that deliberated on several issues including curriculum development and review, exam moderation, results approval and student affairs. The Department participated in four (4) School Executive Board meetings and three (3) School Academic Board Meetings.

3 Curriculum Development and Review

During the period under review, the Department embarked on reviewing the Bachelor of Real Estate degree programme and putting it in the Commission for University Education (CUE) format. This exercise is now almost complete.

The Department was also finalising the drafting of a curriculum for a Master's degree programme in Property Investment and Finance. This is considered important due to the lack of experts trained in this area in the country.

4 Admissions

During the period under review, the Department admitted three (3) groups of students; 40 Bachelor's degree students under regular programme, 10 Bachelor's degree students under Module II programme and 12 Diploma students under Module II programme.

5 Graduation

The Department graduated its first batch of Bachelor's students in December 2015. A total of twenty (20) students graduated with the Bachelor's degree in Real Estate and Property Studies, two (2) with first class honours, sixteen (16) with second class upper division and two (2) with lower Division.

6 Conferences/ Seminars Attended by staff

Three (3) full time members of staff attended and participated in seminars and conferences as follows; Mr Muriithi and Mr Madi Yahya attended a conference on 'Affordable Housing' organized by the Ministry of Housing in January 2016. Dr. Raphael Kieti participated in a seminar on Valuation of Plant and Machinery organized by the Institution of Surveyors of Kenya (ISK) in February 2016 and presented a paper on 'Principles of Valuation of Motor Vehicles'.

7 Publications by School staff

Dr. Raphael Kieti and Prof. Sylvester Masu published an Article titled: 'Urban Housing Affordability in Kenya' in the Africa Habitat Review Journal.

8 Postgraduate Supervision by Staff in the Department

Dr. Sarah Gitau is currently supervising Mr. James Muriithi who is working on his PhD proposal in the Department. Dr. Raphael Kieti is supervising Mr. Linus Korir who is registered for PhD in the school.

9 Staff Distribution

S/NO	Name of Staff	P/N0	Qualification/Designation
1	Dr. Sarah Gitau	AC0-420	PhD, Senior Lecturer and Chair of Department
2	Dr. Raphael Kieti	AC0-497	PhD/ Lecturer
3	Ms. Diana Gachuhi	AC0-442	Master's/ Assistant Lecturer
4	Mr. James Muriithi	AC0-563	Master's/Assistant Lecturer
5	Mr. Madi Yahya	AC0-527	Master's/Assistant Lecturer
6	Mr. Linus Korir	CT0-307	Master's/Tutorial Fellow

10 Completion of Doctor of Philosophy degree by staff within the year

One full – time member of staff Raphael Kieti, completed his PhD and graduated in September 2015 from the University of Nairobi.

11 Promotions and New Appointments

Two full - time staff, Mr Muriithi (Assistant Lecturer) and Mr. Linus Korir (Tutorial Fellow), were appointed during the period under review. One staff Dr. Raphael Kieti was promoted from Assistant Lecturer to full Lecturer during the year.

E. DEPARTMENT OF SPATIAL PLANNING AND DESIGN

1. Members of Staff Appointed During This Period

The following members of staff joined the Department during the Academic Year 2015/2016.

- Dr. Margaret Macharia Kedogo
- Grace Kamweru
- Joan Nyangwala
- Dinah Ajawah

2. Visiting Professors

The Department hosted Prof. Pieter Van den Broeck from K.U. Leuven. During this two day visit, he participated in a PhD doctorate presentation that was held by members of staff.

3. Gradaunds for 2015/2016 Academic Year

The Department graduated 13 students with the Bachelor of Built Environment in Urban Design and Development in December 2015.

4. List of New Partnerships Established

The Department established partnership with the County Government of Kilifi whereby it was to assist the County prepare a County Spatial Plan for Kilifi County.

6.2 SCHOOL OF MECHANICAL AND PROCESS ENGINEERING

1.0 INTRODUCTION

The School of Mechanical and Process Engineering (SMPE) was established in January 2014 to offer cutting edge professional and academic training in line with the University's motto of "Education and training for the real world." The School focuses on aspects of engineering that are concerned with mechanical and manufacturing systems on one hand and process engineering on the other hand.

The School has four (4) Departments namely:

- a). Department of Mechanical and Mechatronic Engineering
- b). Department of Chemical and Petroleum Engineering
- c). Department of Aerospace and Aviation Engineering
- d). Department of Industrial and Manufacturing Engineering

The Department of Industrial and Manufacturing Engineering is yet to take off.

2.0 New Appointments

During the period under review, the following new members of staff were appointed in the Departments indicated:

Department of Chemical and Petroleum Engineering

- I. Professor Kionga Kamau – Associate Professor
- II. Jacob Kittinya – Assistant Lecturer
- III. Fabisch Kilonzi – Tutorial Fellow

Department Aerospace and Aviation Engineering

- i. Samson Ochiel – Graduate Assistant
- ii. William Maina – Senior Technician
- iii. Evans Kimaru - Technician

2.1 Promotions

In the 2015/2016 Academic Year, the following members of staff were appointed to the positions indicated against their names:

- i. Dr. Bilha Gitonga – Ag. Chairman, Department of Chemical and Petroleum Engineering.
- ii. Mr. Julius Kirui – Ag. Chairman, Department of Mechanical and Mechatronic Engineering

2.2 Staff Development.

During the period under review, the following members of staff enrolled into PhD Programmes:

- Leonard Onyango –PhD in Mechanical Engineering - South Africa
- Fredrick Nzioka - China
- Wilson Sitienei - PhD in Mechanical Engineering - China
- Jacob Kittinya – PhD in Chemical Engineering, Tshwane University of Technology in South Africa
- Fabisch Kilonzi – PhD in Energy and Process Engineering, Ecole des Mines University - France

2.3 Staff Attrition

Category	Name
Resignations	Dr. Benson Gathitu – Chemical Engineering Ms. Jackline Njue – Aeronautical and Aviation Engineering Dickens Magak -
Death	Professor Wilson Ogola - Mechanical and Mechatronic Engineering

3. Conference Papers Presented/Attended by Staff

B. Eshton (2015) Potential Environmental Impacts from production and use of Bioethanol; 3rd TU-K Conference on Innovative Technologies for Development.

4. Students Enrolment

During the 2015/2016 academic year, the following numbers were admitted into the various Master's, Bachelors, Diploma as and Certificates courses offered by the School.

a). Department of Mechanical and Mechatronic Engineering

Name of the Program	No. of Students
Master of Technology in Mechanical Engineering	10
Bachelor of Engineering in Mechanical Engineering	67
Bachelor of Technology in Mechanical Engineering	68
Bachelor of Philosophy in Mechanical Engineering	10
Diploma in Mechanical Engineering	56
Certificate in Mechanical Engineering	38
Total	238

b). Department of Chemical and Petroleum Engineering

Name of Program	No. of Students
Bachelor of Engineering in Chemical Engineering	18
Bachelor of Technology in Chemical Engineering	56
Total	74

c) Department of Aerospace and Aviation Engineering

Name of Program	No. of Students
Bachelor of Engineering in Aeronautical Engineering	35
Diploma in Aeronautical Engineering	38
Certificate in Aeronautical Engineering	8
Total	71

6.3 SCHOOL OF INFRASTRUCTURE AND RESOURCE ENGINEERING

1. INTRODUCTION

The School of Infrastructure and Resource Engineering (SIRE) was established in January 2014 to offer cutting edge professional and academic training in line with the University's motto of 'Education and Training for the Real World'.

SIRE is structured into four (4) Departments namely:

- Department of Civil and Construction Engineering
- Department of Biosystems and Environmental Engineering
- Department of Mining and Minerals Engineering
- Department of Engineering Economics and Management

However, apart from the Department of Civil and Construction Engineering which is offering Bachelor of Engineering (Civil Engineering), Bachelor of Technology (Civil Engineering) and Diploma in Technology (Civil Engineering) courses, the other three Departments are yet to take off.

2. MEETINGS HELD

During the 2015/2016 Academic Year, the School held a total of six (6) Executive Board meetings and eight (8) Academic Board meetings to discuss results, curricula and other management issues.

3. CURRICULUM REVIEW

The curriculum for Bachelor of Engineering (Civil Engineering) was revised to conform to Engineers Board of Kenya (EBK) requirements. It has since been forwarded to EBK for assessment and approval.

4. ADMISSIONS

The School admitted a total of 344 students to pursue various courses as tabulated below:

No.	Course	No. of students admitted		
		Module 1/ Class A	Module 2/Class B	Total Admitted
	Bachelor of Technology (Civil Engineering)	73	32	105
	Bachelor of Engineering (Civil Engineering)	45	60	105
	Diploma in Technology (Civil Engineering)	52	62	114
	Certificate in Technology (Civil Engineering)	20	-	20
TOTAL				344

5. GRADUATION

A total of 148 students graduated from the School during the Technical University of Kenya's 3rd graduation ceremony held on 18th December, 2015 as follows:

No.	Course	No. of Students
	Bachelor of Philosophy in Technology (Civil Engineering)	6
	Bachelor of Technology (Civil Engineering)	1
	Bachelor of Engineering (Civil Engineering)	49
	Diploma in Technology (Civil Engineering)	82
	Certificate in Technology (Civil Engineering)	10
TOTAL		148

6. CONFERENCES/SEMINARS ATTENDED BY STAFF IN THE SCHOOL

Members of staff in the School attended Conferences during the period under review as here under:

Name of Staff	Date/period of seminar	Purpose/theme/organizers	Venue
Dr. George Okwadha (Snr. Lecturer)	15 th – 17 th March, 2016	1 st Integrated Conference on Transport and Road Research. Organized by Kenya Roads Board in collaboration with Materials Testing and Research Division, Ministry of Transport and Infrastructure; and Africa Community Access Programme	White Sands Hotel, Mombasa

7. PUBLICATIONS BY STAFF

During the 2015/2016 Academic Year, the following members of staff published their research papers in peer reviewed journals.

No.	Name of Staff	Designation	Title of Publication	Journal Published in
1	Prof. George Thumbi	Professor	Ground water mapping of Makueni County, Eastern Kenya using remote sensing and geographical information system technologies	Journal of International Academic Research for Multidisciplinary
2	Dr. George O. Okwadha	Senior Lecturer		
3	Mr. George C. Kirumba	Tutorial Fellow	The efficiency of Pontederia Cordata in nitrogen removal from landscape water under varying flow rates.	Water Practice and Technology. 2015 Sep 1;10(3):583-94.
4	Mr. George C. Kirumba	Tutorial Fellow	The role of a hybrid phytosystem in landscape water purification and herbicides removal.	Water Science and Technology. 2015 Dec 1;72(11):2052-61
5	Mr. George C. Kirumba	Tutorial Fellow	Role of UV photolysis in accelerating the biodegradation of 2, 4, 6-TCP.	Biodegradation. 2015 Sep 18:1-5.
6	Mr. George C. Kirumba	Tutorial Fellow	Effect of surfactants on the removal and acute toxicity of aqueous nC60 aggregates in water treatment process.	Environmental Science and Pollution Research. 2015 Jul 1; 22(13):9676-85.
7	Mr. George C. Kirumba	Tutorial Fellow	Changes in metabolites, antioxidant system, and gene expression in Microcystis aeruginosa under sodium chloride stress.	Ecotoxicology and environmental safety. 2015 Dec 31;122:126-35.

8. Postgraduate Supervision by Staff in the School

Some senior staff in the School are currently supervising postgraduate students as follows:

	Supervisor	Designation	Name of Student & Admission No.	Course	Title
1	Prof. George M. Thumbi	Professor	Stanley Kibe Ng'ang'a (EECX/06509P/2016	PhD in Civil Engineering	Ground water mapping, quality assessment & hydrogeophysical modeling in Makueni County, Eastern Kenya
2	Dr. George O. Okwadha	Senior Lecturer			

9. Staff Development

Mr. Alphonse A. Owayo is pursuing a Doctorate degree while Mr. Felix Omondi and Ms Sharon Otieno are currently pursuing Masters degrees.

10 NEW APPOINTMENTS

The School received a total of nine (9) new appointments during the period under review as follows:

No	Name	Gender	Qualifications	Grade	Designation	Date Appointed
	Eng. Erastus Kariuki	M	MSc (Construction Eng)	XIIIA	Senior Lecturer	19.09.2015
	Dr. Luke Olang	M	PhD in Hydrology	XIIIA	Senior Lecturer	25.08.2015
	Pius Migwi	M	Construction Part II; Autocard; HDip (Building)	XIII	Senior Technician	13.07.2015
	Eng. Felix Adoyo Otieno	M	MSc (Civil Eng)	XIIIA	Professional Fellow	22.09.2015
	Eng. Petronila Ogut	F	MSc. (Hydroinformatics); BSc (Civil)	XIIIA	Lecturer	19.10.2015
	Jedida W. Maina	F	MSc (Environment)	XIA	Assistant Lecturer	01.12.2015

No	Name	Gender	Qualifications	Grade	Designation	Date Appointed
	Alphonse Owayo	M	MSc (Construction Eng)	XI	Tutorial Fellow	19.10.2015
	Collins O. Kawanga	M	Diploma (Civil)	VII	Technician	10.12.2015

6.4 SCHOOL OF ELECTRICAL AND ELECTRONIC ENGINEERING

I. General Introduction

Electrical Engineering is one of the most competitive programmes amongst students seeking admission into universities. It attracts a large number of applicants from high school and also the working class who desire to further their education. This is due to the fact that the field of Electrical Engineering currently offers some of the best employment opportunities to graduates in Kenya and Africa at large.

The School of Electrical and Electronic Engineering is headed by Prof. Stephen Musyoki, assisted by Dr. Christopher Maina Muriithi who heads the Electrical Power Department and Mr. Joseph Abok Obadha who heads the Telecommunication and Information Engineering.

The School of Electrical and Electronic Engineering is structured into four Departments namely:

- Department of Telecommunication and Information Engineering.
- Department of Electrical and Power Engineering.
- Department of Electronics and Computer Engineering.
- Department of Automation and Control Engineering.

4. Admissions (Masters, Bachelors, Diplomas and Certificates)

During the 2015/2016 Academic Year, the School admitted new students into the various programs as indicated hereunder:

S/NO	Program	Numbers
1	Diploma in Technology in Electrical and Electronic Engineering	62
2	Bachelor of Technology in Electrical and Electronic Engineering	92
3	Bachelor of Philosophy in Electrical and Electronic Engineering	7
4	Bachelor of Engineering in Electrical and Electronic Engineering	49
6	Certificate In Electrical Installation Technician Iii	28
	TOTAL	238

5. New Curricula

During the period under review, the School reviewed and developed curricula for the following programs:

- Bachelor of Engineering in Electrical and Electronic Engineering - this was revised to CUE format.
- Master of Engineering in Electrical and Electronic Engineering (Power Systems Option).
- Doctor of Philosophy in Electrical and Electronic Engineering.

6. Conferences/Seminars

The following members of staff attended local and international conferences during the period under review.

	Member of Staff	Conference Attended	Venue	Date
1	Dr Christopher Maina	Solar Photovoltaic Training for T1 and T2	JKUAT-JICA Bright Project	August 2016
2	Antone Mubinya	Workshop on Enhancing Participation in National/International Standardisation Activities.	Nairobi Safari Club	8 th April 2016

	Antone Mubinya	Standards Awareness Workshop for Final Year Electrical and Communications Engineering Students.	Technical University of Kenya.	20 th May 2016
	Antone Mubinya	Academic Integrity and Plagiarism	NACECE Resource Centre KICD	4 th – 5 th August 2016
3	James Mbuthi	Workshop on Enhancing Participation in National/International Standardisation Activities.	Nairobi Safari Club	8 th April 2016

7. Publications by School Staff

During the 2015/2016 Academic Year, the following members of staff published their research papers in peer reviewed journals.

	Name of Staff	Publication	Publisher	Year
1	Prof. S. Musyoki, Co-authors S.K. Muendo, P.K. Langat	Traffic Analysis of Power Consumption Reduction in Cellular Radio Access Networks	Journal of Sustainable Research in Engineering, Vol 2, (3), pp84-91.	2015
2	Prof. S. Musyoki, Co-authors: F. E. Omosa, K. Langat	Performance of Adaptive Bandwidth Allocation for Multimedia Handover Services in UMTS Mobile Cellular Networks.	Journal of Sustainable Research in Engineering Vol 2 (4), pp 148-157	2015
3	Prof. S. Musyoki, Co-authors: E.Omosa, K. Langat	Performance of an Admission Control Scheme for Bandwidth in Multimedia Handover Services in UMTS Mobile Cellular Network.	Proc. Of the 2016 Annual Conf. on Sustainable Research and Innovation, pp 94-103,	2016
4	Prof. S. Musyoki, Co-authors: B. Langat, K.P. Langat	Bandwidth Enhancement of a Circular Microstrip Patch Antenna Through Shape Modification in the S-Band	Maseno University Journal, Vol 1, pp 282-296	2015
5	Dr Christopher Maina Muriithi, Co-authors:A.M.Mutegi, P.K.Kihato, M.J. Saulo	Optimal Placement of FACTS Devices Using Voltage Stability Indices.	Proc. Of the 2016 Sustainable Research and Innovation (SRI) conf., Kenya School of Monetary Studies, pp 138-143.	May 2016
6	Dr Christopher Maina Muriithi, Co Authors: C.N. Karue, D.K. Murage	Shore to Ship Power for Mombasa Port possibilities and Challenges.	Proc. Of the 2016 Sustainable Research and Innovation (SRI) conf., Kenya School of Monetary Studies, pp 132-137	May 2016
7	Dr Christopher Maina Muriithi, Co-authors:A.M.Mutegi, P.K.Kihato, M.J. Saulo	Voltage Stability Improvement on Optimal Placement of FACTS Devices.	European Journal of Advances in Engineering and Technology, Vol. 3. Issue7.	2016.
8	Boniface K. Chomba, Co-authors: R.J. Omusonga, D. M. Nyaanga, J.M. Githeko.	Effects of Selected Roofing Materials and Angle of Incidence on Navaid's Signal Strength.	IISTE Industrial Engineering Letters, Vol. 5, No 5. Pp 137-151	2015
9	Winston Ojenge, Co Authors: William Okelo-Odongo, Patrick Ogao	Use of GA-Optimized NN to Predict DVB-T2 Receiver Spectrum Holes to Accommodate Burden GSM Voice Calls	International Journal of Simulation Systems, Science and Technology - Vol-16/No-4/paper12	August 2015
10	W. Ojenge, Co Authors: W. Okelo-Odongo, P. Ogao	Comparing PSO and GA Optimizers in MLP to Predict Mobile Traffic Jam Time	International Journal of Computer Science and Information Security (IJCSIS), Vol. 13, No. 10	October 2015

	Name of Staff	Publication	Publisher	Year
11	Dr Christopher Maina Muriithi, Co Authors: Joel.R. Sutter, John N. Nderu	“Placement of FACTS for Voltage Profile Improvement and Loss Reduction”	International Journal of Emerging Technology and Advanced Engineering (IJETAEE), ISSN: 2250-2459, PP: 53 – 58	Oct-15

8. Staff Development

The following members of staff completed their Masters Degrees within the 2015/2016 Academic Year

	Name of Staff	Degree Awarded	Institution	Year
1	Samuel Kamau	Masters in Data Communications	KCA University	Nov-15
2	Mary Ahuna	MSc. Electronic Engineering	University of KwaZulu, Natal	April, 2016

Short Courses

The following members of staff attended short courses meant to improve their skills during the period under review:

Short Courses attended

	Name of Staff	Certificated Awarded	Institution	Year
1	Mary Guchu	IBM Mobile Application Development.	United States International University	Jan 2016
2	Mary Guchu	Oracle Java Fundamentals	Strathmore University	April 2016
3	George Asiko	Competence Based Education and Training (CBET), GIZ	Kenya Institute of Curriculum Development (KICD)	Sept. 2015
4	George Asiko	Satellite Communications	African Advanced Level Telecommunications Institute.	Aug. 2016
5	Edward Njenga	Competence Based Education and Training (CBET), GIZ	Kenya Institute of Curriculum Development (KICD)	Sept. 2015
6	Edward Njenga	Satellite Communications	African Advanced Level Telecommunications Institute.	August 2016

6.5 SCHOOL OF SURVEYING AND GEOSPATIAL SCIENCES

1. BACKGROUND OF THE SCHOOL

The School of Surveying and Geospatial Sciences was established in January 2014 from the Department of Geospatial Science and Engineering of the then School of Engineering Sciences and Technology. Surveying and Geospatial Sciences enables the collection of data pertaining to the location, shape and sizes of land parcels and the rights and interests pertaining to these land parcels. This information allows for the transactions of land parcels and also provides for infrastructure development activities, information that is relevant. We can make sound decisions that will affect virtually all aspects of human life.

The School has four Departments namely:

- i) Department of Geodetic Science and Navigation
- ii) Department of Geoinformation and Earth Observation
- iii) Department of Surveying Science and Technology
- iv) Department of Land Administration and Information

The School offers various programs i.e. Bachelors, Diplomas and Certificate. The School looks forward to starting Master's degrees in various disciplines in the 2016/2017 academic year.

2. STAFF DISTRIBUTION

At the close Academic Year 2015/2016, SSGS staff capacity was as follows:

Teaching Staff:

Professor	-	1
Associate Professor	-	2
Senior Lecturers	-	2
Lecturers	-	7
Assistant Lecturers	-	2
Tutorial Fellow	-	1
Graduate Assistant	-	2
Teaching Assistant	-	2
Technologists	-	6
Senior Technician	-	1
Technician	-	2
TOTAL	-	28

Non-Teaching Staff

Senior Administrative Assistant	-	1
Junior Administrative	-	1
Assistant Secretary	-	1
TOTAL	-	3

3. MEMBERS OF STAFF APPOINTED DURING THE PERIOD 2015/2016

The following members of staff were appointed to the School within the period under review:

NO.	NAME	GENDER	GRADE	DESIGNATION	DATE OF EMPLOYMENT
	Dr. Godfrey O. Ogonda	Male	XIIA	Lecturer	1 st Sept. 2015
	Ms. Pamela A. Ochungo	Female	XIA	Asst. Lecturer	1 st Sep. 2015
	Mr. George Konguka	Male	XIA	T/Fellow	Aug. 2015
	Enos O. Ondiek	Male	XI	Technologist (contract)	9 th Oct. 2015
	Malaki O. Atieno	Male	X	G/Assistant	1 st Oct. 2015

4. MEMBERS OF STAFF PROMOTED DURING THE PERIOD 2015/2016

The following member of staff was promoted:

1. Prof. Gordon O. Wayumba – Was promoted to the position of Associate Professor

5. LIST OF PUBLICATIONS BY SCHOOL MEMBERS

During the 2015/2016 Academic Year, the following members of staff published their research papers in peer reviewed Journals.

(a) Prof. Gordon Wayumba

- **Wayumba, G et al., (2016)** Fit-For-Purpose Land Administration: Guiding Principles for Country Implementation. Published by UN-Habitat – Global Land Tool Network (GLTN).
- **Wayumba, G.,** Tiagi, M., Mumo, T., Matata, P., Odongo, M., & Kawira, J. (2015). A methodology for the enhancement of tenure security in the informal settlements in Kenya. *International Journal of Scientific Research and Engineering Studies*, 83-88.
- **Wayumba, G.** (2015). Accuracy Assessment of Preliminary Index Diagrams (PIDS) From High Resolution Orthoimages In Kenya.
- **Wayumba, G.** (2015). The Role of Training Institutions in Promoting Sustainable Land Management in Kenya.
- **Wayumba, G. (2015).** A Historical Review of Land Tenure Reforms in Kenya.
- **Wayumba, G.** The Challenge of Sustaining Pastoralism Land Tenure System For Ecological Conservation Of The Maasai Mara.

(b) Dr. Samson Ayugi

Wayumba, R.N and **Ayugi, S.O** (2016). Training on Land Information Management Systems for Sustainable Development in Africa. Presented to the 5th RVTTI International Conference, 26th – 28th May, 2016, Eldoret Kenya.

(c) Dr. Jacinta Kimuyu

- **Kimuyu, J. S.** (2016): Optimisation of Scan range for 3D Point Localisation in Statscan Digital Medical Radiology. *IJSTR Vol 5-Issue 06, June 2016 Edition-ISSN 2277-8616 PP 19-25* <http://www.ijstr.org/research-paper-publishing.php?month=june2016>
- **Kimuyu, J.S** (2016): Methodology for Determination of Space Control for 3D Reconstruction
- In Statscan Digital X-Ray Radiology Using Statscan Static Frame Model. *IJSTR Vol. 5-Issue 06, June 2016 Edition-ISSN 227-8616 pp 371-375* [http://www.ijstr.org/research-paper-publishing .php.june2016](http://www.ijstr.org/research-paper-publishing.php.june2016)
- **Kimuyu, J. S.;** Nzioka J. Muthama and Sammy M. Musyoka (2015); *Modeling Alteration of Malaria Vector Ecological Niches by Bioclimatic Envelope Models*. Peer reviewed publication in Conference proceedings in GIS International Conference at Masinde Muliro University of Technology
- **Kimuyu, J. S.** and Sygga P. M. (March 2016): Technical Report of Desk study on Minimum and Maximum and Maximum Land Holding Acreage in Kenya; A Guide to Policy Makers

(d) Dr. Godfrey Ogonda

- **Ogonda G. O.,** Oyier, M. O. and Ong'ang'a O. (2017): Ecosystem services perception profiles (ESPPs) as a tool for sustainable integrated lake basin management, a paper accepted for publication in the proceedings of the Environmental research and scientific conference (LVBCON 2017) to be held in Mwanza, Tanzania, 15th – 16th February, 2017
- **Ogonda, G. O.,** Oyier M.O. and Ong'ang'a O. (2017): Assessment of the efficiency of sewage treatment plants: a comparative study of two sewage treatment plants in Kisumu, Kenya, a paper accepted for publication in the proceedings of the Environmental research and Scientific conference (LVBCON 2017) to be held in Mwanza, Tanzania, 15th – 16th February, 2017

(e) Dr. Robert Wayumba

- **Wayumba, R.N** and Ayugi, S.O (2016). Training on Land Information Management Systems for Sustainable Development in Africa. Presented to the 5th RVTTI International Conference, 26th -28th May, 2016, Eldoret Kenya.
- Konguka, G.O and **Wayumba, R.N** (2016). Analysis of Land Transaction Controls in Freehold Agricultural areas of Kenya. *Journal of Land Administration in Eastern Africa*. Sep 2016 Issue.

(f) Mr. George Konguka

- **Konguka, G.O** and Wayumba, R.N (2016). Analysis of Land Transaction Controls in Freehold Agricultural

areas of Kenya. Journal of Land Administration in Eastern Africa. Sep 2016 Issue.

(g) Ms. Pamela Ochungo

- **Ochungo P**, Lindahl JF, Kayano T, Sirma AJ, Senerwa DM, Kiama TN, Grace D (2016). Mapping Aflatoxin Risk from Milk Consumption using Biophysical and Socio-economic data: A case study of Kenya. *African Journal of Food, Agriculture, Nutrition and Development*.
- Kiama TN, Lindahl JF, Sirma AJ, Senerwa DM, Waithanji EM, **Ochungo PA**, Poole EJ, Kang'ethe EK and D Grace (2016). Kenya Dairy Farmer Perception of Moulds and Mycotoxins and Implications for Exposure and Aflatoxins: A Gendered Analysis
- Atherstone, C., Smith, E., **Ochungo, P.**, Roesel, K., & Grace, D. (2015). Kenya Dairy Farmer Perception of Moulds and Mycotoxins and Implications for Exposure to Aflatoxins: A Gendered Analysis

6. LIST OF NEW PROGRAMMES CRAFTED AND MOUNTED

The school developed the Master of Science in Land Administration program during the period under review.

7. CONFERENCE AND PAPERS PRESENTED/ATTENDED BY SCHOOL MEMBERS

During the period under review, members of staff attended conferences and presented papers as indicated here under:

- **Kimuyu, J. S.** attended GIS International Conference at Masinde Muliro University of Technology (October 2015).
- **Wayumba, R.N** attended The 5th RVTTI 2016 International TVET and Interdisciplinary Conference, 26th – 28th May, 2016, Eldoret Kenya.
- **Wayumba, R. N.** attended GIS International Conference at Masinde Muliro University of Technology (October 2015).
- **Wayumba, R.N, Konguka, G and Odwe, P** attended the Eastern African Land Administration Network (EALAN), workshop on 23rd -26th May 2016, Musanze, Rwanda.
- **Wayumba, G., Konguka, G., Odwe, P., Wayumba, R.N.,** attended The Eastern African Land Administration Network (EALAN) Conference, 20th – 22nd July, 2016, Dar es Salaam, Tanzania.

8. LIST OF VISITING PROFESSORS

- **Professor Monica Lengoi boni**, Faculty of Geo-Information Science and Earth Observation (ITC) of the University of Twente, Netherlands.
- **Professor Rohan Bennett**, Faculty of Geo-Information Science and Earth Observation (ITC) of the University of Twente, Netherlands.
- **Mr. John Horn**, Senior Project Officer at Faculty of Geo-Information Science and Earth Observation (ITC) of the University of Twente, Netherlands.
- **Professor Joep Crompvoets**, KU Leuven, Belgium, School of Public Governance Institute.
- **Dr. Malumbo Chipofya**, Universität Münster, Germany. Institute For Geoinformatics, University of Münster.
- **Mr. Tarek Zein**, International Consulting, Hansa Luftbild AG, Nevinghoff 20, 48147 Muenster, Germany.

9. LIST OF NEW PARTNERSHIPS ESTABLISHED

The School was able to establish the following partnerships under the leadership of Prof. Gordon Wayumba:

- The School was involved in the **ITS4LAND – Horizon2020 Project**, which is being funded by the

European Union. The Project aims at using Geospatial technology innovations for land tenure security in East Africa. The project includes partners from Faculty of Geo-Information Science and Earth Observation (ITC) of the University of Twente, Netherlands, Universität Münster, University of INES Ruhengeri in Rwanda and Bahir Dar University in Ethiopia.

- The School is involved in the **Yiel Gap Project**, which is funded by the Swedish Institute. The project aims at unraveling the causes and implications of crop productivity gaps in underperforming regions through integration of geospatial, biophysical and socio-economic factors. Key project partners include: University of Nairobi (Department of Agricultural Economics), Chuka University, LUND University (Sweden), Gävle University College (Sweden).
- Prof. Wayumba and Mr. Malachi Odongo are involved in piloting the **Social Tenure Domain Model (STDm)** in Mwea, Kenya. The project is funded by the UN-Habitat, Global Land Tool Network (GLTN).
- Prof. Wayumba and Mr. Malachi Odongo are surveyors in the **Kenya Informal Settlements Improvement Project (KISIP)** funded by the World Bank through the Ministry of Lands.

6.6 CENTRE FOR ENGINEERING INNOVATION AND PRODUCTION (CEIP)

I PREAMBLE

Universities are expected to have a growing impact on society. To achieve this, the TU-K established the **Centre for Engineering Innovation and Production (CEIP)** under the Faculty of Engineering Sciences and Technology. CEIP has aligned its vision, mission and set objectives that are critical to the development of a critical mass in the technical field. Through annual work plans, CEIP is able to train, conduct research and come up with innovations among other things. The Centre has positioned itself in meeting the dynamic challenges that face the industry by offering training programmes, both short- and long-term, conduct and implement research findings as expected by the parent Ministry and to enter into collaborative research partnerships.

II VISION, MISSION AND OBJECTIVES

VISION: To become the Centre of Excellence in the area of design, development and manufacturing of quality tools and components, project consultancy, skill development, contract and commercial work.

MISSION: Promote growth and development of Micro, Small and Medium Enterprises through technological and skill manpower support.

OBJECTIVES

- To meet the technological requirements of the Micro, Small, Medium Enterprise (MSME) sector
- To meet the skill deficit in the area of tool engineering and allied trades including skill upgrading of existing manpower.
- To enhance the skills of members of the jua kali sector to improve their production potential.

III STAFF SITUATION BY CLOSE OF 2014 – 2015 ACADEMIC YEAR

CEIP commenced its operations on 1st January 2014 with the appointment of the Director who at the time was the only member of staff at the Centre.

Through the support of the Executive Dean, Faculty of Engineering Sciences and Technology, CEIP now boasts of over twenty members of staff which includes 10 Technicians, 4 Senior Technicians and 6 Technologists. The Centre also has a Secretary, Clerk/Messenger and seven (7) housekeeping staff.

IV SHORT COURSES

CEIP is committed to developing human resources to cater for the needs of the manufacturing and service industries in the area of Tool Technology and Computer Aided Design, Computer Aided Manufacturing and Computer Aided Engineering (CAD/CAM/CAE).

CEIP aims at becoming the preferred Micro, Small and Medium Enterprises (MSME) service provider in manufacturing and service industries with the goal of improving the competitiveness of the industrial sector through expert training, availability of state-of-the-art equipment and high-tech facilities in high-value manufacturing. To this end, the following short professional courses have been developed:

1. Auto Cad Modelling & Drafting
2. Autodesk Inventor Modelling
3. SolidWorks® Modelling & Drafting
4. Programming & Operation of CNC Lathe Machine
5. Programming & Operation of CNC Milling Machine
6. Certificate in Lathe Machine Operations
7. Certificate in Milling Machine Operations
8. Certificate in Grinding Machine Operations
9. Certificate in Tool Design and CAD/CAM
10. Certificate in Computer Aided Engineering
11. Certificate in Computer Aided Manufacturing
12. Certificate in CNC Machine Maintenance
13. Certificate in Reverse Engineering & Rapid Prototyping
14. Certificate in Programmable Logic Controllers
15. Certificate in Tool Technology
16. Certificate in Metallurgy and Heat Treatment
17. Certificate in Foundry Technology
18. Certificate in Motor Rewinding Technology
19. Certificate in Industrial Electronics Technology
20. Certificate in Vehicle Diagnosis Technology

V TRAINING(S)

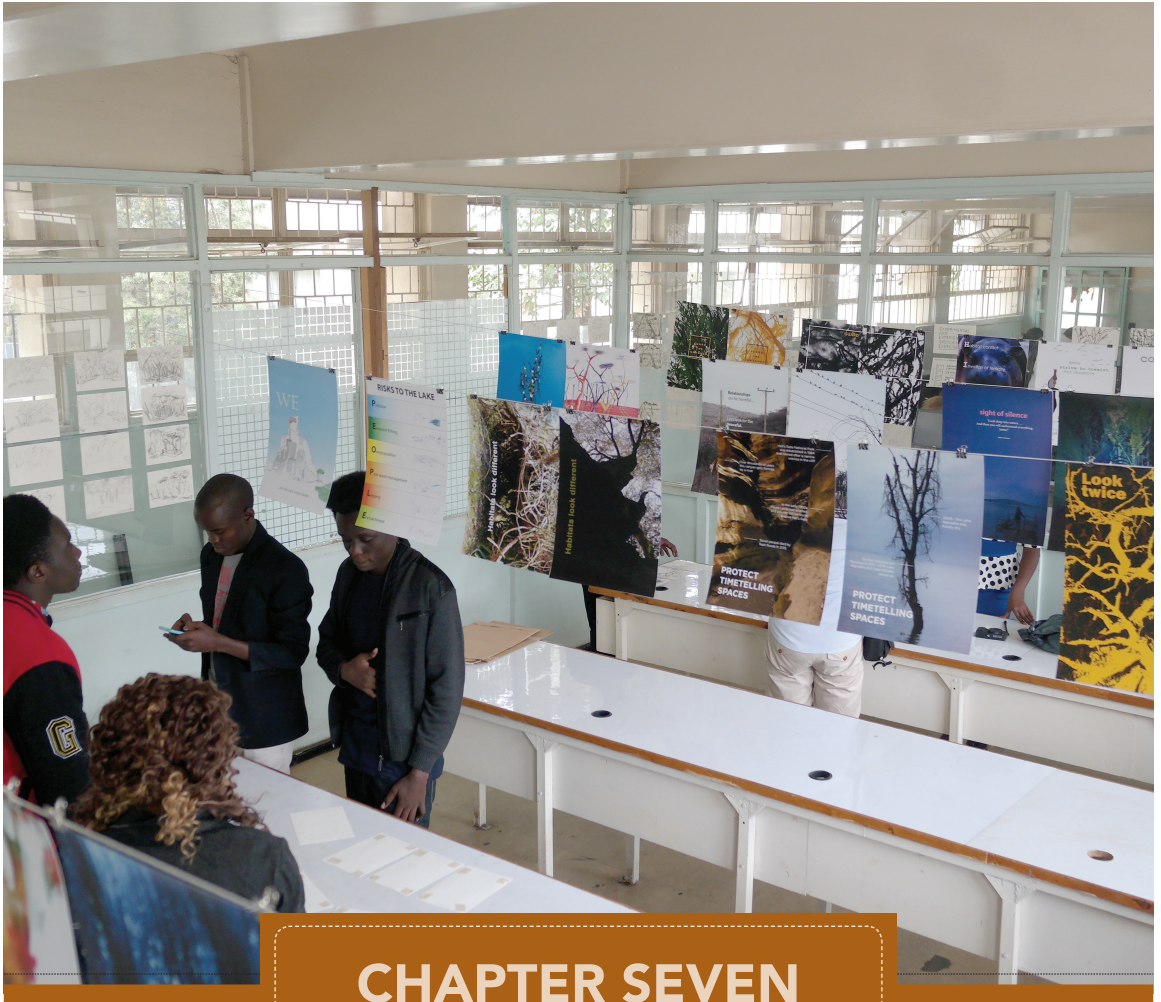
Through CEIP's collaboration with Tshwane University of Technology (TUT), two trainings have been conducted at CEIP by TUT staff as outlined below:

1. Tool Design Training in Kenya – Course attended by all Technicians and Technologists in December 2015 for two (2) weeks. The course was conducted by Mr. Jeff Makhubela and Mrs. Ireen Modipa.
2. Jigs and Fixtures - Course attended by all Technicians and Technologists in January 2016 for two (2) weeks. The course was conducted by Mr. Patrick Mogire and Mrs. Ireen Modipa.

VI COLLABORATIONS

CEIP needs to embark on research projects in partnership with industry and recognizes the importance of increasingly anchoring its major sector-based spheres of excellence in industry. The challenge for the next few years will be to establish strategic partnerships that will increase the impact at all levels of the research and innovation activities carried out at CEIP. To date, the following collaborations have been initiated with the following companies:

1. Tshwane University of Technology
2. Geothermal Development Corporation
3. Gearbox
4. Numerical Machining Complex
5. Habitat for Humanity
6. Bosch (K) Ltd



CHAPTER SEVEN

FACULTY OF SOCIAL SCIENCES AND TECHNOLOGY

The Faculty of Social Sciences and Technology is made up of five Schools namely:

1. School of Business and Management Studies
2. School of Creative Arts and Technology
3. School of Hospitality and Tourism Studies
4. School of Information and Communication Studies
5. School of Social and Development Studies

SCHOOL OF BUSINESS & MANAGEMENT STUDIES

The School of Business and Management Studies has four Departments namely:

- Department of Accounting and Finance
- Department of Business Administration and Management
- Department of Management Science and Technology
- Department of Entrepreneurship and Technology Management.

School Motto:

“Build Business Ideas, Build Society”

Programmes offered:

In the year 2015/2016 academic year, the School offered the following undergraduate programmes:

- Bachelor of Commerce
 - Finance Option
 - Accounting Option
 - Logistics and Supply Chain Management Option
 - Insurance Option
 - Marketing Option
 - Human Resource Management Option
 - Management Option
- Bachelor of Technology in Office Administration
- Bachelor of Technology (Business Information Technology)
- Bachelor of Accountancy
- Diploma in Accounting
- Diploma in Technology (Business Information Technology)
- Diploma in Business Studies
 - Human Resource Management Option
 - Sales and Marketing Option
 - Business Administration Option
 - Procurement and Supply Chain Management Option

New programmes/Curricula developed and discussed:

- Master of Business Administration (MBA)
- Master of Arts in Entrepreneurship Management
- Bachelor of Business Studies-(BBS)
- Bachelor of Science (Entrepreneurship)
- Master of Arts (Entrepreneurship)
- Diploma in Entrepreneurship
- Bachelor of Science in Management Science

Graduation Statistics

The following groups graduated in December 2016:

S/NO	NAME OF THE PROGRAMME
1.	Certificate in Business Studies, Sept 2015
2.	Certificate in Sales and Marketing, Sept 2015
3.	Certificate in Business Information Technology, Sept 2015
4.	Certificate in Supplies Chain Management, Sept 2015
5.	Diploma in Accountancy, Sept 2013
6.	Diploma in Business Studies (Business Administration), Sept 2013
7.	Diploma in Business Studies (Human Resource Mgt.), Sept 2013
8.	Diploma in Business Studies (Procurement and Supply Chain Mgt.), Sept 2013
9.	Diploma in Business Studies (Sales and Marketing), Sept 2013
10.	Diploma in Technology (Business Information Technology), Sept 2013
11.	Bachelor of Commerce, May 2012
12.	Bachelor of Commerce, January 2013
13.	Bachelor of Commerce, September 2014 (Module II)
14.	Bachelor of Science (Accountancy), May 2012
15.	Bachelor of Science (Accountancy), January 2013
16.	Bachelor of Science (Accountancy), September 2014 (Module II)
17.	Bachelor of Technology (Business Information Technology), May 2012
18.	Bachelor of Technology (Business Information Technology), January 2013
19.	Bachelor of Technology (Business Information Technology), September 2014 (Module II)
TOTAL	

Staff:

i) Teaching staff

In the year 2015/2016, the School had the following staff distribution:

Department	Associate Professor	Senior Lecturer	Lecturer	Assistant Lecturer	Technologist/ Teaching Assistant	Total
Management Science and Technology	2	1	0	4	1	8
Business and Administration Management	0	1	20	4	0	25
Accounting and Finance	0	0	8	4	0	12
Entrepreneurship and Management	0	3	9	2	2	16
Total	2	5	37	14	3	61

ii) Non-teaching staff

The School had eleven (11) non-teaching members of staff in the four departments as follows:

- 3 Administrators
- 3 Secretaries
- 3 Clerks
- 2 Technicians

Completion of Doctor of Philosophy Studies:

The following two members of staff completed their PhD studies in the 2015/2016 Academic year:

- i. Dr. Beatrice Chiuri - PhD in Strategic Management, JKUAT.

- ii. Dr. Ruth Ruhiu - PhD in Entrepreneurship, JKUAT.

Appointments and Promotions:

During the period under review, the following appointments were made:

DEPARTMENT	NAME OF STAFF	POSITION
Management Science and Technology	Dr. Elyjoy M. Micheni	Ag. Director of School
	Mr. Taylor Karungani	Ag. Chairperson of the Dept.
	Mr. Julius Nyerere	Dept. Examination officer
Business and Administration Management	Dr. Esther Kiruja	Chairperson of the Dept.
	Dr. Stephen Kirinya	School Examination Officer
	Ms. Celestine Kiilu	Dept. Timetabling Officer
	Dr. Evans V. Sagwa	School Undergraduate Curriculum Coordinator
	Dr. S. Onchoke	School IBL I Coordinator
Accounting and Finance	Dr. Headmound Okari	School IBL II Coordinator
	Mr. Titus Mweta	Dept. Examination officer
	Ms. Jane Karanja	Dept. Timetabling Officer
Entrepreneurship and Management	Dr. Esther Mwiti	Chairperson of the Dept.
	Dr. Ruth Ruhiu	School Postgraduate Coordinator

The following members of staff were promoted to the position of Senior Lecturer:

- i. Dr. Esther Thuku
- ii. Dr. Esther Kiruja
- iii. Dr. Esther Mwiti
- iv. Dr. Elyjoy Micheni
- v. Dr. Evans Sagwa

Number of Board Meetings held at School Level:

30 School Management Board Meetings were held and 15 School Academic Board Meetings were held where various decisions were passed regarding curricula, timetables, examinations and other academic related issues.

Academic Articles Published in Peer-Reviewed Journals

- i. **Elyjoy Micheni**, Julius Murumba *An Overview of Digital Library Projects in Kenyan Universities*. IEEE, 978-1-905824-43-4
- ii. Julius Murumba, **Elyjoy Micheni**, Alice Njuguna *Evaluating Preparedness for Social Networks Integration into Learning: A Case Study of Inoorero University*, IEEE, ISBN: 978-1-905824-51-9
- iii. **Elyjoy M. Micheni**, *Diffusion of Big Data and Analytics in Developing Countries*, The International Journal Of Engineering And Science (IJES) || Volume || 4 || Issue || 8 || Pages || PP -44-50 || 2015 || ISSN (e): 2319 – 1813 ISSN (p): 2319 - 1805
- iv. **Elyjoy M. Micheni**, *Using the Technology Organisation Environment Framework for Adoption and Implementation of Cloud Computing in Institutions of Higher Learning in Kenya*. The International Journal Of Engineering And Science (IJES) || Volume || 4 || Issue || 9 || Pages || PP -18-21 || 2015 || ISSN (e): 2319 - 1813 ISSN (p): 2319 – 1805
- v. Muchiri Michael Njoki, Franklin Wabwoba, **Elyjoy Muthoni Micheni**, *ICT Definition Implication on ICT Career Choice and Exclusion among Women*. Submitted to - I.J. Information Technology and Computer Science journal.
- vi. Geoffrey Rotich, Muma Benard, **Elyjoy Micheni**, *E-Sourcing, E-Maintenance and Public Procurement Performance: A Case of Kericho County-Kenya*. *Science Research*. Vol. 4, No. 2, 2016, pp. 37-42. doi: 10.11648/j.sr.20160402.13
- vii. Muchiri Michael Njoki, Franklin Wabwoba, **Elyjoy Muthoni Micheni**, *Security and Usability Enhancing E-Service Marginalisation for Digital Vulnerable Groups*. *International Journal of Science and Technology* Volume 4 No. 12, December, 2015. ISSN 2049-7318

- viii. **Elyjoy Micheni**. C.T. Akumu Owuor, *An Assessment of the Partnerships between TVET Institutions and Industry in Kenya*, CAPA Scientific Journal. ISSN 2310 - 6298, December, 2015: Vol 3: Number 1
- ix. **Elyjoy Micheni**, *E-Government based on Web 3.0: Case of Kenya*. CAPA Scientific Journal. ISSN 2310 - 6298, December, 2015: Vol 3: Number 1
- x. **Okari H. I.**, Contemporary Strategic Approaches Towards Sustainable Competitiveness in the Kenyan Banking Industry **International Journal of Innovative Financial and Economics Research**. Volume 4(1); 19-24, Jan-Mar. 2016
- xi. **Okari H. I.**, Good Governance for Enhancement of Effective Service Delivery and Accelerated Economic Development of Counties in Kenya **International Journal of Innovative Social Sciences and Humanities Research** Volume 3(3), July-September 2015
- xii. **Okari H. I.**, Role of Critical Thinking in Management Decision Making **Prime Journal of Business Administration and Management** July - Sept 2015
- xiii. **Sagwa, E. V.**, (2016) *Role of industry in employee training and education for performance improvement in Kenya-prospects and priorities*, 1ST Edition, Africa Journal of Technical and Vocational Education and Training 1 (1), 149-155, 2016 Rift Valley Technical Training Institute (RVTTI) May 2016, Eldoret, Kenya, pg. 149-155 ISSN 2413-984X Print and Electronic Journal www.rvti.ac.ke
- xiv. **Sagwa, E. V** and Shitiabai, A, K, (2016) *The effect of competitive strategy on the performance of Deposit Taking SACCOs in Nairobi County, Kenya* *The European Journal of Business and Management* ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online) Vol.8, No. 8, 2016 Pg. 30-37 <http://www.iiste.org>
- xv. **Sagwa, E. V.** K'Obonyo. P and Ogutu, M (2015) *Mediation effect of employee outcomes in the relationship between human resource management practices and performance of firms listed on the Nairobi Securities Exchange*, Journal of Emerging Trends in Economics and Management Sciences (JETEMS) 6(4):237-244 Scholarlink Research Institute Journals, 2015 (ISSN:2141-7024) www.scholarlinkresearch.org
- xvi. **Samuel I. Onchoke** (2015), "A Study & Challenges of Staff Training and Development in MNCs", Vol. 4 Issue 10. www.ijird.com
- xvii. **Waithaka T.W.** (2015): A survey of student satisfaction levels with educational services offered by Kenya polytechnic. **Prime Journal of Business Administration and Management (BAM)** ISSN: 2251-1261. Vol. 5(3), pp. 1807-1814.
- xviii. **Beatrice W. Chiuri**. Strategic Management Practices among Technical Training Institutions in Kenya: A Case Study of Technical Training Institutions in Nairobi. *International Journal of Business & Law Research*. ISSN: 2360-8986, 4(2):20-39, April-June, 2016 © SEAHI PUBLICATIONS, 2016 www.seahipaj.org

Conference Papers/seminars attended by members of staff in the School:

- i. **Micheni, E.M.**, *Enhancing Employability Skills through strengthening TVET and Industry Partnerships in Kenya*, presented at the CAPA International Conference in Kumasi, Ghana from 7th - 11th December 2015
- ii. **Micheni E.M.**, The Promise of Grid Computing Technologies for E-Learning Systems in Kenya presented at the IST-Africa 2016 Conference, in Durban, South Africa from 10th -13th May 2016.
- iii. Gachau A. & **Micheni, E.M.**, *A Tracer Study of Graduates in the Fields of Bachelor of Engineering 2011 Cohort - Technical University Of Kenya*, presented at the 3rd TU-K Annual International Conference, Nairobi, Kenya from 23rd - 25th February 2016.
- iv. **Micheni, E.M.**, Skilled Manpower for Industrialisation and Innovation in Kenya: Optimizing Existing Resources and Infrastructure for Vocational Education and Training, presented at the CAPA International Conference in Mombasa, Kenya from 6th - 11th June 2016
- v. **Murerwa, Tabitha G. Dr.**, Richard Lesiyampe**2015: **An Overview of Time Management: An Effective Tool in Organisational Management** (*International Journal of Advanced Research in* ISSN: 2278-6236 *Management and Social Sciences* Impact Factor: 5.313 Vol.

- vi. **Murerwa, Tabitha G:** PhD 2015: **To Determine the Effect of Organisational Culture on the Work Preferences among Generation “Y” in the Private Sector in Kenya.** *International Journal of Academic Research in Business and Social Sciences* Dec 2015, Vol. 5, No. 12 ISSN: 2222-6990
- vii. **Murerwa, Tabitha G:** 2015: challenges faced by managers on managing employees from diverse background *European journal of business and management* ISSN2222-1905 Vol.no.30
- viii. **Okari H. I.,** Innovative Competitive Strategies Adopted By Top Performing Banks in Kenya, **3RD Technical University of Kenya (TU-K)** International Conference ON Innovative Technologies for Development, Nairobi, 23rd to 25th February, 2016.
- ix. **Okari H. I.,** Influence of Quality Management Systems on Performance of Public Universities in Kenya, **Nottingham – Daystar Africa 2015 Conference “Building Sustainable Business in the 21st Century”** August 2015
- x. **Sagwa, E. V** and Shitiabai, A, K, (2016) *Assessment of firm size on performance of deposit taking SACCOS in Nairobi County, Kenya*, abstract Submitted for the 9th Kenya Scholars & Studies Association (KSSA) Conference September 8-10, 2016 at Atlanta Marriott Marquis, 265 Peachtree Centre Avenue NE, Atlanta GA 30303, USA www.kessa.org
- xi. Shitiabai, A, K and **Sagwa E. V, (2016),** *Effect of firm age on performance of Deposit Taking SACCOS in Nairobi County, Kenya*, full paper submitted to Makerere University Business School (MUBS) 21st Annual International Management Conference (AIMC) September 12-15, 2016 www.mubs.ac.ug/aimc
- xii. Shitiabai, A, K and **Sagwa E. V, (2016)** *Effect of human resource management practices on the performance of Deposit Taking SACCOS, Nairobi County, Kenya* ARCA Conference, Cape Coast, Ghana – International Conference August 2016 – Full Paper Accepted for presentation www.arca.org
- xiii. Alfayo, A. A, **Sagwa, E. V** and Mbugua, J, (2016) *The effect of capacity building through Uwezo Fund on national development in Kenya: A case study of Vihiga County*, 3rd TU-K International Conference on innovative technologies for development, Laico Regency Hotel Nairobi 23rd to 25th February 2016 www.conference.tukenya.ac.ke
- xiv. **Sagwa, E. V.,** (2016) *Role of Technical, Vocational and Entrepreneurship Training (TVET) in the creation of decent employment for a sustainable Kenyan economy*, 5th International Conference, 26th – 28th may 2016, Rift Valley Technical Training Institute (RVTTI) Conference Room, Eldoret, Kenya www.rvti.ac.ke
- xv. **Sagwa, E. V,** Ogola, W and Langat, K (2016) *Role of Technical University of Kenya in growing innovative skilled, technical human capital for industrialisation and sustainable development of the Kenyan economy*, Commonwealth Association of Technical Universities and Polytechnics in Africa (CAPA), International Conference, 6th – 11th June 2016, Mombasa, Kenya www.capa-sec.org
- xvi. **Sagwa, E. V** and Shitiabai, A, K, (2016) *Influence of human resource management practices on competitive strategy: A study of deposit taking SACCOS in Nairobi County, Kenya*, Kenya Scholars & Studies Association (KSSA) – Multi Media University of Kenya Joint International Interdisciplinary Conference June 22-25, 2016 at the Multi Media University of Kenya Hotel, Nairobi, Kenya
- xvii. Shitiabai, A, K and **Sagwa, E. V** (2015) *The effect of competitive strategy on the performance of Deposit Taking SACCOS in Nairobi County*, Kenya ICABUMPA-In4In Conference 2015, MKU, Leipzig University (Germany) and Equip Africa, Kenyatta International Convention Centre (KICC), Nairobi Kenya www.icabumpain4in.mku.ac.ke
- xviii. **Waithaka, Tabitha W.** 1st DBA Africa Management Review International Conference (UON, 2015) Theme: Research and Innovation for Socio-Economic Development in Africa. **Paper Presented: Corporate Visual Identity Systems and Brand Performance of Kenyan Universities**
- xix. **Waithaka, Tabitha W.** International Academy of African Business and Development (IAABD) Conference (Strathmore University, 2015) Theme: Towards Sustainable African Business Development African International Business and Management Conference (UON, 2011). Theme: Building Synergies for Better Performance.

Continuing Ph.D. Students & Research Projects Supervised:

- a) **Dr. Micheni, E. M.,**
Cyprian Makiya Ratemo, **“A Framework for Evaluating Usage of Mobile Instant Messaging Technology in Universities”.** Ph.D. Research Student in 2015 at Kibabii University and Continuing.
- Muchiri Michael Njoki, **“Modeling Security Usability for Digital Inclusion in E-Service Provision”.** Ph.D. Research Student in 2015 at Kibabii University and Continuing.

Shadrack Metto, **“A Framework and Metric for Assessing Green Broadcasting Readiness in Developing Countries”** Ph.D. Research Student in 2015 at Kibabii University and Continuing.

b) **Dr. Murerwa, Tabitha G**

Mary Mati (Catholic University) 1024281: **Effect of Performance Appraisal Practise on Employee Performance in Insurance Firms in Kenya**, Ph.D. research

Jane Njoki Rebut (Kenya Methodist University): **Impact of Servant Leadership on Knowledge Sharing and Organisational Agility (Study of Outpatient Medical Scheme Managed by National Hospital Insurance Fund)** Ph.D. research

Carol Makokha (Mount Kenya University) MPAM/2014/67077) **Assessing NGOs’ rural poverty alleviation roles on sustaining livelihoods: case of selected NGOs in Turkana county, Kenya** Masters 2015/2016 ongoing

Golicha Abduba Roronjo (Mount Kenya University) MPAM/2014/69384: **The role of strategic human resource management practices in developing competitive advantage in the telecommunication industry in Kenya**, Masters 2015/2016 ongoing

Ibrahim Abdi Diba MBA212/0075, (Mount Kenya University): **Challenges affecting organisational change management in the administration police service.** Case Study Kamukunji police station. Masters 2015/2016 ongoing

c) **Okari, H. I.,**

Eric Opiyo, **The Effect of Strategic Leadership on Performance of County Governments in Kenya**, Kisii University, ongoing PhD student.

Lilian Akoth Otieno, **Influence of Corporate Social Responsibility Strategy on Bank Performance Catholic University of Eastern Africa**, ongoing PhD student.

d) **Dr. Sagwa, E. V.,**

Murigi Ndwiga (2016), *Determinants of Waste Management Systems on Garbage Handling in Kenya: a Case Study of Whitehouse Residential Area in Machakos Sub-County*, Masters in Project Planning and Management, University of Nairobi

Agufana Alfayo Alfonze (2015), *Influence of Youth Empowerment Programmes on National Development: Case Study of Vibiga County*, Masters in Project Planning and Management, University of Nairobi

Lucy Namaswa Khakasa (2015), *Influence of Table Banking on Members of Village Savings and Loan Schemes in Nairobi and Siaya Counties, Kenya*, Masters in Project Planning and Management, University of Nairobi

e) **Dr. Waithaka, Tabitha W.**

Sogoti James (2015): **The influence of daily free daily newspapers on advertising market share of pay newspaper in Nairobi.** Strathmore Business School

COMMUNITY SERVICE

The following members of staff participated in the community service activities as indicated in the year 2015/2016 academic year:

a) **Dr. Elyjoy Micheni**

- Oct. 2015 - To date: Kibabii University - External Examiner
- Sept 2015 - To date: Member, Board of Management - Kambandi Secondary School
- Sept 2013-To date: Member, Board of Management - Ndagoni Girls Secondary School
- 2014 - To date: P.C.E.A Sukari Parish Procurement Committee member
- 2014 - To date: P.C.E.A Sukari Parish Information Technology Committee member
- 2012 - To date: Sukari Presbyterian Senior School Committee member

- b) Dr. Sagwa, Evans V.
- **Sagwa, E. V**, Career Guidance Counselor - 5th February 2007 to date Umoja Pentecostal Assemblies of God Youth and Parents (over 800 target audience) on empowerment and career choices.
 - **Sagwa, E. V**, Patron - Association of Business Students, Technical University of Kenya
- c) Dr. Waithaka, Tabitha W.
- 2012 to date: Treasurer, Windy Ridge Women Group, Karen.

SCHOOL OF HOSPITALITY AND TOURISM STUDIES

(i) PREAMBLE

The School of Hospitality and Tourism Studies originated from the Department of Institutional Studies which was established in 1964. As the oldest school in the institution, it initially focused on offering certificate and diploma courses for Institutional Catering and Studies for hostel, hotel and restaurant employees. With the elevation of Kenya Polytechnic to a University College and subsequently a University in January 2013, the School of Hospitality and Tourism Studies then (SHTM) introduced degree programs and other courses targeting high school graduates, hospitality, leisure, events and tourism employees, as well as others interested in careers within the fields.

The school produces highly competent, technological and application-oriented leaders, practitioners and managers for the hospitality, leisure and tourism industries, as well as creating and transfer of knowledge through extension, outreach and partnership with local communities, private and public sectors, and the international professional community. Graduates of the Bachelors and Diploma Programmes join the industry as Supervisors, Tour and Travel guides, Event Planners, Chefs, Hotel and Restaurant Managers, Executive Housekeepers, Laundry Operators, Tourism Advisors, Consultants and Strategists while certificate holders are competent operations personnel.

The school has three distinct units namely:-

1. Department of Hospitality and Institutional Management
2. Department of Tourism and Travel Management
3. Department of Leisure and Event Management

1.1 OFFICE OF THE DIRECTOR OF SCHOOL

The Office of the Director of School is responsible for managing the academic and administrative leadership. It offers strategic direction by ensuring that the Director keeps abreast with what is happening in the School through monthly Management Board Meetings chaired by the Director. The members of the Board include the Director of School, all chairs of Departments, lecturers charged with extra responsibility within their departments; the school administrator sits as the Secretary. The Director also attends other high profile University meetings where he seeks management buy-in in projects and programs that the School intends to carry out within the year.

The Office of the Director of School has a team that works under the Director with the guidance of the Administrative Officer. The team includes:

Florence Kagweru	Administrative Officer
Eunice Kamau	Secretary
Rose Jebet Robert	Secretarial Assistant (Casual Engagement)
Albert Ojuma Anyait	Clerk/Messenger (Casual engagement)
Margaret Apiyo	Cleaner

1.1.1 Graduation

In the year under review, the School presented **Two hundred and Fifty Six (256)** students for the award of Degree, Diploma and Certificate. This was an increase of 91 students compared to these who graduated from the previous year. The summary of graduands was as follows:

Department	Degree		Diploma		Certificate		Total		Difference
	2014/ 2015	2015/ 2016	2014/ 2015	2015/ 2016	2014/ 2015	2015/ 2016	2014/ 2015	2015/ 2016	
Hospitality and Institutional Management:	37	59	79	107	19	30	135	196	61
Tourism and Travel Management:	12	13	11	30	7	13	30	56	26
Leisure and Event Management:	0	0	0	4	0	0	0	4	4
TOTAL							165	256	91

1.1.2 Collaborations & Partnerships

In the year under review (2015/2016), the School through the Departments have held discussions with various stakeholders with the intention of collaboration and partnering. These include Café Deli, Kenya Motor Industry (KMI) where contact was made through the Department of Leisure and Event Management through the AMEX exhibition and the School has further linked the Company with the Dean of FEST. KIM is willing to partner with the School by offering internship to its students. Furthermore, the School has partnered with the Kenyatta International Convention Centre (KICC) which has been very instrumental in offering the students in event and convention management exposure. The institution has involved our students in key events including Africa Meeting Expo 2016 (AMEX).

1.1.3 Achievements

- Graduated two hundred and fifty six (256) students for various awards
- Attended the East Africa Regional Tourism Workshop 1st – 4th June 2016 in Rwanda
- The Department of Leisure and Event Management participated in AMEX at the KICC
- Networking with the industry e.g. KICC on IBL and students exposure during major conferences held at the venue.
- The School has been able to place its students in reputable organisations for the purpose of Industry Based Learning which is a worthwhile way of applying the theory learned during class to real work situations. This has enabled our students to gain competitive edge and thus a clear career path which has enabled them secure jobs in high end institutions and blue chip companies.

1.1.5 Refereed Publications/Abstracts

During the year 2015/2016, various members of staff attended conferences and made presentations as follows:

- **Makopondo, R.**, Odege, D, Bagajah, T., Otieno, W, and Mtula, J. (2016). The 1st Obama Kogelo Community Cultural Festival Development: Process and Success Factors. *The 1st Biennial International Conference, Moi University, Eldoret. 14th – 16th August, 2016.*
- **Makopondo, R.** (2016). Obama Kogelo Community Cultural Festival: Bungled Opportunities. *2016 LARASA World Leisure Congress: Challenges, Choices, and Consequences, 27th – 30th June, Durban, Kwazulu Natal, South Africa (forthcoming).*

1.1.6 Research Projects

- Opportunities and Challenges to Developing Tourism in Djibouti, UNECA-SRO-East Africa (March 2016)

- Opportunities and Challenges Marketing IGAD Regional Tourism Product. UNECA-SRO-East Africa (March 2016)

1.1.7 Seminar/Lecture Presentations

- Marketing IGAD Tourism Products and Region as an Integrated/Single Destination: opportunities, Challenges and Recommended Strategies, Kigali, Rwanda 3rd June 2016

The School through Departments has continually invited guest speakers from the industry to talk to the students on the opportunities available in their areas of study. This has helped boost the students' interest in the programs we offer.

2.1 DEPARTMENT OF HOSPITALITY AND INSTITUTIONAL MANAGEMENT

The Department of Hospitality and Institutional Management was the product of a merger between the Department of Hotel and Restaurant Management and the Department of Catering and Accommodation Management of the former Kenya Polytechnic University College. The merger was effected in 2013.

The Department offers diploma and degree programmes on both full-time and part-time basis. Graduates are adequately equipped with the knowledge, skills, and tools to be effective business owners, supervisors and entry or middle level managers in professionally run organisations both in the public and in the private sectors.

The Department has already come up with **Master of Science in Hospitality Management** curriculum which is awaiting Senate approval.

2.2 Programs offered by the Department:

The following programs were offered by the department during the year under review:-

1. Bachelor of Science in Hospitality Management
2. Bachelor of Technology in Hotel and Restaurant Management
3. Bachelor of Technology in Institutional Catering and Accommodation Management
4. Diploma of Technology in Hotel and Restaurant Management
5. Diploma of Technology in Institutional Catering and Accommodation Management
6. Diploma in Housekeeping and Front Office Management

2.3 Staff Establishment

2.3.1 Appointment of New staff

As a result of the growth of the School and increased students numbers, the Department hired new faculty members who were engaged under permanent and pensionable terms as follows:

Dr. Josephine A. Opondo, PhD .- Lecturer

Other members of staff in the department include:

2.3.2 Academic staff

○ Dr. Erick Fwaya	Senior Lecturer /COD
○ Susan Mwachiro	Assistant Lecturer
○ Domitilla Chelimo	Assistant Lecturer
○ Rose Kiema	Assistant Lecturer
○ Esther Makunyi	Assistant Lecturer
○ Margaret Ngari	Assistant Lecturer
○ Nelly Obonyo	Lecturer
○ Jane Esese	Assistant Lecturer
○ Rita Gikonyo	Teaching Assistant

o Robert Ondara	Assistant Lecturer
o Abijah Kimani	Lecturer
o Mr. Japheth Mugao Kwenga :	Assistant Lecturer
o Mr. Sasmson Kuria:	Assistant Lecturer
o Ms. Caroline Wasike:	Assistant Lecturer
o Susan Namasaya Otido	Teaching Assistant
o Esther Odawa	Teaching Assistant
o Louise Ndeda	Graduate Assistant

2.3.3 Administrative staff

Mrs. Josephine Sang	Catering Officer
Rosemary Njeri Ngugi	Senior Assistant Cateress
Carol Koech	Technician / Assistant Cateress
Mary Muia	Laundry Assistant
Lucy Mbwali	Laundry Assistant
Judy Gakinya	Stores Assistant
Joyce Waweru	Cook
Ann Asiko Anjichi	Cook
Pamela Owoko	Kitchen Attendant/Cook
Judy Asagi	Cook

2.4 Participation in Industry-Based Learning (IBL)

Students pursuing various programs in the Department proceeded for their external IBL in various reputable facilities and institutions e.g. Kilaguni Simba Lodge, Sankara Hotel, Windsor Hotel, Mombasa Beach Hotel, Whitesands Beach Hotel, TIWI Beach Hotel, Safari Park Hotel, Utalii hotel, Great Rift Valley Lodge, Hotel Intercontinental, Kenya School of Government, KMTC, Kenya Institute of Curriculum Development, Family Health Care among others.

2.5 Achievements

- Talks on partnering with Nanjala Ltd (cafe Deli’).
- The Department graduated 196 students which was an increase by 61 students from the 2014 cohort of graduates.

3.1 DEPARTMENT OF TOURISM AND TRAVEL MANAGEMENT

The Department was curved out from the Department of Information and Liberal Studies of the then Kenya Polytechnic. The Diploma in Tourism Management inherited from this department was being examined by the Kenya National Examinations Council (KNEC). Since then programmes developed include: Bachelor of Technology in Tourism and Travel Management, Bachelor of Science in Tourism and Travel Management, Diploma of Technology in Tourism and Travel Management and Certificate in Tours and Travel Operations. The Department also came up with a new Masters curricular namely **Master of Science in Tourism Management** which is awaiting approval by University Senate.

3.2 Programs offered by the Department

The following programs were offered by the Department during the period under review:

1. Bachelor of Science in Tourism and Travel Management
2. Bachelor of Technology in Tourism and Travel Management
3. Diploma of Technology in Tourism and Travel Management

3.3 Staff Establishment

3.3.1 Appointment of New staff

In the year under review, the Department did not hire new staff.

3.3.2 Academic Staff

o Prof. R. Makopondo	Associate Professor
o Elizabeth Kamunzyu	Lecturer
o Dr. Boniface Kihima	Senior Lecturer/COD
o Mr. Daniel Dick Okallo	Asst. Lecturer
o Lynette Obare	Asst. Lecturer
o Shadrack Nzioka	Lecturer
o Jane Kathurima	Lecturer
o Josephine Ogembo	Tutorial Fellow
o Paul Olola	Graduate Assistant
o Laban Rotich	Tutorial Fellow
o Benson Gakara	Graduate Assistant

3.4 Participation in Educational Trips and Industry-Based Learning (IBL)

Tourism students toured major circuits across the country as part of the internal Industry Based learning. The areas they toured included: Nairobi, Nyanza, Central, Machakos, Ngong, Laikipia, Mombasa, Kilifi, Malindi, Kisumu, Nyeri, Nanyuki, Kwale, Western, Nakuru, Limuru, Magadi, Nyanza, Ollkaria.

3.5 Achievements

- o In the year under review the department graduated 56 students in the various programs which was an increase from the previous academic year.
- o In the year under review, the department of tourism and travel management published the following journals and made presentation to conferences as follows:

List of published journal papers by faculty members

1. **Kihima, B.O.**, (2015) *Community and Tourism Entrepreneurship: Toward a Viable Community Based Tourism Initiatives in Kenya*, The East African Journal of Hospitality, Leisure and Tourism, ISSN N^o: 1821-8393.
2. **Kihima, B.O.**, (2016) *Domestic Tourism in Kenya: Trends, Initiatives and Practices*, Cahier d'Afrique de l'Est/The East African Review, No. 50: 22-39.
3. **Kihima, B.O.**, (2016) *Limits and Paradoxes on Development of Ecotourism in Kenya: Implications on the Sustainability of the Natural Environment*, Tourism Recreation Research Journal.

List of conferences and papers presented/attended by faculty members

1. **Kihima B.O.**, (2016), *Effectively Promoting Cultural Tourism for Sustainability*, 2nd Regional Green Tourism Summit, Nairobi.
2. **Kihima B.O.**, (2016), *Practical Tips on how to Green your Office and Save Money*, Ecotourism and Sustainable Tourism Forum, Nairobi.
3. **Makopondo R.**, (2016), *Marketing IGAD Tourism Products and Region as an Integrated/ Single Destination: Opportunities, Challenges and Recommended Strategies*, Regional Tourism Workshop, Kigali Rwanda.
4. **Kihima B.O., Kathurima J., Obare L.**, (2016), Attended a Regional Tourism Workshop, Kigali Rwanda.

Presentation by the Director of School:

- **Laban K. Rotich, Prof. Richard O.B. Makopondo, Paul Olola.**, (2016) *Investigating the Relationship Between Hospitality/Tourism, Climate Change, Pollution, Natural Resource Conservation & Technological Innovations 2016: 3rd TU-K International Conference, 23rd – 25th February, Laico Regency Hotel, Nairobi Kenya.*

DEPARTMENT OF LEISURE AND EVENT MANAGEMENT

The Department of Leisure and Event Management offers degree, Diploma and specialized certificate programs in fields of leisure, amusement, and entertainment management, special event and convention management, festival planning and management, wedding planning, trade shows/exhibitions, as well as sports events management.

The Bachelor of Science in Leisure and Event Management is the first degree of its kind in the region and sets standards for higher and professional education in planning, designing, implementing, and marketing of special events, conferences and conventions.

In the year under review, the department graduated its first cohort of four (4) students with a Diploma in Technology – Event and Convention Management. The number of students taking event courses increased with the Department receiving seven (7) first year Diploma students and 13 Bachelor of Science in Event and Convention Management students.

The Department came up with a new Masters curricular namely **Master of Science in Event Management** as well as **Certificate in Event Planning Operations**. The curricula are awaiting approval by Senate.

4.2 Programs offered by the Department

- o Bachelor of Science in Event and Convention Management
- o Diploma of Technology in Event and Convention Management

4.3 Staff Establishment

4.3.1 Academic Staff

o Dr. Davis Barasa	Lecturer/COD
o Theresia Kyule	Asst. Lecturer
o Catherine Wainaina	Lecturer
o Mr. Sylvester Hayker Lecturer	Asst. Lecturer
o Mrs. Beatrice Makawiti	Lecturer

4.6 Participation in Industry-Based Learning (IBL)

During the year under review, the department sent 14 third year students of Bachelor of Science in Events and Convention Management on IBL. These students were attached to event organisations as follows:

Nairobi:

- Kenyatta International Convention Centre (KICC)
- Safari Park Hotel and Casino
- Wonder Joy Party World Ltd
- Weston Hotel
- Elite Tents Ltd
- Advance Public Relations and Marketing

Machakos:

- Gelian Hotel

4.7 Achievements:

1. The Department participated in Africa Meeting Expo 2016 (AMEX) organized by Kenyatta International Convention Centre (KICC) in March 2016. This event was initially planned to take place as Kenya MICE 2016 in January 2015 but was renamed AMEX 2016. Participation in AMEX 2016 also yielded a collaboration opportunity for the Faculty of Engineering Sciences and Technology (FEST) as well. Ms. Frances Cattermole of Kenya Motor Industry (KMI) met with the Dean of FEST, Prof. Alex Mumbo, and are discussing on the possibility of KMI sponsoring some student research projects in mutually

agreed areas. KMI has also shown some willingness to provide IBL placement to students. One of our students was offered temporary employment by KMI over the long holiday.

2. The Department is working with The Kenya Motor Industry Association in regard to placement of students on IBL.
3. KICC requested our students to participate in the delivery of a number of key international events namely; Global Entrepreneurship Summit in July 2015, World Trade Organisation Ministerial Meeting in December 2015.
4. The Department has continued to build rapport with the event industry with a view to securing collaborations.
5. The students on IBL have had 'Very Good to Excellent reviews' from the attaching institutions.
6. The students are highly sought after by employers with one Mr. Kelvin Rukenya, a Diploma graduate being employed as an Events Executive at the Radisson Blu Hotel, Nairobi.

School of Social and Development Studies

The School of Social and Development Studies is structured into four (4) Departments namely:

- Department of Economics and Resource Management
- Department of Criminology and Legal Studies
- Department of Governance and Public Policy
- Department of Human and Social Development

DEPARTMENT OF ECONOMICS AND RESOURCE MANAGEMENT

1. Members of Staff Appointed during the period

- Erastus K. Kariuki – Assistant Lecturer
- Naftaly Mose – Tutorial Fellow
- Judith Odhiambo – Tutorial Fellow
- Peter Mburu – Tutorial Fellow
- David Waweru – Tutorial Fellow

2. The List of Published Journal Papers Presented/attended by Faculty Members

- a) Name of Lecturer: Naftaly Gisore Mose
- b) Name of Journal: American Journal of Research Communication
- c) Name of Paper: 'Effect of Domestic Debt on Economic Growth in the East African Community;' by James Ochieng' Babu; Symon Kiprop; Aquilars M. Kalio; and, Naftaly Gisore Mose.

3. Conference papers presented/ attended by Faculty members

- a) Name of Lecturer: Benson Ateng and Florence Nelima Nyongesa

Name of Conference: 3rd TU-K Conference on Innovative Technologies for development (23 – 25 February, 2016)

Papers Presented:

- 'Economic Performance and Perceived Impact on People's Well-being;' by Benson Ateng' and Florence Nelima.
- 'Benchmarking Kenya's Attractiveness on Foreign Direct Investment Destination;' by Benson Ateng', Kenneth Aduda and Florence Nelima.
- 'Factors contributing to Resilient Biodiversity Based on Indigenous Knowledge System: An Application to Ramogi Hill, Kenya;' by Esther Were Shisia, Florence Nelima and Benson Ateng'.

b) Name: Florence Nelima

Conference: ‘13th PEP Annual Conference;’ Manila, Philippines (02 – 08 June 2016)

Name of Paper: ‘The Effect of Minimum Wage on the Labour Market and Income Distribution in Kenya;’ A CGE Analysis by Tabitha Mwangi; Florence Nelima; and, Albert Onderi.

c) Name: Judith Odhiambo

Conference: African Economic and Research Consortium Biannual Workshop (Addis Ababa, December 2016)

Name of Paper:

‘Technical Efficiency of Healthcare Services in Kenya;’ (Addis Ababa, December 2015)

DEPARTMENT OF CRIMINOLOGY & LEGAL STUDIES

Members Of Staff Appointed During The Period	List of Published Journal Papers by Department Members	List of New Programmes Crafted and Mounted	List of conference papers Presented/Attended by Department Members	List of Graduands
1. Wandiri Karimi Mugambi (CT0360) Tutorial Fellow	Victim willingness to engage with Kenya Criminal Justice System: Does information Justice Matter? Vol.3, Issue1, January 2016-February 2016 by Kariuki Peterson Mwai & Omosa Ntabo Mogambi	-Diploma in Security Studies	-LSK Seminars	-Diploma in Legal studies BS325112 (19 Students)
2. Sigu Pavel Okoth (CT 0374) Graduate Assistant		-Bachelor in Criminology & Legal Studies	-Training seminars, workshop & Conferences of the Chartered Institute of Arbitrators	
3. Marygorrety Chepng’etich (CT0377) Graduate Assistant				

DEPARTMENT OF GOVERNANCE AND PUBLIC POLICY

Members of staff appointed during the period:

- i. Mr. Wilfred Muliuro – Assistant Lecturer
- ii. Mr. John Wangunyu – Assistant Lecturer
- iii. Ms. Elizabeth Achieng’ – Graduate Assistant

List of published journal papers:

Morumbasi, K. (November 2015) State Survival and Terrorism in Africa. Contemporary Security in Africa, Nairobi, Kenya, Vol. 3 No. 2 pp. 1-16.

List of new programmes crafted and mounted:

- i. BSc. in Disaster and Emergency Management
- ii. MSc. in International Relations and Diplomacy
- iii. PhD in International Relations and Security

List of conference papers presented/Attended:

- i. **Dr. K. Morumbasi:** *Technology and its Impacts on Terrorism and Counter-Terrorism in Africa* at the 3rd Technical University of Kenya Conference on Innovative Technologies for Development, held on 23-25 February, 2016 at Laico Regency Hotel, Nairobi, Kenya.
- ii. **Dr. K. Morumbasi:** *Kenya-India Security Relations* at the international conference on Africa’s Engagement with Japan, China, South Korea and India: A Comparative Perspective, held on 9th & 10th October, 2015 in New Delhi, India.

- iii. **Mr. Wilfred Muliro:** The Next Generation Social Sciences in Africa Workshop in Nairobi, Kenya (August 1-5, 2016). The Next Generation Social Sciences in Africa workshop is intended to allow fellows to convene, network, and benefit from the advice of a group of strong senior faculty members. The workshop facilitators will work with fellows both collectively and individually over the course of the five days.
- iv. **Mr. Wilfred Muliro:** Paper: “Alshabaab (Somalia) Terrorist backlash attacks in Kenya and Ethiopia: a comparative analysis”; Alumni and Research Methodology Conference at King’s College London; 6 June 2016.
- v. **Mr. Wilfred Muliro:** National Defence College Alumni Symposium and Conference, 26th May, 2016; This Symposium also discussed arrange of issues touching on National security and National interests, besides launched an alumni for the National Defence College.
- vi. **Ms. Sylvia Kiamba:** WASH in Emergencies 2015- Regional WASH Workshop to Strengthen Humanitarian Preparedness and Response Capacity, Kampala, Uganda (October 5th – 9th October, 2016. Hosted by the German WASH Network and International Toilet Organisation.
- vii. **Ms. Sylvia Kiamba:** Designing Humanitarian Cash Based Assistance linked to Social Assistance. Nairobi, Kenya. (27th – 28th July 2016.) Hosted by the Cash Learning Partnership.
- viii. **Ms. Sylvia Kiamba:** EU Proposal Writing Workshop for Civil Societies. Nairobi, Kenya (1st – 3rd August 2016) Hosted by the EU.
- ix. **Ms. Elizabeth Achieng’:** *Turning Green to Gold* at the Embracing Innovation Integration conference at the Kenyan Annual Universities Exhibition held from 14th – 17th March 2016, KICC.

New partnerships established:

Partnership between TU-K, the Centre for Conflict Research and Training, and Thirty Three Consortia. The MoC was aimed at supporting PhD studies and other postgraduate programmes at the Department of Governance and Public Policy.

DEPARTMENT OF HUMAN AND SOCIAL DEVELOPMENT

1. Members of Staff

The Department had staff strength as follows:

Category	Nos.	Status
Senior Lecturers	2	Full-Time
Lecturers	9	Full-Time
Assistant Lecturers	15	4 – Full-Time 11- Part-Time/Sessional
Support Staff	1	
Total	27	15 – Full- Time Lecturers 11 – Sessional Lecturers 1 – Support Staff

2. New Programmes

The following programmes are at advanced stages of development:-

	Programme	Stage	Coordinator
1	Certificate in Counseling Psychology	Complete – To be discussed in the Department	Mrs. Helen M. Kaluai
2	Certificate in Social Work & Community Development	Complete – To be discussed in the Department	Mrs. Florence N. Salim
3	Diploma in Counseling Psychology – Review	Complete – To be discussed in the School	Mrs. Janet O. Obiero
4	B.Sc. in Counseling Psychology – Review	Complete – To be discussed in the Faculty	Mrs. Janet O. Obiero
5	B.A. in Guidance & Counseling	In Progress	Dr. John G. Ng’ang’a
6	M.A. in Family Studies - Correction	In Progress	Dr. John G. Ng’ang’a

3. Promotions

There were no promotions during the review period.

4. Achievements

Members of staff attended and presented papers in the following conferences:

Date	Conference	Participant	Paper presented
8 th - 13 th Nov. 2016	The 2 nd East and Central African Regional Conference of Psychology/1 st National Congress of Psychology (ECARCP/NCP2015)	Dr. Eunice J. Nyavanga	<ul style="list-style-type: none"> • Expectations About Counselling for A Mental Illness Among Primary School Teacher Trainees in Kenya • Attitudes Towards Professional Psychological Help Seeking Among College Students In Kenya
		Dr. John G Ng'ang'a	• Prevalence of burnout syndrome among accountants; A Case study of the University of Nairobi–Kenya
		Mrs. Florence N Salim	• Wastage in Primary School Education: The Case of Slum Schools in Kibera Division; Nairobi
		Dr. Solomon C J Mumah	• Lost in translation: Child care for the first 1000 days of life, in Kenya
23 rd – 25 th March 2016	TU-K International Conference 3 rd Innovative Technologies for Development	Mrs. Janet O. Obiero	• Relationship between self-efficacy and mathematics performance in selected girls schools in Nairobi

5. Study Leave

During the period, the following members of staff applied and were granted study leave:-

	Applicant	Programme of Study	Duration
1	Mrs. Anastacia K Musila	PhD	1 st June 2015 – 31 st Aug 2015
2	Mrs. Gaudencia A. Ndeda	PhD	1 st June 2015 – 1 st Sep 2015
3	Mrs. Helen M Kaluai	Masters	2015 – 22 nd May 2015

6. Admissions

The following numbers of students were admitted to study the programmes indicated:-

	Class Code	Programme	No. of Students
1	ASSQ 2015	B.Sc. in Counselling Psychology	19
2	ASSQ 2015P	B.Sc. in Counselling Psychology	9
3	ASSF/2015P	Diploma in Social Work & Community Development	7
Total			35

8. Graduation

The following classes successfully completed their respective programmes and graduated in December 2015.

	Class Code	Programme	No. of Students
1	ALSE/2013P	Diploma in Social Work & Community Development	9
2	LP112301	Diploma in Social Work & Community Development	8
Total			17

9. Public Engagement

Members of staff continued to engage with the general public in their individual capacities in the following areas:-

- i) Church Leadership
- ii) Public Secondary Schools: Members/Chairmen, Board of Management

CHAPTER EIGHT

THE FINANCIAL REPORT

The Technical University of Kenya (TU-K)
Annual report & Financial Statements for the Year Ended 30 June, 2016

IX. STATEMENT OF FINANCIAL PERFORMANCE

FOR THE YEAR ENDED 30 JUNE 2016

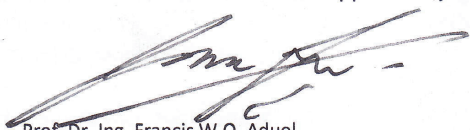
	Notes	2,016 Kshs.	2,015 Kshs.
INCOME			
Revenue from non-exchange transactions			
Government Grants: Recurrent	4(a)	1,063,961,634	1,040,499,998
Donor Funds	4(b)	14,366,191	50,036,009
Revenue from exchange transactions			
Rendering Services	5(a)	912,375,606	722,015,804
Other Income	5(b)	23,848,310	20,841,997
Total Revenue		2,014,551,741	1,833,393,808
EXPENSES			
Employee costs	6(a)	1,991,574,309	1,657,293,376
Depreciation and amortization expense	6(b)	137,080,243	150,189,686
General Expenses	6(c)	260,960,704	236,694,794
Bulk purchases of Water and Electricity	6(d)	39,706,780	40,516,885
Contracted services	6(e)	23,218,336	18,374,560
Repairs and Maintenance	6(f)	29,552,340	34,181,614
Remuneration of Council members	6(g)	5,510,786	8,552,202
Audit fees	6(h)	812,000	812,000
Total Expenses		2,488,415,498	2,146,615,117
Surplus/Deficit for the year		(473,863,757)	(313,221,309)

The Technical University of Kenya (TU-K)
Annual report & Financial Statements for the Year Ended 30 June, 2016

X. STATEMENT OF FINANCIAL POSITION
AS AT 30TH JUNE 2016

	Notes	2,016 Kshs.	2,015 Kshs.
ASSETS			
Trade and Other Receivables	10	260,147,403	276,408,201
Cash and Cash Equivalents	9(a)	62,396,297	77,164,342
Inventories	11	2,811,969	4,563,022
		325,355,669	358,135,565
NON CURRENT ASSETS			
Property, Plant and Equipment	7	5,606,626,918	5,574,655,355
TOTAL ASSETS		5,931,982,587	5,932,790,920
CURRENT LIABILITIES			
Trade and other payables	8	1,218,409,880	863,194,630
Bank Overdraft	9(b)	15,760	3,470
TOTAL CURRENT LIABILITIES		1,218,425,640	863,198,100
FUNDS			
Capital Fund	3	1,634,835,574	1,517,007,690
Revenue Reserve	3	(978,361,958)	(504,498,201)
Revaluation Reserve	3	4,057,083,331	4,057,083,331
		4,713,556,947	5,069,592,820
TOTAL FUNDS AND LIABILITIES		5,931,982,587	5,932,790,920

The financial Statements were approved by Council and were signed on its behalf by :



Prof. Dr. Ing. Francis W.O. Aduol
VICE- CHANCELLOR

13 June 2017



Tom Okungu
FINANCIAL CONTROLLER

13 June 2017

ANNEX 1

ADMISSION STATISTICS OF STUDENTS
IN MODULE I AND MODULE II

Programme	SUM (`Mod1_2014`)	SUM (`Mod2_2014`)
BACHELOR PHILOSOPHY TECHNOLOGY IN Applied Chemistry (Analytical Option)	0	0
BACHELOR OF TECHNOLOGY (Electrical and Electronic Engineering Technology)	48	44
BACHELOR OF APPLIED SCIENCE (Geo-informatics)	21	0
BACHELOR OF ARCHITECTURAL STUDIES/BACHELOR OF ARCHITECTURE	34	1
BACHELOR OF ARTS (International Relation and Diplomacy)	17	26
BACHELOR OF BUILT ENVIRONMENT (Urban and Regional Planning)	42	0
BACHELOR OF COMMERCE	142	123
BACHELOR OF COMMERCE (Accounting)	0	0
BACHELOR OF COMMERCE (Business Management)	0	1
BACHELOR OF COMMERCE (Finance)	0	1
BACHELOR OF COMMERCE (Human Resource Management)	0	0
BACHELOR OF COMMERCE (Logistics and Supply Chain Management)	0	0
BACHELOR OF COMMERCE (Marketing Management)	0	0
BACHELOR OF ECONOMICS	31	6
BACHELOR OF ENGINEERING (Aeronautical Engineering)	22	23
BACHELOR OF ENGINEERING (Chemical Engineering)	29	6
BACHELOR OF ENGINEERING (Civil Engineering)	51	64
BACHELOR OF ENGINEERING (Electrical and Electronic Engineering)	55	23
BACHELOR OF ENGINEERING (Geospatial Engineering)	25	2
BACHELOR OF ENGINEERING (Mechanical Engineering)	50	14
BACHELOR OF MUSIC	4	7
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Construction Management)	0	6
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Applied Biology)	0	7
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Applied Chemistry - Analytical Option)	0	14
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Biotechnology - Medical)	0	1
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Biotechnology)	0	4
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Electrical and Electronic Engineering Technology)	0	30
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Food Science and Technology)	0	0
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Geoinformation Technology)	0	0
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Land Surveying Technology)	0	6
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Mechanical Engineering Technology)	0	10
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Medical Laboratory Science)	0	1
BACHELOR OF PHILOSOPHY IN TECHNOLOGY (Printing Technology)	0	17
BACHELOR OF REAL ESTATE	33	4

Programme	SUM (`Mod1_2014`)	SUM (`Mod2_2014`)
BACHELOR OF SCIENCE (Accountancy)	30	10
BACHELOR OF SCIENCE (Biochemistry)	25	1
BACHELOR OF SCIENCE (Counseling Psychology)	21	0
BACHELOR OF SCIENCE (Event and Convention Management)	16	0
BACHELOR OF SCIENCE (Hospitality Management)	18	4
BACHELOR OF SCIENCE (Information Science)	46	0
BACHELOR OF SCIENCE (Land Administration)	25	0
BACHELOR OF SCIENCE (Mathematics)	33	3
BACHELOR OF SCIENCE (Medical Laboratory Science)	35	5
BACHELOR OF SCIENCE (Nutrition and Dietetics)	1	0
BACHELOR OF SCIENCE (Tourism Management)	18	4
BACHELOR OF SCIENCE IN DISASTER AND EMERGENCY MANAGEMENT	0	0
BACHELOR OF TECHNOLOGY (Applied Biology)	29	14
BACHELOR OF TECHNOLOGY (Applied Chemistry - Industrial Chemistry)	0	2
BACHELOR OF TECHNOLOGY (Applied Statistics)	40	1
BACHELOR OF TECHNOLOGY (Biotechnology)	31	12
BACHELOR OF TECHNOLOGY (Building Construction)	38	0
BACHELOR OF TECHNOLOGY (Business Information Technology)	46	2
BACHELOR OF TECHNOLOGY (Chemical Engineering Technology)	35	11
BACHELOR OF TECHNOLOGY (Civil Engineering Technology)	47	43
BACHELOR OF TECHNOLOGY (Communication and Computer Networks)	22	8
BACHELOR OF TECHNOLOGY (Community and Public Health)	33	6
BACHELOR OF TECHNOLOGY (Computer Technology)	31	15
BACHELOR OF TECHNOLOGY (Construction Management)	0	0
BACHELOR OF TECHNOLOGY (Design)	29	25
BACHELOR OF TECHNOLOGY (Electrical and Electronic Engineering Technology)	0	0
BACHELOR OF TECHNOLOGY (Environmental Resource Management)	34	0
BACHELOR OF TECHNOLOGY (Food Science and Technology)	28	20
BACHELOR OF TECHNOLOGY (Geoinformation Technology)	24	12
BACHELOR OF TECHNOLOGY (Hotel and Restaurant Management)	23	10
BACHELOR OF TECHNOLOGY (Industrial and Applied Chemistry)	30	28
BACHELOR OF TECHNOLOGY (Information Studies)	0	56
BACHELOR OF TECHNOLOGY (Information Technology)	34	11
BACHELOR OF TECHNOLOGY (Institutional Catering and Accommodation Management)	23	27
BACHELOR OF TECHNOLOGY (Journalism and Mass Communication)	25	18
BACHELOR OF TECHNOLOGY (Mechanical Engineering Technology)	43	35
BACHELOR OF TECHNOLOGY (MECHANICAL ENGINEERING TECHNOLOGY)	0	0
BACHELOR OF TECHNOLOGY (Medical Laboratory Science)	0	0
BACHELOR OF TECHNOLOGY (Nutrition and Dietetics)	34	8
BACHELOR OF TECHNOLOGY (Office Administration and Technology)	23	1
BACHELOR OF TECHNOLOGY (Quantity Surveying)	0	0
BACHELOR OF TECHNOLOGY (Science Laboratory Technology)	28	0
BACHELOR OF TECHNOLOGY (Surveying Technology)	26	34
BACHELOR OF TECHNOLOGY (Technical and Applied Physics)	22	0
BACHELOR OF TECHNOLOGY (Tourism Management)	0	0
BACHELOR OF THE BUILT ENVIRONMENT (Construction Management)	37	0
BACHELOR OF THE BUILT ENVIRONMENT (Quantity Surveying)	37	1
BACHELOR OF THE BUILT ENVIRONMENT (Real Estate)	0	0

Programme	SUM (`Mod1_2014`)	SUM (`Mod2_2014`)
BACHELOR OF THE BUILT ENVIRONMENT (Urban and Regional Planning)	0	0
BACHELOR OF THE BUILT ENVIRONMENT (Urban Design and Development)	41	0
DIPLOMA IN ACCOUNTANCY	0	30
DIPLOMA IN ARCHITECTURE	0	2
DIPLOMA IN BUSINESS STUDIES (Business Administration)	0	37
DIPLOMA IN BUSINESS STUDIES (Human Resource Management)	0	17
DIPLOMA IN BUSINESS STUDIES (Procurement and Supply Chain Management)	0	104
DIPLOMA IN BUSINESS STUDIES (Sales and Marketing)	0	15
DIPLOMA IN COUNSELING PSYCHOLOGY	0	0
DIPLOMA IN CRIMINOLOGY AND SECURITY STUDIES	0	0
DIPLOMA IN DISASTER MANAGEMENT	0	0
DIPLOMA IN ENVIRONMENTAL RESOURCE MANAGEMENT	0	2
DIPLOMA IN EVENT AND CONVENTION MANAGEMENT	0	0
DIPLOMA IN HOUSE KEEPING AND FRONT OFFICE MANAGEMENT	0	8
DIPLOMA IN INTERNATIONAL RELATION AND DIPLOMACY	0	20
DIPLOMA IN LEGAL STUDIES	0	4
DIPLOMA IN MEDICAL LABORATORY SCIENCE	0	0
DIPLOMA IN MUSIC	0	11
DIPLOMA IN OFFICE ADMINISTRATION	0	0
DIPLOMA IN PHARMACEUTICAL TECHNOLOGY	0	23
DIPLOMA IN PRINTING AND PACKAGING	0	0
DIPLOMA IN SOCIAL WORK AND COMMUNITY DEVELOPMENT	0	0
DIPLOMA IN TECHNOLOGY (Actuarial Science)	0	12
DIPLOMA IN TECHNOLOGY (Aeronautical Engineering)	0	0
DIPLOMA IN TECHNOLOGY (Analytical Chemistry)	0	13
DIPLOMA IN TECHNOLOGY (Applied Statistics)	0	7
DIPLOMA IN TECHNOLOGY (Architecture)	0	26
DIPLOMA IN TECHNOLOGY (Archive and Records Managements)	0	20
DIPLOMA IN TECHNOLOGY (Archives and Records Management)	0	0
DIPLOMA IN TECHNOLOGY (Automotive and Autotronic Engineering)	0	0
DIPLOMA IN TECHNOLOGY (Biochemistry)	0	5
DIPLOMA IN TECHNOLOGY (Biotechnology)	0	8
DIPLOMA IN TECHNOLOGY (Building Construction)	0	20
DIPLOMA IN TECHNOLOGY (Business Information Technology)	0	52
DIPLOMA IN TECHNOLOGY (Civil Engineering Technology)	0	122
DIPLOMA IN TECHNOLOGY (Communication and Computer Networks)	0	0
DIPLOMA IN TECHNOLOGY (Community and Public Health)	0	14
DIPLOMA IN TECHNOLOGY (Computer Technology)	0	0
DIPLOMA IN TECHNOLOGY (Construction Management)	0	0
DIPLOMA IN TECHNOLOGY (Design)	0	35
DIPLOMA IN TECHNOLOGY (Ecology and Conservation)	0	0
DIPLOMA IN TECHNOLOGY (Electrical and Electronic Engineering Technology)	0	2
DIPLOMA IN TECHNOLOGY (Electrical and Electronic Engineering)	0	105
DIPLOMA IN TECHNOLOGY (Event and Convention Management)	0	0
DIPLOMA IN TECHNOLOGY (Fashion Design)	0	36
DIPLOMA IN TECHNOLOGY (Food Science and Technology)	0	3
DIPLOMA IN TECHNOLOGY (Geo-Informatics)	0	6
DIPLOMA IN TECHNOLOGY (Health Records and Information Technology)	0	32

Programme	SUM (`Mod1_2014`)	SUM (`Mod2_2014`)
DIPLOMA IN TECHNOLOGY (Hotel and Restaurant Management)	0	28
DIPLOMA IN TECHNOLOGY (Industrial and Applied Biology)	0	19
DIPLOMA IN TECHNOLOGY (Industrial and Plant Engineering)	0	0
DIPLOMA IN TECHNOLOGY (Industrial Chemistry)	0	11
DIPLOMA IN TECHNOLOGY (Information Studies)	0	11
DIPLOMA IN TECHNOLOGY (Information Technology)	0	0
DIPLOMA IN TECHNOLOGY (Institutional Catering and Accommodation Management)	0	16
DIPLOMA IN TECHNOLOGY (Journalism and Mass Communication)	0	22
DIPLOMA IN TECHNOLOGY (Land Surveying and Cartography)	0	5
DIPLOMA IN TECHNOLOGY (Library and Information Technology)	0	0
DIPLOMA IN TECHNOLOGY (Manufacturing Engineering)	0	0
DIPLOMA IN TECHNOLOGY (Mechatronic Engineering)	0	0
DIPLOMA IN TECHNOLOGY (Medical Laboratory Science)	0	18
DIPLOMA IN TECHNOLOGY (Nutrition and Dietetics)	0	53
DIPLOMA IN TECHNOLOGY (Printing Technology)	0	17
DIPLOMA IN TECHNOLOGY (Quantity Surveying)	0	34
DIPLOMA IN TECHNOLOGY (Real Estate)	0	4
DIPLOMA IN TECHNOLOGY (Refrigeration and Air Conditioning)	0	0
DIPLOMA IN TECHNOLOGY (Surveying Technology)	0	33
DIPLOMA IN TECHNOLOGY (Tourism and Travel Management)	0	23
DIPLOMA IN TECHNOLOGY AUTOMOTIVE ENGINEERING	0	0
DOCTOR OF PHILOSOPHY	0	16
DOCTOR OF PHILOSOPHY IN HEALTH SYSTEM MANAGEMENT	0	0
DOCTOR OF PHILOSOPHY IN CIVIL ENGINEERING	0	0
ELECTRICAL INSTALLATION TECHNICIAN III	0	0
MASTER OF APPLIED LINGUISTICS	0	0
MASTER OF ENGINEERING (Electrical and Electronic Engineering)	0	0
MASTER OF SCIENCE (Applied Parasitology)	0	0
MASTER OF SCIENCE (Applied Statistics)	0	0
MASTER OF TECHNOLOGY (Mechanical Engineering Technology))	0	0
MASTER OF SCIENCE (Information and Knowledge Management)	0	0
MASTER OF SCIENCE (International Relations)	0	0
	1765	1969

ANNEX 2

2015/2016 GRADUATION STATISTICS

Faculty	Certificates	Diploma	Bachelors	TOTAL
Faculty of Applied Sciences and Technology				
School of Biological and Life Sciences	15	69	91	175
School of Computing and Information Technologies	35	58	46	139
School of Health Sciences and Technology	43	143	33	219
School of Mathematics and Actuarial Science	0	30	41	71
School of Physical Sciences and Technology	0	54	45	99
Total	93	354	256	703
Faculty of Engineering Sciences and Technology				
School of Architecture and The Built Environment	2	106	164	272
School of Electrical and Electronic Engineering	2	71	122	195
School of Mechanical and Process Engineering	18	217	81	316
School of Infrastructure and Resource Engineering	10	82	56	148
School of Surveying and Geospatial Sciences	30	24	104	158
Total	62	500	527	1089
Faculty of Social Sciences and Technology				
School of Business and Management Studies	46	501	212	759
School of Creative Arts and Technology	2	62	33	97
School of Hospitality and Tourism Studies	43	141	72	256
School of Information and Communication Studies	0	113	54	167
School of Social and Development Studies	0	62	75	137
Total	91	879	446	1416
Grand Total	246	1733	1229	3208



The Technical University of Kenya • Haile Selassie Avenue • P. O. Box 52428 – 00200, City Square, Nairobi •
Tel. +254 (020) 2219929, 3343672, +254 732 388675 • E-mail: vc@tukenya.ac.ke

<http://www.tukenya.ac.ke>