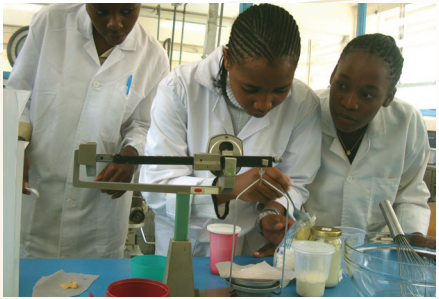
THE TECHNICAL UNIVERSITY OF KENYA

"Education and training for the real world"



FACULTY OF APPLIED SCIENCES AND TECHNOLOGY

COURSE BROCHURE – 2013/2014

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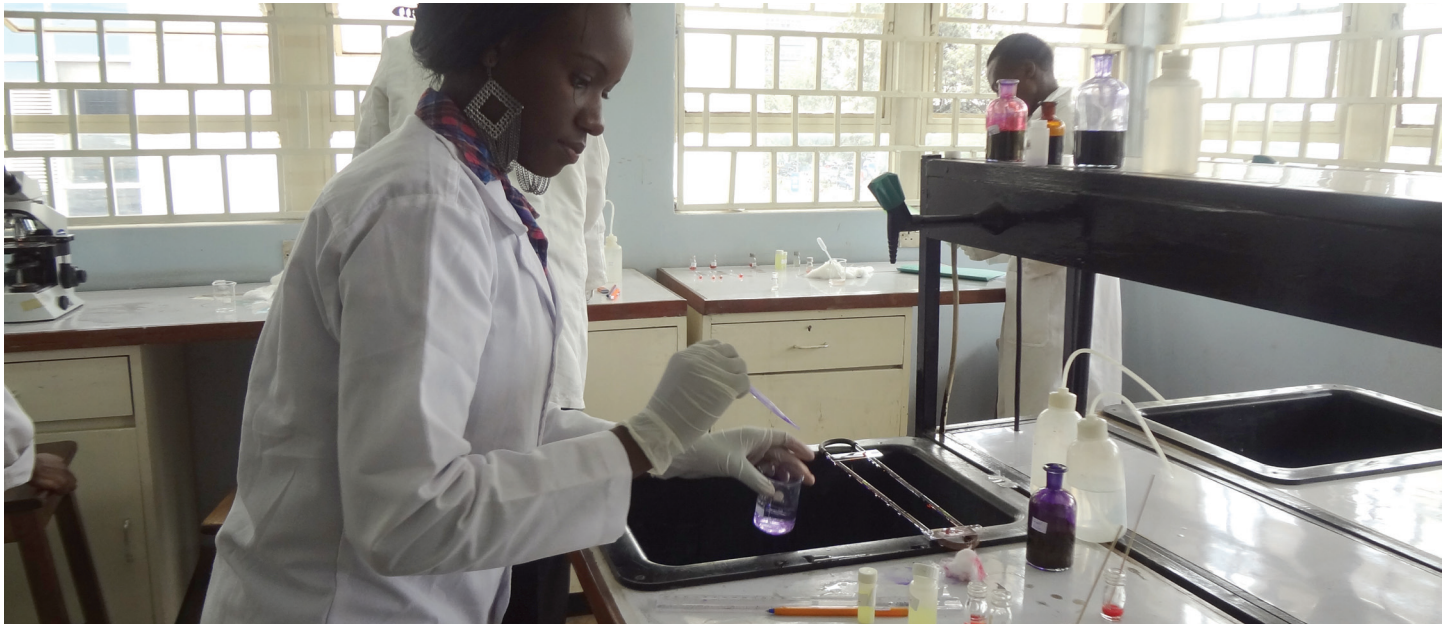
Our wide choice of courses will enable you to specialize in the areas that interest you most. The Faculty of Applied Sciences and Technology is well positioned to teach its own programs, and to provide teaching service to the other Faculties that apply theories of science to concepts in professional courses.

As the reference point for scientific knowledge, the Faculty endeavours to scaffold students to appreciate versatility of science and its application in the real world. We, therefore, simplify the teaching of science by utilizing activity based learning, experimentation and exploration to enhance the use of knowledge in technology development.

We have invested in the state-of-the art laboratories to facilitate achievement of our broader goal—of fostering ties between science and other disciplines, and preparing the minds of scholars by providing a platform from which they could fuse different fields of inquiry to create new knowledge and incubate innovation.

Prof. Michael L. Muia • Executive Dean



A. SCHOOL OF HEALTH SCIENCES AND TECHNOLOGY

Health is a basic need... At the School of Health Sciences and Technology, we equip our trainees with skills to ensure that health services are provided in the most timely and professional way.

The School of Health Sciences and Technology (SHST) offers training in allied health sciences programs. The school coordinates programs in the four departments, highlighted above, at Diploma and Undergraduate levels. We utilize multi-disciplinary and hands-on, practical, approaches aimed at producing graduates with skills that would allow them to seamlessly adapt in the workforce in this highly technical and specialized field in the allied health sciences. SHST graduates will have the knowledge and skills required to compete favourably in the job market, and a broad opportunity to establish careers in both public and private sectors. And because health care continues to evolve and improve, the School is committed to being a place where trainees can enhance knowledge and skills which will be translated into efficient and top rated scientists in the health care industry and research. The various programs mounted by the School address existing and emerging challenges in the health care service delivery. ICT, communication skills and entrepreneurship education are an integral component of the courses that we teach in order to enable the graduates we are producing effectively addresses the needs and challenges in their respective professions.

1. Department of **Biomedical Laboratory Sciences and Technology**

Biomedical Laboratory Sciences program require advanced technological knowledge in combination with methodological and medical knowledge. Biomedical laboratory Scientists are health science professionals whose central functions are the collection, preparation and analysis of patient samples for evidence-based diagnosis and treatment. Accuracy and honesty in the work of analysis is essential, and is emphasized throughout the course. The department provides students with the knowledge of the principles, theories, methods, and their application in medical laboratory sciences. The program helps students acquire skills that would enable them to easily adapt to the challenges and developments in the discipline. The program also develops skills in health needs assessment, decision-making and action, as well as monitoring and evaluation. The courses offered cover a wide range of topics—spanning from medical parasitology, histocytopathology, medical microbiology, medical virology, medical mycology, physiology, entomology, to clinical chemistry and research methods. We train middle and high level technologists who will be capable of working in public and private laboratories, research institutions, and industry.

COURSES OFFERED:

- Diploma in Technology • in *Biomedical Laboratory Science*
- Bachelor of Science • in *Biomedical Laboratory Science*
- Bachelor of Philosophy • in *Biomedical Laboratory Science*

PROGRAMMES FOR SEPTEMBER 2013

Minimum Qualifications:	**BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES** • *Kenya Certificate of Secondary Education (KSCE): Mean Grade C+ (Plus), including C+ (Plus) in relevant subjects* **BACHELOR OF PHILOSOPHY in Medical Laboratory Technology** • *Higher Diploma in Medical Laboratory Science and KMLTTB registered.* **DIPLOMAS IN MEDICAL LABORATORY SCIENCES** • *KCSE Mean Grade C (Plain), including C (Plain) in relevant subjects and C- (Minus) in Mathematics or Physics.*
Intake:	September
Duration:	**BSc**: 11 semesters (4 academic years) **B.Phil**: 4 semesters **Diplomas:** 9 terms (3 academic years)

2. Department of **Community and Public Health**

The Community and Public Health program examines the importance of creating supporting social, physical, and cultural environments for health. It addresses public health information and research, and develops skills in health needs assessment, epidemiology, evidence based decision-making and action, evaluation, partnership, leadership and community engagement. Students' skills and personal development needs are also addressed.

The program is re-aligned with international and national policies and legislation, which have increasingly emphasized a community and public health agenda focused on population based health and health improvement, health public policy and investment in health, re-orientation and modernization of health services, reduction of health inequalities and social exclusion, health protection and harm minimization, and prevention of ill-health as a means to reduce healthcare costs by improving the health of our population.

COURSES OFFERED:

- Bachelor of Technology • *in Community and Public Health*
- Diploma in Technology • *in Community and Public Health*

PROGRAMMES FOR SEPTEMBER 2013

Minimum Qualifications:	**BACHELOR OF TECHNOLOGY (Community and Public Health)** • *Credit Pass in a relevant Diploma, or Pass in a relevant Diploma—with two years of working experience* • *KCSE Mean Grade C+ (Plus), including C (Plain) in Biology, Chemistry, Mathematics or Physics, and in English or Kiswahili.* **DIPLOMA IN TECHNOLOGY (Community and Public Health)** • *KCSE Mean Grade C (Plain), including C– (Minus) in relevant subjects, or a Certificate in a related course* **Diploma in Technology (Health Records & Information Technology)** • *KCSE Mean Grade C– (Minus), including C– (Minus) in English or Kiswahili, Mathematics, Physics or Physical Sciences, and in relevant subjects; or Certificate in Health Records and IT or relevant Subject.* **Certificate in Health Records & Information Technology** • *KCSE Mean Grade D+ (Plus), or current employment in hospital/healthcare industry.*
Intake:	September
Duration:	**B.Tech**: 10 semesters for KCSE, 6 semesters for Diploma **Diplomas:** 8 semesters (3 academic years)

CAREER OPPORTUNITIES:

Graduates of the Community and Public Health programs will find exciting career opportunities in both Public and Private Sector health service delivery. These opportunities range from health surveillance, service delivery, and health education. Our graduates are also trained to effectively conduct research in epidemiological field, which has increasingly acquired prominence in national and international disease prevention strategies.

Training in the health records, information and & hospital services management results in the ability to access career opportunities in hospital and healthcare institutions as management technologists and technicians. Health and health systems management training is increasingly becoming a requirement with the expansion and regulation of the insurance and research industry. The not-for-profit sectors offer additional opportunities for our graduates in health advocacy, policy, and research organizations involved in biomedical health research.

3. Department of **Nutrition and Dietetics**

The Department of Nutrition and Dietetics offers excellent training to Nutritionists, Dieticians and Dietetic technician and technologists by using science to promote healthy eating habits for both preventive and curative management of nutritional disorders. Diet therapy, nutritional research, counselling and education are all within the realm of the nutrition and dietetics profession.

CAREER PROSPECTS

Nutritionists and Dieticians specialize in five main areas: In consultation with physicians and other medical professionals, **Clinical Nutritionists and dieticians** *are involved in the planning and supervision of meals prepared and served to individual patients based on their nutritional needs and preferences;* **Management Nutritionists and dieticians** *plan, coordinate, and supervise the planning, purchase, and preparation of food for institutions such as hospitals, health centres, and schools;* **Research Nutritionists and dieticians** *study nutrition, food science, and research on alternative foods among other areas of study;* **Community Nutritionists and dieticians** *work in government Health centres to provide advice to the community on basic rules of nutrition and improve eating behaviour;* **Consultant Nutritionists and dieticians** *counsel patients and perform nutritional screening and assessments on their own patients, or those referred by physician. We train Nutritionists, Dieticians and Dietetic technicians capable of working at skilled nursing facilities, Schools, Hospitals and medical centres, Public health agencies, Research Pharmacies and Chemists.*

COURSES OFFERED:

- Bachelor of Technology • *in Nutrition and Dietetics*
- Diploma in Technology • *in Community and Public Health*
- Certificate • *in* Nutrition and Dietetics

PROGRAMMES FOR SEPTEMBER 2013

Minimum Qualifications:	**BACHELOR OF TECHNOLOGY (Nutrition and Dietetics)** • *Credit Pass in a relevant Diploma, or Pass in a relevant Diploma with two years of working experience* • *KCSE Mean Grade C+ (Plus), including C+ (Plus) in relevant subjects* **DIPLOMA IN TECHNOLOGY (Nutrition and Dietetics)** • *KCSE Mean Grade C (Plain), including C– (Minus) in relevant subjects, or a Certificate in a related course* **CERTIFICATE IN NUTRITION AND DIETETICS** • *KCSE Mean Grade D+ (Plus)*
Intake:	September
Duration:	**B.Tech**: 11 semesters for KCSE, 6 semesters for Diploma **Diplomas:** 8 semesters (3 academic years) **Certificates:** 3 semesters (1 academic year)

4. Department of **Pharmaceutical Sciences and Technology**

The department offers programs that address acquisition and development of skills, attitudes and knowledge for professional practice in the areas of clinical pharmacy, industrial pharmacy, community pharmacy, and research. The training offered equips students with a strong base of skills to support health care facilities, and engage in pharmaceutical research.

CAREER PROSPECTS:

Pharmacies, Pharmaceutical Companies, Drug regulatory agencies (Pharmacy and Poisons Board), and educational and research institutions.

COURSE OFFERED:

- Diploma in Pharmaceutical Technology

PROGRAMMES FOR SEPTEMBER 2013

Minimum Qualifications:	**DIPLOMA IN PHARMACEUTICAL TECHNOLOGY** • *KCSE Mean Grade C (Plain), including C (Plain) in English or Kiswahili, Mathematics or Physics, Chemistry or Physical Science, and Biology or Biological Sciences.*
Intake:	September
Duration:	9 terms (3 years).

B. SCHOOL OF MATHEMATICS AND STATISTICS

The essence of technology remains vague without a strong ***MATHEMATICAL SUPPORT!*** *Indeed, mathematical support is guaranteed when you join The Technical University of Kenya.*

The School of Mathematics and Statistics currently has four departments: Actuarial and Financial Mathematics, Pure and Applied Mathematics, Technical and Engineering Mathematics and, Statistics and Computational Mathematics.

CORE MANDATE OF THE SCHOOL

To provide an opportunity to students who wish to pursue different areas of mathematics by increasing their level of competence and preparing them adequately to enable them join the job market.

To provide mathematical skills and positive attitudes that cultivates a culture of research and professionalism, and to satisfy industrial and technological demands—nationally and internationally.

OUR VISION: *To be the centre of excellence in teaching mathematics for technological development*

1. Department of **Pure and Applied Mathematics**

The program in Bachelor of Science in mathematics involves using mathematics theory and logic to solve mathematics related problems. In the degree program, a student may specialize in pure or applied mathematics

The course seeks to provide an opportunity to students who wish to pursue different areas of mathematics by increasing their level of competence and preparing them adequately to enable them join the job market e.g. in banking, and education sector, and also to register for a postgraduate course in their area of specialization.

COURSE OFFERED:

- Bachelor of Science in Mathematics

PROGRAMMES FOR SEPTEMBER 2013

Minimum Qualifications:	**Bachelor of Science in Mathematics** • *KCSE mean grade of C+ with C+ in cluster subjects*
Intake:	September
Duration:	4 years

2. Department of **Statistics and Computational Mathematics**

The course is intended to produce practical, and hands-on, statisticians with cutting edge computing skills. The graduates are expected carry to our research and apply statistical data analysis to problems in various sectors of the economy. These sectors ordinarily include; research institutions, education, business, industry, financial services, medicine, information technology in the public, corporate, non-governmental organizations, multinationals, and multilateral United Nation bodies.

In line with the country's Vision 2030 national goals, the graduates who are not absorbed in the formal job market should be able to start small-scale consultancy businesses in statistical data analysis.

COURSES OFFERED:

- Bachelor of Technology in Applied Statistics
- Bachelor of Philosophy in Technology *(Applied Statistics)*
- Diploma in Technology in Applied Statistics

PROGRAMMES FOR SEPTEMBER 2013

Minimum Qualifications:	**Bachelor of Technology in Applied Statistics** • *KCSE mean grade of C+ with C+ in cluster subjects* **Bachelor of Philosophy, in Technology (Applied Statistics)** • *Higher Diploma in Applied Statistics/Actuarial Sciences* **Diploma in Technology in Applied Statistics** • *KCSE mean grade of C– (minus) with C– (minus) in the relevant cluster subjects*
Intake:	September
Duration:	**B.Tech:** 4 years **B.Phil:** 2 years **Dip.Tech:** 2 years

The program is designed to augment the practical skills of the holders of higher diploma qualifications by imparting more mathematical and statistical skills for problem solving. Hence, graduate of this program will be equipped the practical application of the mathematical and scientific principles to solve problems and provide quick solutions in the workplace. The course is intended to provide a sound foundation in the principles and practice of Statistics with emphasis on Practical data collection, organization, presentation, analysis, and Interpretation

3. Department of **Actuarial and Financial Mathematics**

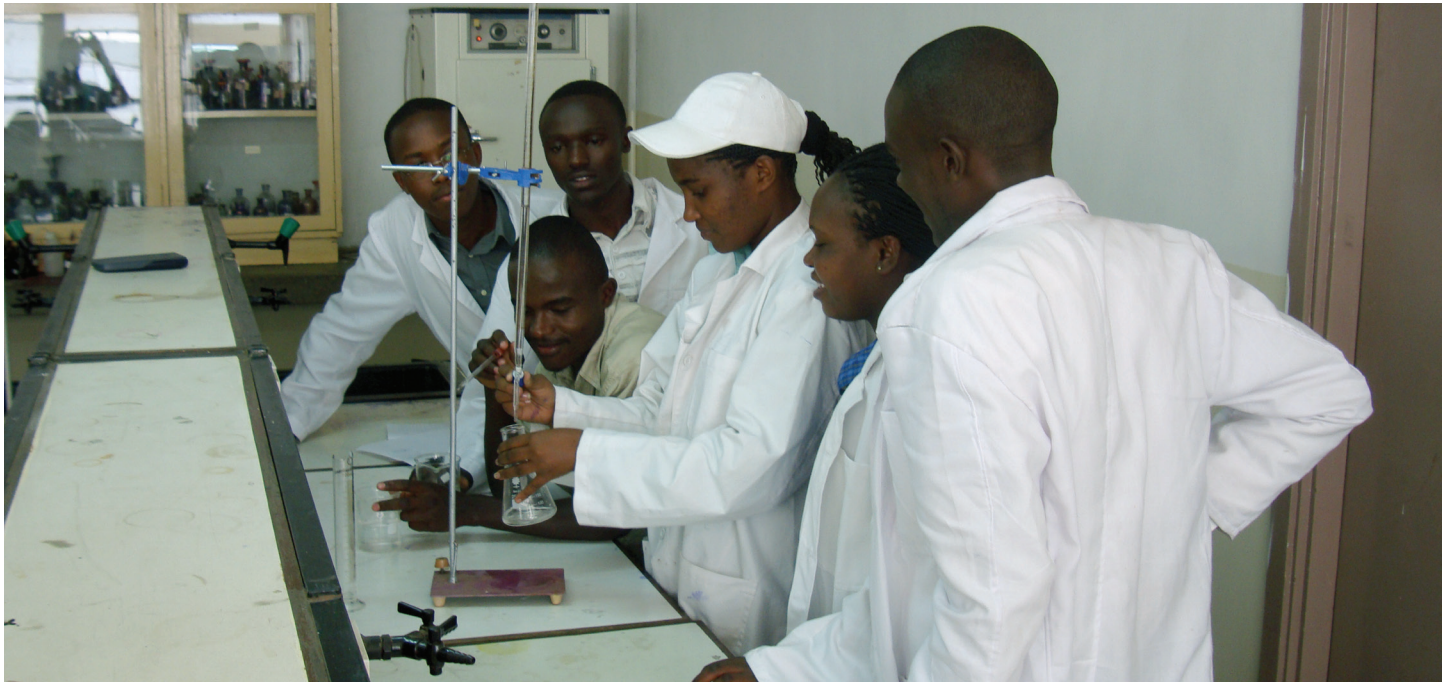
The program leading to Diploma in Technology in Actuarial Science is structured to provide practical skills as well as fundamental knowledge of application of Actuarial Science in various fields. Actuarial Science is concerned with the application of mathematical, statistical, probabilistic and financial theories to solve real business problems. These problems involve analyzing future financial events.

COURSE OFFERED:

- Diploma in Technology in Actuarial Science

PROGRAMMES FOR SEPTEMBER 2013

Minimum Qualifications:	**Diploma in Technology in Actuarial Science** • *KCSE mean grade of C– (minus) with C– (minus) in the relevant cluster subjects*
Intake:	September
Duration:	3 years



C. SCHOOL OF PURE AND APPLIED SCIENCES

*At The Technical University of Kenya, we intertwine **APPLIED SCIENCES** and **TECHNOLOGY** to solve common problems in society. So, when you train with us, you become part of the solution...*

Academic programs within the School include certificates, Diplomas, Bachelor of Technology, and Bachelor of Philosophy. The School has a critical mass of researchers, who are also involved in supervision at Master and Doctorate levels, and is currently leading in publications amongst the Schools in the University. A good number of academic staff within the School participates in many policy-making organs of the Government of Kenya, especially in the areas of Space Science and Technology, and Bio-security and Bio-safety.

1. Department of **Biochemistry and Biotechnology**

Our training is aligned with the national goals of promoting science technology and innovation. The Department offers training in the fields of both Biochemistry and Biotechnology. We aim to produce innovators and techno-scientists equipped with the fundamental scientific principles, knowledge, and its applications in the areas of Biochemistry and Biotechnology. This is to enable our graduates attain the knowledge of converting ideas into new technologies and come up with new innovationsfor product development. This, in turn, will enable our graduates develop biotechnology enterprises which create wealth and employment.

PROGRAMMES FOR SEPTEMBER 2013

Bachelor of Technology in Biotechnology: (Industrial, Medical, and Agricultural Options)	
Intake	September
Duration	3 years
Bachelor of Philosophy in Technology Biotechnology: (Industrial, Medical, and Agricultural Options)	
Intake	September
Duration	2 years
Qualifications	Higher Diploma in Biotechnology
Bachelor of Science in Biochemistry: (Industrial, Medical, and Nutrition options)	
Intake	September
Duration	3 years
Qualifications	Diploma in Biochemistry
Diploma in Technology (Biotechnology)	
Intake	September
Duration	3 years
Qualifications	C mean Grade with at least a C in Biology, chemistry, Mathematics or physics, and English or Kiswahili
Diploma in Technology (Biochemistry)	
Intake	September
Duration	3 years
Qualifications	C mean Grade with at least a C in Biology, chemistry, Mathematics or physics, and English or Kiswahili

The Department also offers the following short courses during April, August, and December vacations.

- DNA and Serological Forensics
- Quality Management System (QMS)
- Internal Quality Auditors (IQA)
- Bio-fuel [Bio-Gas, Bio-Diesel, Bio-Ethanol] Production
- Clinical Good Laboratory practices (GCLP)
- Laboratory Bio-safety and Quality assurance (Module I)
- Laboratory Bio-safety and Quality assurance (Module II)
- Microbiological Laboratory Techniques

2. Department of **Biological Science and Technology**

The Department of Biological science and technology offers Bachelors, Diploma and Higher Diploma, and Certificate courses in Applied Biology and Science Laboratory Technology.

We give our students the tools in applied biology and science laboratory technology to deliver quality services and make quality products that meet the ever changing human needs. We teach them to design, build, evaluate, and improve complex chemical, biological, and material systems. Our biological science technologists and industrial laboratory graduates leave with the knowledge to apply biological, chemical, and physical principles to benefit humanity, protect the environment, and build sustainable futures.

CAREER OPPORTUNITIES:

Our graduates have found employment as technicians and technologists in laboratories in universities, colleges, secondary schools, hospitals, research institutes, and in the Industries.

PROGRAMMES FOR SEPTEMBER 2013

Bachelor of Technology in Applied Biology (Industrial & Bio-production** or **Biological Laboratory options)	
Intake:	September
Duration:	4 years
Qualifications:	C+ mean grade, and a C in mathematics, Biology, and chemistry, or a TU-K Diploma in Technology in Applied Biology

Bachelor of Technology in Science Laboratory Technology (Biological, Chemical or Physical option)	
Intake:	September
Duration:	4 years
Qualifications:	C+ mean grade, and a C+ in Biology, physics, and chemistry, or a TU-K Diploma in technology in Applied Biology or Dip. Tech in SLT.
Bachelor of Philosophy in Technology (Applied Biology) *[Evening] or* ***[Vacation/E-LEARNING]***	
Intake:	September
Duration:	2 years
Qualification:	Higher National Diploma
Diploma in technology in Applied Biology (Evening *or* ***Vacation /On line)***	
Intake:	September
Duration:	3 years
Qualification:	KCSE C (PLAIN) with C- in Biology, Maths, Eng. & any other Science, Certificate in SLT or relevant areas.
Diploma in technology in Science Laboratory Technology (Industrial option & Biological option) – Vacation or Evening	
Intake:	September
Duration:	3 years
Qualification:	KCSE C (PLAIN) with C- in Biology, Maths, Eng. & any other Science, Certificate in SLT or relevant areas.
Diploma in technology in: *Industrial and Applied Biology • Biotechnology*	
Intake:	September
Duration:	3 years
Qualification:	KCSE C (PLAIN) with C- in Biology, Maths, Eng. & any other Science, Certificate in SLT or relevant areas.
Certificate in Science Laboratory Technology (SLT) Evening	
Intake	September
Duration	1 Year
Qualification	KCSE D+(Plus), those working in Science/School, Research, & Industrial labs

3. Department of **Chemical Science and Technology**

The Department of Chemical Science and Technology offers Bachelors, Diploma, and Certificate courses in Analytical and Industrial Chemistry. We give our students the tools in Analytical and Industrial Chemistry to deliver quality services and make quality products that meet the ever changing human needs. We teach them to design, build, evaluate, and improve complex chemical, biological, and material systems. Our Chemical Technologists and Chemistry graduates leave with the knowledge to apply chemical and biological principles to benefit humanity, protect the environment, and build sustainable futures.

Careers in chemical Technology are more rewarding today than ever. Technologists are in high demand for bringing valuable skills to the development of new products, processing methods and materials. Chemical technologists work in every aspect of the chemical process industry from basic research to hazardous waste management. Research and development technologists work in experimental laboratories and process control technologists work in manufacturing or other industrial plants. Technologists operate many kinds of equipment and instrumentation, set-up apparatus for chemical reactions, prepare compounds, monitor commercial production, test for product quality, and collect and analyze samples produced through organic synthesis.

Technologists also work in data management, quality assurance, and shipping to provide technical support and expertise for these functions. Consequently, chemical technologists from the The Technical University of Kenya are employed in government research institutions, universities; pharmaceutical and manufacturing companies, and oil companies. A number of our chemical technologists get employment in industries such as polymer, biotechnology, consumer products, paint, soap, and fragrance—with well defined career ladders.

PROGRAMMES FOR SEPTEMBER 2013

Bachelor of Technology in Applied Chemisty (Industrial Chemistry *or* ***Analytical Chemistry Options)***	
Intake:	September
Duration:	8 semesters + 2 IBL semesters
Qualifications:	C+ mean grade (in addition C+ in mathematics, physics and Chemistry) *or* TU-K Diploma in Technology in Industrial Chemistry or Analytical Chemistry or Equivalent
Diploma in Technology in: *Analytical Chemistry • Industrial Chemistry*	
Intake:	September
Duration:	6 semesters + 1 IBL semester
Qualifications:	C - (minus) mean grade (in addition C- in mathematics, physics and chemistry), or Certificate in Applied Chemistry

Advanced Diploma in QC, TQM, QMS [Module 2 only]	
Intake:	September
Duration:	3 Semesters
Qualifications	Diploma, Degree, Masters in any science field
Certificate in Applied Chemistry [Module 2 only]	
Intake	September
Duration	3 semesters
Qualification	D+ mean grade (in additional least D+ in Mathematics, Physics and Chemistry)

4. Department of **Earth Environmental Science and Technology**

The Department aims to train natural resource managers who can look at the environment in its totality, diagnose environmental resource issues, and suggest sustainable mitigation measures at local, national and global levels. The training is aimed at developing an awareness of the complexities of interrelationships between human and environment, because the way society frames these relationships determines how society allocates and/or conserves its natural resources. We are determined to produce top environmentalists, and environmental technologists and technicians, who will apply their skills innovatively to conserve the environment for sustainable development.

PROGRAM FOCUS: Environmental Resource Management, Environmental Science and Technology, Environmental Planning, Environmental Disaster Management, Geological Sciences, Atmospheric Science, Environment and Community Development, and Integrated Water Resource Management. The programs we offer are tailored to cater for students at various levels from Certificate, Diploma, and Degree to postgraduate.

CAREER OPPORTUNITIES:

Our graduates find employment as research officers, lecturers, environment officers, technologists and technicians in research institutes and environmental agencies such as Kenya Agricultural Research Institute (KARI), Universities, National Environmental Management Authority (NEMA), Kenya Wildlife Service (KWS), Kenya Forest Research Institute (KEFRI), Ministry of Water, Ministry of Environment and Mineral resources, United Nations Environmental Program (UNEP), County governments, National Museums of Kenya, and International Centre for Insect Physiology and Ecology (ICIPE) among many others.

PROGRAMMES FOR SEPTEMBER 2013

Bachelor of Technology in Environmental Resource management ***Bachelor of Technology in Environmental Science***	
Intake:	September
Duration:	4 years
Qualifications:	KCSE C+ with at least C+ in Mathematics, Geography, Chemistry and Biology, *or* TU-K Diploma in Technology in Environmental Resource Management
Diploma in Technology: Environmental Resource Management	
Intake:	September
Duration:	3years
Qualifications:	KCSE C- (Minus) with at least C- in Mathematics, English/Kiswahili, Biology/Chemistry, Geography/ Agriculture, or TU-K Certificate in a related area or from a recognized institution
Certificate in Environmental Studies	
Intake:	September
Duration:	One year
Qualifications:	KCSE D+ (Plus), those working in various ministries & NGO's on environmental related matters

5. Department of **Food Science and Technology**

The Department of Food Science and Technology offers courses at Bachelors, Diploma and Certificate in Food Science and Technology. Students are trained and given an exposure to all components of food processing, science and technology to enable them understand the link between food, nutrition and health, as well as deliver quality services and make quality products to the ever discerning quality conscious consumers. Our graduates work in a range of food business activities.

PROGRAMMES FOR SEPTEMBER 2013

Bachelor of Philosophy in Food Science and Technology	
Intake:	September*
Duration:	2 years
Qualifications:	Higher Diploma in Technology (Food Science and Technology)

Bachelor of Technology in Food Science and Technology	
Intake:	September
Duration:	4 years
Qualifications:	C + Mean grade (with C+ in Mathematics, Physics and Chemistry, or TU-K Diploma in Technology (Food Science and Technology)
Diploma in Technology in Food Science and Technology	
Intake:	September
Duration:	3 years
Qualifications:	C- Mean grade (with C- in Maths, Physics, Chemistry, English or Kiswahili), OR TU-K Certificate in Food Science and Technology
Certificate in Technology Food Science and Technology	
Intake:	September
Duration:	2 years
Qualifications:	D+ Mean grade (in addition, D+ in Mathematics, Physics, Chemistry English or Kiswahili).

6. Department of **Technical and Applied Physics**

The Department of Technical and Applied Physics runs programs at Diploma and degree levels. It is the only Department offering programs of this kind in Africa. The Department, through its staff, currently provides leadership in Kenya in all matters of space science and technology, and will soon be mounting a Postgraduate program in Space physics.

The degree program is a four-year program placing emphasis on real- world applications and sound understanding of the basics of physics. It is a unique program whose main objective is to produce skilled graduate with hands-on experience, strong analytical skills, and adequate computer based techniques in their areas of specialization. Deliberate emphasis is placed on technical and practical skills by including a high component of practical work, long period of Industry Based Learning (IBL), and regular industry visit to support classroom teaching. Major areas of research in applied physics are adequately covered such as material science, Instrumentation and energy among others.

The diploma is a three year program with a unique and well thought out curriculum that aim to produce qualified technicians in the field of Physics and related areas. The curriculum puts emphasizes on hands-on learning through demonstrations, practical exercises, fieldwork and Industry based learning.

Holders of Diploma in Technology (Technical and Applied physics) are eligible for admission into the bachelors program in related Applied Physics areas...

CAREER OPPORTUNITIES:

Opportunities for our graduates are wide and varied. Among the prospective employers include those in the fields of energy, polymer, ceramics and glass. Opportunities are also available in government sector—especially in the ministry of Trade and Industries, Kenya Bureau of standards among others—and e in private sectors such as research bodies, Educational Institutions (such as universities laboratories), as well as colleges and secondary schools where qualified technologist/technicians are greatly sought.

PROGRAMMES FOR SEPTEMBER 2013

Bachelor of Technology (Technical and Applied Physics)	
Intake	September
Duration	4 years
Qualification	C+ mean grade (with C+ in Maths, physics and chemistry, English), or TU-K Diploma in Technology (Technical and Applied Physics)
Diploma in Technology (Technical and Applied Physics)	
Intake	September
Duration	3 years
Qualification	C mean grade (in addition C in mathematics, physics and chemistry, English) or TU-K Certificate in Technology in (Technical and Applied Physics)