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# Vision and Mission Statements

## Vision

**A Globally Competitive Centre of Excellence in Teaching, Research, Innovation and Service**

## Mission

**To Provide Quality Education Through Teaching, Research, Extension, Innovation and Entrepreneurship with Emphasis on Dryland Agriculture, Natural Resources and Environmental Management.**

## Core Values

**Professionalism**

**Innovation**

**Integrity**

**Freedom of Thought**

**Teamwork**

**Respect and Conservation of Environment**

# Addresses

## Main Campus

P.O. Box 170 – 90200, Kitui, KENYA  
Telephone: 0202-41 3859, 0202-334346, 0716-962770  
E-mail: [info@seku.ac.ke](mailto:info@seku.ac.ke)  
Website: [www.seku.ac.ke](http://www.seku.ac.ke)

## Kitui Town Campus

P.O. Box 170 – 90200, Kitui, KENYA  
Telephone: 44-4422699  
E-mail: [kituitowncampus@seku.ac.ke](mailto:kituitowncampus@seku.ac.ke)  
Website: [www.seku.ac.ke](http://www.seku.ac.ke)

## Nairobi Campus

P.O. Box 170 – 90200, Kitui, KENYA  
Telephone: 020-2531395  
E-mail: [info@seku.ac.ke](mailto:info@seku.ac.ke)  
Website: [www.seku.ac.ke](http://www.seku.ac.ke)

## Wote Campus

P.O. Box 170 – 90200, Kitui, KENYA  
Telephone: 0714-122140  
E-mail: [wotecampus@seku.ac.ke](mailto:wotecampus@seku.ac.ke)  
Website: [www.seku.ac.ke](http://www.seku.ac.ke)

## Machakos Campus

P.O. Box 170 – 90200, Kitui, KENYA  
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E-mail: [machakoscampus@seku.ac.ke](mailto:machakoscampus@seku.ac.ke)  
Website: [www.seku.ac.ke](http://www.seku.ac.ke)

## Tala Campus

P.O. Box 170 – 90200, Kitui, KENYA  
Telephone: 0721-325026  
E-mail: [talacampus@seku.ac.ke](mailto:talacampus@seku.ac.ke)  
Website: [www.seku.ac.ke](http://www.seku.ac.ke)

## Mtito Andei Campus

P.O. Box 122 – 90128, Mtito Andei, KENYA  
Telephone: 0731-435934  
E-mail: [mtito-andeicampus@seku.ac.ke](mailto:mtito-andeicampus@seku.ac.ke)  
Website: [www.seku.ac.ke](http://www.seku.ac.ke)

## Mwingi Campus

P.O. Box 170 – 90200, Kitui, KENYA  
Website: [www.seku.ac.ke](http://www.seku.ac.ke)

# **The Chancellor of The South Eastern Kenya University**



**Dr. Titus T. Naikuni**  
**B.Sc.Eng (Nairobi), Hon. D.Sc (JKUAT)**

# The University Council



**Prof. Louis M. Mumera**  
Chairman



**Prof. Geoffrey M. Muluvi**  
Vice-Chancellor/Secretary



**Mrs. Veronica Maina**  
Member



**Prof. Kamuti Kiteme**  
Member



**Mrs. Margaret Muiru**  
Member / Representing



**Mr. Martin Kinoti**  
Member



**Dr. Issa A. Kipera**  
Member



**Mr. Batholomew Lumbasi**  
Member / Representing



**Ms. Risper Kandie**  
Member



# Members of the University Council

## Chairman of Council

Prof. Louis M. Mumera, B.A.(Massachusetts), M.Sc. (Penn State), Ph.D. (Illinois)

## Members

Prof. Kiteme Kamuti, Cert. (Kagumo), Dip. (Fairly Dickinson), M.Sc. (Bank Street College), Ed.D. (Yeshiva)

Dr. Issa A. Kipera, B.A., M.A. (Nairobi), Ph.D. (Jawaharlal Nehru)

Ms. Risper J. Kandie, B.Sc., M.Sc. (Nairobi)

Mr. Martin Kinoti, Dip., B.Sc. (Egerton), M.Sc. (Nairobi)

Ms. Veronica Nduati Maina, LL.B. (Nairobi), LL.M. (London)

Principal Secretary, Ministry of Education, Science and Technology

Principal Secretary, Ministry of Finance

## Ex-officio Member

## Vice-Chancellor

Prof. Geoffrey M. Muluvi, B.Sc. (Moi), MBA (ESAMI), Ph.D. (Dundee).

# Officers of the University



**Dr. Titus T. Naikuni**  
Chancellor



**Prof. Louis M. Mumera**  
Chairman of Council



**Prof. Geoffrey M. Muluvi**  
Vice-Chancellor



**Prof. Dickson M. Nyariki**  
Deputy Vice-Chancellor (AHRM)



**Prof. Zipporah W. Ng'ang'a**  
Deputy Vice-Chancellor (ARSA)



**Prof. Reuben M. Muasya**  
Deputy Vice-Chancellor (FPD)



**Prof. Mary W. Mburu**  
Registrar (AHRM)



**Dr. John F. Koga**  
Registrar (ASA)



**Dr. Joseph K. Metet**  
Registrar (PD)



**Mr. Lawrence M. Bokoro**  
Finance Officer

# Officers of the University

## **Chancellor**

Dr. Titus T. Naikuni, B.Sc.Eng (UoN), Hon. D.Sc (JKUAT)

## **Chairman of Council**

Prof. Louis M. Mumera, B.A. (Massachusetts), M.Sc. (Penn State), Ph.D. (Illinois)

## **Vice-Chancellor**

Prof. Geoffrey M. Muluvi, B.Sc. (Moi), MBA (ESAMI), Ph.D. (Dundee).

## **Deputy Vice-Chancellor (Academic, Research and Student Affairs)**

Prof. Zipporah W. Ng'ang'a, B.Sc., M.Sc. (Nairobi), Ph.D (Kenyatta), EMBA (JKUAT)

## **Deputy Vice-Chancellor (Administration and Human Resource Management)**

Prof. Dickson M. Nyariki, B.Sc. Agric (Nairobi), M.Sc. (Nairobi), Ph.D. (Reading)

## **Deputy Vice-Chancellor (Finance, Planning and Development)**

Prof. Reuben M. Muasya, B.Sc.Agric (Baraton), M.Phil. (Moi), Ph.D. (Wagenigen)

## **Registrar (Academic and Student Affairs)**

Dr. John F. Koga, B.Ed.(Sc.) (Nairobi), M.Sc. (Kenyatta), Ph.D. (Leeds).

## **Registrar (Planning and Development)**

Dr. Joseph K. Metet, B.Sc. (Iowa), M.Ed. (Washington), Ed.D. (Bristol).

## **Registrar (Administration and Human Resource Management)**

Prof. Mary W. Mburu, B.Sc.Agric. (Nairobi), M.Sc. (California), Ph.D. (Reading)

## **Finance Officer**

Mr. Lawrence M. Bokoro, B.Com., MBA (Kenyatta), CPA (K), CPS (K)

# **The University Senate**

# Academic Structure

## University Senate

### Membership

Prof. Geoffrey M. Muluvi	Vice-Chancellor; Chairman
Prof. Zipporah W. Ng'ang'a	Deputy Vice-Chancellor (Academic, Research and Student Affairs) Secretary
Prof. Dickson M. Nyariki	Deputy Vice-Chancellor (Administration and Human Resource Management)
Prof. Reuben M. Muasya	Deputy Vice-Chancellor (Finance, Planning and Development)
Dr. John F. Koga	Registrar (Academic and Student Affairs)
Prof. Mary W. Mburu	Registrar (Administration and Human Resource Management)
Dr. Joseph K. Metet	Registrar (Planning and Development)

### Librarian

Ms. Nduku Charles (Ag.)	University Librarian
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### Dean of Students

Dr. Eliud M. Muli	Dean of Students
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### Deans of Schools

Prof. Nashon N.R. Musimba (Ag.)	School Agricultural and Veterinary Sciences
Prof. Augustus Wali	School of Pure and Applied Sciences
Dr. Jacinta Kimiti (Ag.)	School of Environment and Natural Resources Management
Dr. Johnson Kitheka	School of Water Resources Science and Technology
Dr. Anthony O. Ogutu (Ag.)	School of Humanities and Social Sciences
Dr. James M. Muola (Ag.)	School of Education
Dr. Charles Ombuki	School of Business and Economics
Ms. Carolyn Onkangi (Ag.)	School of Information and Communication Technology

### Directors/Coordinators of Campuses

Prof. Dorothy Mutisya	Nairobi City Campus
Dr. Jonathan Mwania	Kitui Town Campus
Dr. Matheaus Kauti	Mtito Andei Campus
Dr. Patrick D. Kisangau	Wote Town Campus
Ms. Regina Wambua	Machakos Town Campus
Dr. Redempta Maithya	Tala Town Campus
Ms. Florence Kioko	Mwingi Town Campus

## **Directors of Institutes, Boards and Directorates**

Prof. Eliud M. Mathu	Institute of Mining and Mineral Resources
Prof. Cornellius Wanjala	Board of Postgraduate Studies
Prof. Thomas A. Akuja	Linkages and International Programmes
Dr. Patricia N. Muendo	Catering and Accommodation Services
Dr. Onesmus Maweu	Research, Innovation and Technology
Mr. Casper Shikali	Performance Contracting & QMS
Mr. Mogire Obwayo	Information and Communication Technology

## **Chairmen of Departments**

Dr. Benjamin K. Muli	Department of Dryland Agriculture
Dr. Dorothy Amwata	Department of Range and Wildlife Sciences
Dr. Peter Njuru	Department of Environmental Science and Technology
Dr. Patrick C. Kariuki	Department of Geological Sciences
Dr. David K. Musembi	Department of Meteorology
Dr. Benson M.O. Agaya	Department of Sociology and Anthropology
Dr. Brian Ptoton	Department of Physical Sciences
Dr. Sichangi Kasili	Department of Biological Sciences
Dr. Moses Mwangi	Department of Hydrology & Water Resources Management
Dr. Amos K. Mutua	Department of Fisheries & Aquaculture Technology
Mr. Festus Mutiso	Department of Forestry Resources Management
Mr. Sternly Rotich	Department of Mathematics and Actuarial Science
Mr. Jared Ariemba	Department of Business and Entrepreneurship
Ms. Esther Waila-Wambua	Department of Management Science
Mr. Kyalo Musau	Department of Economics
Ms. Carolyne Onkangi	Department of Computer Science & Software Engineering
Mr. Georgiads M. Kivai	Department of Community and Development Studies
Ms. Agnes Mulewa	Department of Linguistics and Communication
Dr. Joash Migosi	Department of Education Administration and Planning

# **Schedule**

## **THE SOUTH EASTERN KENYA UNIVERSITY CHARTER**

### **The Universities Act, 2012 (No. 42 of 2012)**

**IN EXERCISE** of the powers conferred by section 21 of the Universities Act 2012, the Minister for Higher Education, Science and Technology certifies that this Charter set out in the Schedule hereto has been granted to the South Eastern Kenya University in accordance with the provisions of the Act.

**Dated the First Day of March 2013**

**MARGARET KAMAR,  
Minister for Higher Education, Science and Technology**

# Preamble

**WHEREAS** the Government of Kenya wishes to establish the South Eastern Kenya University situated in Kitui County in the Republic of Kenya;

**AND WHEREAS** the said South Eastern Kenya University has applied to the Commission for University Education, for the grant of a Charter to provide for the establishment, control governance, and administration of the University and for connected purposes, in the manner prescribed by the Universities Act;

**AND WHEREAS** the Commission for University Education has visited and inspired the said institution, and is satisfied that the objects of the South Eastern Kenya University are consistent with the advancement of University education in Kenya;

**AND WHEREAS** the Commission for University Education is also satisfied that the South Eastern Kenya University has complied with the provisions of the Act;

**AND WHEREAS** the Minister for Higher Education, Science and Technology has submitted this Charter to me with recommendations thereon;

**AND WHEREAS**, I am satisfied that the granting of this Charter will be of benefit to the advancement of University education in Kenya;

**NOW WHEREFORE**, by these presents, be it known in exercise of the powers conferred upon me by Section 19 of the Universities Act, 2012, I, Mwai Kibaki, President and Commander - in - Chief of the Defence Forces of the Republic of Kenya, grant this Charter annexed hereto to the South Eastern Kenya University.



# The South Eastern Kenya University Charter

## Arrangement of Sections

### **PART I - PRELIMINARY**

- 1- Short Title
- 2- Interpretation

### **PART II - ESTABLISHMENT AND FUNCTIONS OF THE UNIVERSITY**

- 3- Establishment and Incorporation of the University
- 4- Vision and Mission
- 5- Philosophy
- 6- Aims
- 7- Functions
- 8- Establishment of Colleges and Campus
- 9- Establishment of Constituent Colleges
- 10- Conferment, Granting, Cancellation and  
Withdrawal of Degrees, and Other Awards
- 11- Award of Scholarship

### **PART III – MEMBERSHIP AND GOVERNANCE OF THE UNIVERSITY**

- 12- Membership of the University
- 13- The Chancellor

- 14- University Council
- 15- Vice Chancellor
- 16- Deputy Vice Chancellor
- 17- Principals of Colleges and Campuses
- 18- Principals of Constituent Colleges
- 19- Council
- 20- Functions of the Council
- 21- Senate
- 22- Students' Association
- 23- Alumni Association

### **PART IV – MANAGEMENT OF THE UNIVERSITY**

- 24- The University Management Board
- 25- Staff of the University
- 26- Performance of Functions in the event of  
incapacity of an office holder.

### **PART V - FINANCIAL PROVISIONS**

- 27- Financial Year

### PART VI - MISCELLANEOUS PROVISIONS

- 28- Common Seal
- 29- Statutes
- 30- Protection of Name
- 31- Repeal
- 32- Transition
- 33- Variation and Revocation of this Charter

### PART I – PRELIMINARY

#### 1. Short Title

This Charter may be cited as the South Eastern Kenya University Charter, 2013.

#### 2. Interpretation

In this Charter, unless the context requires otherwise:

“**Act**” means the Universities Act, 2012;

“**Administrative Staff**” means a member of staff of the University in any of the Grades V to XIV, and who is appointed to perform duties related to general management and administration of the University;

“**Alumni Association**” means the association of graduates and former students of the University established under Section 22 of this Charter;

“**Cabinet Secretary**” means the Cabinet Secretary for the time being responsible for university education;

“**Campus**” means a campus established under Section 7 of this Charter;

“**Chairman of Council**” means the Chairman of Council of the University as appointed under Section 13 of this Charter;

“**Chancellor**” means the Chancellor of the University appointed under Section 12 of this Charter;

“**College**” means a college established by the University under Section 7 but does not include a Constituent College;

“**Constituent College**” means a constituent college of the University established under Section 8 of this Charter;

“**Council**” means the Council of the University established under Section 18 of this Charter;

“**Constituent College**” means a Constituent College of the University established under this Charter

“**Deputy Vice Chancellor**” means the Deputy Vice Chancellor appointed by the Council of the University under Section 15 of this Charter;

**“Faculty”** means a faculty of the University established under the Statutes;

**“Graduate”** means a person upon whom a degree of the University has been conferred or to whom a qualification of the University has been awarded as determined by the Senate;

**“Institute”** means an institute of the University established by the Statutes;

**“Lecturer”** means a member of the staff of the University, who is, in terms of appointment, a professor; an associate professor; adjunct professor; senior lecturer; lecturer; assistant lecturer; teaching assistant, or a person who holds any other teaching or research post which the Council has recognized as a post having academic status in the University;

**“Senate”** means the Senate of the University established under Section 20 of this Charter;

**“School”** means a school of the University established under the Statutes;

**“Staff Association”** means an association of the staff recognized by Council as being representative of the staff of the University;

**“Statutes”** means Statutes of the University made by the Council under Section 28 of this Charter; and

**“University”** means The South Eastern Kenya University established under Section 3 of this Charter;

## **PART II - ESTABLISHMENT AND FUNCTIONS OF THE UNIVERSITY**

### **3. Establishment and Incorporation of the University**

- (1) There is hereby established a university to be known as the South Eastern Kenya University
- (2) The University shall be a body corporate with perpetual succession and a common seal, and shall in its corporate name be capable of:-
  - (a) suing and being sued;
  - (b) taking, purchasing or otherwise acquiring, holding, charging and disposing of movable and immovable property;
  - (c) receiving, investing, borrowing and lending money; and
  - (d) doing or performing any such other things or Acts, including entering into such contracts as may be necessary or expedient, for the furtherance of the provision of this Charter which may be done by a body corporate

- (3) The University shall be the successor to the South Eastern University College constituted under the South Eastern University College Order, 2008.
- (4) Subject to this Charter, all rights liabilities and assets held on behalf of the Southern Eastern University College, existing at the commencement of this Charter shall be automatically and fully transferred to the University.

#### 4. Vision and Mission

- (1) The vision of the University is “A globally competitive centre of excellence in teaching, research, innovation and service”
- (2) The mission of the University is to provide quality and transformative education through teaching, learning, research, innovation and entrepreneurship with emphasis on agriculture, natural resources and environmental management.

#### 5. Philosophy

Transforming lives through teaching, research, innovation and community service.

#### 6. Functions

- (1) The Functions of the University are to -
  - (a) provide directly, or in collaboration, with other institutions, facilities for technological, professional and scientific education;
  - (b) advance knowledge and its practical application by research, innovation, extension and other means;
  - (c) disseminate the outcomes of research by various means, and commercially exploit the results of such research;
  - (d) participate in technological innovation as well as in the discovery, transmission and enhancement of knowledge and to stimulate the intellectual life in the economic, social, cultural, scientific, and technological development;
  - (e) contribute to industrial and technological development of society in collaboration with industry and other organizations;
  - (f) make proposals for new programmes of study including those that culminate with degrees, diplomas and certificates;

- (g) make proposals for the establishment of colleges, campuses, faculties, schools, institutes, departments, and other resource and administrative units as may be appropriate from time to time;
- (h) inculcate a culture of innovation in science, technology and engineering, amongst staff, students, and society;
- (i) promote education in liberal arts, science, technology, engineering, and mathematics within the institution and society;
- (j) develop an institution of excellence in teaching, training, scholarship, entrepreneurship, research, consultancy, community service, among other educational services and products, with emphasis on technology and its development, impact and application to society;
- (k) provide a multi-level system of education and training that is relevant to the needs of the community covering a wide range of fields and levels with provision for recognition of prior learning and flexibility of transition between educational levels;
- (l) provide for the development of technical and vocational education and training and related activities within the institution and the wider society;
- (m) play a leading role in the development and expansion of opportunities for technological and vocational education and training;
- (n) provide high quality educational, research, residential, commercial, cultural, social, recreational, sporting, and other critical facilities and amenities;
- (o) facilitate student mobility between programmes of study at different technical training institutions, polytechnics, and universities;
- (p) promote critical enquiry and creativity in education, training and research within the institution;
- (q) participate in commercial ventures and activities that promote the objectives of the institution;
- (r) foster the general welfare of staff and students;
- (s) provide opportunities for further development and training for staff of the institution;

- (t) develop and provide educational, cultural, professional, technical and vocational services to the community and in particular the fostering of corporate social responsibility;
  - (u) provide programmes, products, and services in ways that reflect the principles of equity, equality, parity and social justice;
  - (v) conduct examinations for, and grant such, academic awards as may be provided for in the statutes, and to syndicate examinations for awards at other institutions as may be approved by the Senate; and
  - (w) Generally facilitate the development and provision of appropriate and accessible academic and other programmes.
- (2) The University shall not discriminate against any person on grounds of race, sex, pregnancy, marital status, health status, ethnic or social origin, colour, age, disability, religion, conscience, belief, culture, dress, language or birth.

### **7. Establishment of Colleges and Campus**

- (1) The Council may, on the advice of the Senate, establish colleges and campuses within the University whose functions and powers shall be provided for in the statutes.

- (2) A college or campus established within the University shall consist of such faculties, schools, institutes, centres, departments and other resources and administrative units as may be provided for under the Statutes.

### **8. Establishment of Constituent Colleges**

The Cabinet Secretary may, on the advice of the Council and the recommendation of the Commission, by order published in the Gazette, establish or declare an institution of learning or higher education or any other training establishment to be a constituent college of the University.

### **9. Conferment, Granting, Cancellation and Withdrawal of Degrees and other Awards**

- (1) Subject to the provisions of the Act and this Charter, the University may-
- (a) grant Diplomas or Certificates or other awards as may be provided under the statutes;
  - (b) confer the degrees of Bachelor, Master and Doctor and such other degrees as may be provided for by the Statutes; and

- (c) Confer honorary degrees or any other academic distinction to a person who has rendered distinguished service to the advancement of any branch of learning or who has otherwise rendered service in any field of human endeavor worthy of such a degree or academic distinction as may be provided for under the Statutes.
- (2) Subject to this Charter, the University Council on the recommendation of Senate may cancel or withdraw such certificates, diplomas, degrees, including honorary degrees, or any other awards as may be provided for under the statutes.

### **10. Award of Scholarship**

Subject to this Charter, the University may award scholarships, bursaries and prizes and make other awards which may be provided for by the statutes.

## **PART III—MEMBERSHIP AND GOVERNANCE OF THE UNIVERSITY**

### **11. Membership of the University**

- (1) The members of the University are:-
  - (a) The chancellor

- (b) the Chairman of Council;
  - (c) the Vice-Chancellor;
  - (d) the Deputy Vice-Chancellors;
  - (e) the Principals of Constituent Colleges;
  - (f) the Principals of Colleges within the University;
  - (g) the Deputy Principals of colleges and Campuses within the University
  - (h) the Registrars;
  - (i) the University Librarian;
  - (j) the Finance Officer;
  - (k) the Chief Legal Officer;
  - (l) the members of the Council;
  - (m) the members of the Senate;
  - (n) the Lecturers;
  - (o) the students;
  - (p) the non-teaching staff of the University;
  - (q) the members of the Alumni Association; and
  - (r) such other members of staff of the University or any other body formally admitted into association with the University, as the Council may from time to time determine.
- (2) The members of the University shall enjoy such rights and privileges as may be outlined under the Statutes.

### 12. The Chancellor

- (1) There shall be a Chancellor of the University who shall be appointed and hold office in accordance to the provisions of the Act.
- (2) The functions of the Chancellor and tenure of office shall be in accordance with the provisions of the Act.
- (3) The Chancellor shall enjoy such powers and privileges, and perform such other functions as may be provided under the Statutes.

### 13. Chairman of Council

- (1) There shall be a Chairman of the Council who shall be appointed in accordance with the provisions of the Act.
- (2) The Chairman of the Council shall hold office for a period of three years, provided that the person so appointed shall be eligible for re-appointment for a further one term.

### 14. Vice – Chancellor

- (1) There shall be a Vice-Chancellor of the University who shall be appointed in accordance with the provisions of the Act.

- (2) The Vice-Chancellor shall hold office for a period of five years and shall upon expiration of that period be eligible for re-appointment for a further one term.

### 15. Deputy Vice-Chancellor

- (1) The Council shall appoint two or more Deputy Vice-Chancellors through a competitive process.
- (2) The Deputy Vice-Chancellor shall, under the general authority of the Vice-Chancellor, exercise such powers and perform such duties as may be provided by the Statutes.
- (3) The Deputy Vice-Chancellor of the University shall hold office for a term of five years and shall be eligible for re-appointment for a further term of five years.

### 16. Principals of Colleges and Campuses

- (1) The Council shall, through a competitive process, appoint for each campus or college a Principal.
- (2) A Principal shall be the academic and administrative head of the campus or



college and shall, under the general authority of the Vice-Chancellor, have such other powers and duties as may be provided by the Statutes.

- (3) A Principal shall hold office for a term of five years and shall be eligible for re-appointment for a further term of five years.

### **17. Principals of Constituent Colleges**

- (1) The Principal of a Constituent College shall be appointed in accordance with the provisions of the Act.
- (2) The Principal shall hold office for a period of five years and shall upon expiration of that period be eligible for re-appointment for a further one term.

### **18. Council**

- (1) There shall be a Council of the University whose members shall be appointed in accordance with the Act.
- (2) The members of the Council, other than the ex-officio member, shall hold office for

a period of three years and shall be eligible for re-appointment.

- (3) The office of a member of the Council shall become vacant:
  - (a) if, not being an ex-officio member, the member resigns from office in writing addressed to the Vice-Chancellor;
  - (b) if the Council is satisfied that the member is, by reasons of physical or mental infirmity, unable to exercise the functions of the office; and
  - (c) Upon death of the member.
- (4) Where the office of a member of the Council becomes vacant, the Vice-Chancellor shall forthwith notify the vacancy to the appointing authority.
- (5) The procedure, conduct and regulation of the affairs of the Council shall be determined in accordance with the Charter and the statutes.
- (6) The Council shall exercise prudent leadership, innovative enterprise, and good

judgment in directing the University and shall always charter in the best interest of the University.

### 19. Functions of the Council

- (1) Council shall be the governing body of the University.
- (2) The Council -
  - (a) shall administer the property and funds of the University in a manner and for the purposes which shall promote the interest of the University; but the Council shall not charge or dispose of immovable property of the University except in accordance with the procedures laid down by the Government of Kenya;
  - (b) shall receive, on behalf of the University, donations, endowments, gifts, grants or other moneys and make disbursements therefrom to the University or other bodies or persons;
  - (c) shall provide for the welfare of the staff and students of the University;
  - (d) shall have powers to establish its committees;
  - (e) shall appoint the University staff;
  - (f) shall establish schools, departments, faculties, institutes, directorates and centres;
  - (g) shall approve academic affiliations and other association with colleges and other institutions;
  - (h) may enter into association with other universities, or other institutions of learning, whether within Kenya or otherwise, as the Council may deem necessary and appropriate;
  - (i) may, after consultation with the Senate, make regulations governing the conduct and discipline of the students of the University;
  - (j) may, after consultation with the University Management Board make regulations governing the conduct and discipline of the staff of the University.
  - (k) Perform such other duties as may be contained in the Statutes and may have such other powers as contained in the Act.

**20. Senate**

- (1) There shall be the Senate of the University which shall consist of –
  - (a) the Vice-Chancellor, who shall be the Chairperson;
  - (b) the Deputy Vice-Chancellors;
  - (c) the Principals of each constituent college;
  - (d) the Principals of each college within the University;
  - (e) the Registrars;
  - (f) the Deans or Directors of Schools, institutes, centres and other academic units;
  - (g) the Chairpersons of Departments;
  - (h) two members elected by the academic board or equivalent body of each constituent college from among the members of such board or body;
  - (i) the director for the time being in charge of library and learning resource centre services;
  - (j) one representative of each of the college academic boards appointed by the respective boards from amongst its members;
  - (k) one representative of each of the school academic boards appointed by the respective boards from amongst its members;
  - (l) the director of students affairs or the equivalent;
  - (m) the head of information, communication and technology services of the University;
  - (n) two members elected by the students' organization, who shall not be entitled to attend deliberations of the Senate on matters which are considered by the Chairperson of the Senate to be confidential or which relate to examinations, the general discipline of students, and other related matters; and
  - (o) such other member as Council may determine in accordance with the Statutes.
- (2) The members of the Students' Association shall not participate in the deliberations of the Senate related to examinations, grades and such other issues that may pose a conflict of interest.

- (3) The Deputy Vice- Chancellor for the time being in charge of teaching and learning shall be the Secretary to the Senate.
- (4) The functions of the Senate shall be to-
  - (a) to satisfy itself regarding the content and academic standard of any course of study in respect of any degree, diploma, certificate or other award of the University;
  - (b) to propose regulations to be made by the Council regarding the eligibility of persons for admission to degree, diploma and certificate programmes;
  - (c) to propose regulations to be made by the Council regarding the standard of proficiency to be gained in each examination for a degree, diploma, certificate or other awards of the University;
  - (d) to decide which persons have attained such standard of proficiency and are otherwise fit to be granted a degree, diploma, certificate or other awards of the University;
  - (e) to make regulations governing such other matters as are within its powers in accordance with this Charter or the statutes.
- (5) Notwithstanding any of the provision of this Charter; the Council shall not initiate any action in respect of subsection (3) except upon receipt of a report or proposal thereunder; and the Council shall not reject any such report, or reject or amend any regulations as proposed without further reference to senate.
- (6) The Senate shall exercise such other powers as may be conferred to it by the provisions of the Act, the Statutes or by the rules and regulations, and to do such other acts as the Council shall authorize.

### **21. Students' Association**

There shall be a Students' Association established in accordance with the Statutes.

### **22. Alumni Association**

- (1) There shall be an Alumni Association of the University, which shall consist of graduates of the University and such other persons as may be determined by the Statutes.
- (2) The Alumni Association is nonpolitical and shall have the following functions-
  - (a) To develop alumni programmes that promote effective networks amongst its members;

- (b) To promote the academic, physical, moral and spiritual growth of the members of the University.
  - (c) To assist the University in the growth and advancement of its socio-cultural and co-curricular activities;
  - (d) To enhance the involvement of the University in Community Service;
  - (e) To initiate, organize and coordinate fundraising activities for the University;
  - (f) To project a positive image of the University; and
  - (g) To perform any other activity of interest to the University as the Council may request from time to time.
- (3) The Council shall make rules for the establishment and promotion of the alumni association.
- (4) The Alumni Association shall have the right to meet and discuss any matter relating to the University and transmit resolutions thereon to the Council and the Senate, and may exercise such other functions as the Statutes may prescribe.

## **PART IV – MANAGEMENT OF THE UNIVERSITY**

### **23. The Management Board**

- (1) There shall be a University Management Board which shall function as provided for in the provisions of the Act and the Statutes.
- (2) The Management Board which shall consist of –
  - (a) the Vice-Chancellor, who shall be the Chairperson;
  - (b) the Deputy Vice-Chancellors;
  - (c) the Principals of Colleges and campuses within the University;
  - (d) Registrars
  - (e) Finance Officer; and
  - (f) such other member of senior management as the Council may determine in accordance with the Statutes.
- (3) The Chairperson of the Management Board may invite other officers of the University to attend management board

meetings where specific matters pertaining to their departments or offices are being discussed by the Management Board and such officers shall be in attendance but shall not be eligible to vote.

- (4) The University Management Board shall assist the Vice-Chancellor in the day-to-day management of the University and shall-
- (a) the efficient management of the human, physical, and financial resources of the University;
  - (b) making proposals to the Council and Senate on policies that have a University wide application;
  - (c) the coordination of the University strategic and development plans; and
  - (d) any other matters related to the management of the University.

### 24. Staff of the University

- (1) The teaching staff of the University shall consist of the Vice-Chancellor, the Deputy Vice-Chancellors, the Principals of colleges within the University, the University Librarian and all members of staff who are engaged in teaching and research.

- (2) The senior management staff of the University shall consist of the Vice-Chancellor; the Deputy Vice-Chancellors, the Principals of colleges of the University, the Registrars and Finance Officer.
- (3) The administrative staff of the University shall consist of the Registrars, Finance Officer; the directors not being engaged in teaching or research and such other members of staff engaged in general administration as the Council may, from time to time determine.
- (4) The technical staff of the University shall consist of those staff engaged in laboratory, field instruction, workshops and such similar environs in the teaching departments under the general direction of the heads of the teaching departments, and as the Council may from time to time determine.
- (5) The support staff of the University shall consist of those staff engaged in general duties and as the Council may from time to time determine.

- (6) All members of staff of the University shall, subject to this Charter, be appointed either:-
  - (a) in the manner and upon the terms and conditions of service prescribed by the statutes; or
  - (b) in the case of a person seconded to the service of the University from the service of another institution, the Government or any other public service, on terms and conditions agreed upon between the Council and the seconding body.
- (7) The Council may, subject to such restrictions as it may impose, delegate, either generally or specially, to any person, committee, or body, the power to appoint any member of the staff of the University.
- (8) All members of staff of the University shall:
  - (a) be subject to the general authority of the Council and of the Vice-Chancellor; and
  - (b) be deemed to be employed in accordance with the statutes or as otherwise specifically provided by the statutes or by the terms of a particular appointment.

**25. Performance of functions in the event of incapacity of an office holder**

- (1) In the event of incapacity of the Chancellor, the President may appoint a person to perform functions of the Chancellor for a period of three months.
- (2) In the event of incapacity of the Vice-Chancellor, the Cabinet Secretary on the recommendation of the Council may appoint one of the Deputy Vice-Chancellor to carry out the functions of the Vice-Chancellor for a period of three months.
- (3) In the event of the simultaneous incapacity of the Vice-Chancellor and all the Deputy Vice-Chancellors, the Chairperson of the Council, in consultation with the Chancellor, may appoint a member of the academic staff of the University to perform the functions to the Vice-Chancellor for a maximum period of three months.
- (4) In the event of incapacity of any member of staff of the University other than the Vice-Chancellor, the Vice-Chancellor may appoint a suitable person to perform the functions of the said officer for a period of up to three months.

- (5) In this section, “incapacity” means absence from Kenya or inability for any other reason to perform the functions of the office concerned or as may be provided for in the Statutes.
- (6) Subject to the provisions of this section, at expiry of the above prescribed period, the position shall fall vacant and the process of filling up the position as provided for in the Act, Statutes, and or regulations shall commence.

### **PART V – FINANCIAL PROVISIONS**

#### **26. Financial Year**

In the event of any change in the financial year, and for the purposes of transition from the old financial year to a new financial year consequent upon the change, the transition period, whether more or less than twelve months, shall be deemed for the purposes of this Charter to be a financial year.

### **PART VI - MISCELLANEOUS PROVISIONS**

#### **27. Common Seal**

- (1) The common seal of the University shall be kept in such custody and used only as the

Council may direct and shall not be used except upon the order of the Council.

- (2) The common seal shall be authenticated by the signature of the Vice-Chancellor and any other person duly authorized by the Council.
- (3) The common seal of the University when affixed to any document and duly authenticated under this section shall be judicially and officially noticed, and, unless and until the contrary is proved, any necessary order or authorization shall be presumed to have been duly given.

#### **28. Statutes**

- (1) In the performance of its functions under this Charter, the Council shall, subject to the provisions of the Act, make Statutes generally for the governance, control and administration of the University and for the better carrying into effect of the purposes of this Charter, and in particular for the-
  - (a) establishment of Colleges, Campuses, Faculties, schools, Institutes And Centres of the University;



- (b) description of degrees, diplomas, certificates and other academic qualifications;
  - (c) requirement for conferment of degrees and award of diplomas, certificates and other academic qualifications;
  - (d) conduct of examinations;
  - (e) prescription of fees and other charges;
  - (f) prescription the rules and regulations for the conduct and organization of student affairs;
  - (g) setting the terms and conditions of service, including the appointment, dismissal and recommendation of retirement benefits of the members of the staff of the University;
  - (h) constitution and procedure of meetings of the Council, the Senate, and the University Management Board and provide for the establishment, composition and terms of reference of their respective committees; and
- (i) providing for or prescribing anything, which, under this Charter may be provided for or prescribed by statutes.
- (2) The Council shall not make, amend or revoke any Statute relating to the functions and privileges of the Chancellor, Vice-Chancellor or Senate without first obtaining the opinion of the Senate.
  - (3) Statutes shall only be made by a resolution passed at a meeting of the Council supported by a majority of not less than three-fourths of the members present and voting, being not less than half of the total membership of the Council.
  - (4) The Council of the South Eastern University College immediately at the pronouncement of the South Eastern Kenya University shall have the powers to make statutes for the University under the Charter.

### 29. Protection of Name

- (1) Notwithstanding the provisions of any other written law, no public officer performing functions relating to the registration of companies, business or societies shall accept for such registration any name which includes the words "South", "Eastern", "Kenya" or "University", together in any order, unless the application for the registration is accompanied by the written consent of the Council.
- (2) Any person who except with the written consent of the Council, uses the word "South", "Eastern" "Kenya" or "University" together in any order and in furtherance of, or as, or in connection with, any advertisement for any trade, business, calling, or profession, commits an offence and shall be liable on conviction to a fine not exceeding Kenya Shilling three million shillings, or to imprisonment for a term not exceeding three years, or to both.
- (3) Notwithstanding the foregoing, nothing in this section shall be construed as preventing the bona-fide use by any person of any title in pursuance of the grant to her/him of a degree, diploma or certificate by the University.

### 30. Repeal

- (1) The South Eastern University College Order, 2008 is revoked.
- (2) Notwithstanding the provisions of this subsection (1), all acts, directions, orders, appointments, requirements, requirements, authorizations, other things given, taken or done under; and all funds, assets and other property acquired by virtue of, that Order; shall so far as not inconsistent with this Charter; be deemed to have been given, taken, done or acquired under this Charter.

### 31. Transition

The students of former Southern Eastern University College, who were pursuing degree, diploma and certificate programmes as at the commencement date of this Charter, shall –

- (a) Be allowed to complete their courses; and
- (b) Be awarded degrees, diplomas and certificates of the University.

**32. Variation and Revocation of this Charter**

This Charter may be revoked or varied in accordance with the provisions of the Act. Given under my hand and the Public Seal of the Republic of Kenya

on the .....day of .....2013

**MWAI KIBAKI**  
***President***

Dated the .....day of..... 2013

**MARGARET KAMAR,**  
***Minister for Higher Education, Science and Technology.***



South Eastern Kenya University

# Statutes

# Statutes

In exercise of the powers conferred under section 33 of the South Eastern Kenya University Charter the Council of the University hereby makes the following Statutes. These statutes shall be cited as the South Eastern Kenya University Statues 2013.

## Statute I

### Definitions

#### I. In these Statutes, unless the context otherwise requires:

**“Administrative Staff”** means a member of staff of the University in any of the Grades 5 - 14, who is appointed for general purposes of performing duties related to general management and administration of the University;

**“Alumni Association”** means the organization of all graduates, former students and staff of the University upon payment of the requisite membership fees;

**“Cabinet Secretary”** means the Cabinet Secretary for the time being responsible for university education;

**“Centre”** means a centre of the university established under the statutes;

**“Chairman of Council”** means the Chairman of Council of the University as defined in the Charter;

**“Chancellor”** means the Chancellor of the University;

**“Charter”** means the University Charter of South Eastern Kenya University.

**“College”** means (a) a College specified in the Schedule hereof; and (b) a College established within the University defined in the Charter; but does not include a Constituent College;

**“Commencement Date”** means the date as defined in the Charter; and as declared by notice of gazette;

**“Constituent College”** means a Constituent College of the University established under this Charter;

**“Convocation”** means the convocation of the University established as defined in the Charter;

**“Council”** means the council of the University established as defined in the Charter;

**“Deputy Vice-Chancellor”** means the Deputy Vice-Chancellor appointed by the Council of the University as defined in the Charter;

**“Director”** means the person appointed by the Council to be designated as a director in the University;

**“Senate”** means a Senate of the University established under these Statutes;

**“Fiscal Year”** means the financial year of the University as provided for in the Charter;

**“Graduate”** means a person upon whom a degree of the University has been conferred or to whom a qualification of the University has been awarded as determined by the Senate;

**“Institute”** means an institute of the University established by the Statutes;

**“Lecturer”** means a member of the staff of the University who is, in terms of appointment, a professor; an associate professor; senior lecturer; lecturer; assistant lecturer; teaching assistant, or a person who holds any other teaching or research post which the Council has recognized as a post having academic status in the University;

**“Registrar”** means a Registrar of the University appointed in accordance with the Charter;

**“Senate”** means the Senate of the University established as defined in the Charter;

**“School”** means a school of the University established under these Statutes;

**“Staff Association”** means an association of the staff recognized by Council as being representative of the staff of the University;

**“Statutes”** means statutes of the University made by the Council under the Charter;

**“Student”** means a person registered by the University for the purposes of receiving instructions in

a particular area of study with a view to obtaining a qualification of the University or any other person who is determined by the Senate to be a student;

**“Students Association”** means an association of the students recognized by the Council as being an organization representative of the students of the University and as provided for in the Charter;

**“Support Staff”** means a member of staff of the University in any of the Grades 1 to 4 who is appointed for purposes of providing support services for the general management and administration of the University;

**“Teaching Staff”** means a member of staff of the University who is in terms of appointment, a lecturer of the University;

**“Technical Staff”** means a member of staff of the University who is appointed to conduct general clerical, laboratory and field courses, and assist in the conduct of lectures, examinations and research of the University;

**“University”** means the South Eastern Kenya University established in the Charter;

**“University Management Board”** means the University Management Board of the University as provided for in the Charter; and

**“Vice-Chancellor”** means the Vice-Chancellor of the University appointed as provided for in the Charter.

# Statute II

## The Chancellor

1. There shall be a Chancellor of the University who shall be appointed and hold office in accordance to the provisions of the Charter and the schedule thereof.
2. The Chancellor shall notify the Council of the University of his/her intention to direct an inspection or visitation of the University.
3. The Council shall tender to the Chancellor advice on any matters relevant to such an inspection or visitation.

# Statute III

## The Vice-Chancellor

1. There shall be a Vice-Chancellor of the University who shall be appointed by the Cabinet Secretary on the recommendation of the Council.
2. The Vice-Chancellor shall hold office for five (5) years but upon the expiration of that period shall be eligible for re-appointment, provided that the Vice-Chancellor shall cease to hold office in the event of resigning office by giving six months' notice or the Council may terminate his/her services as Vice-Chancellor by giving six months'

notice in writing or pay six (6) months' salary in lieu of notice.

3. The Vice-Chancellor shall be the chief executive of the University and shall be the academic and administrative head of the University and as such shall have overall responsibility of the direction, organization, administration and programmes of the University.
4. The Vice-Chancellor shall, by virtue of this office, be an ex-official of every School/Institute/Board within the University.
5. The Vice-Chancellor, by virtue of his/her office shall be a member of every committee appointed by the respective University Management and Senate, unless otherwise expressly provided.
6. The Vice-Chancellor shall be Secretary to the Council and Chairman of the Senate.
7. The Vice-Chancellor may assign or delegate any of his/her duties to a committee or to a member of staff of the University and may withdraw such assignment or delegation at any time.
8. The Vice-Chancellor may in consultation with the Chairman of the Council take decisions that are in the best interest of the University provided that decisions are reported in the next Council meeting.
9. The Vice-Chancellor shall have such other duties as may be assigned or delegated by the Council.



## STATUTE IV

### **The Deputy Vice-Chancellor (Academic, Research and Student Affairs)**

- 1 The Deputy Vice-Chancellor (Academic, Research and Student Affairs) shall be appointed by the Council in consultation with the Chancellor and shall hold office for five (5) years but upon the expiration of that period shall be eligible for re-appointment, provided that the Deputy Vice-Chancellor (Academic, Research and Student Affairs) shall cease to hold office in the event of resigning office by giving six months' notice or the Council may terminate his/her services as Deputy Vice-Chancellor (Academic, Research and Student Affairs) by giving six (6) months' notice in writing or pay six (6) months' salary in lieu of notice.
- 2 The duties and responsibilities of the Deputy Vice-Chancellor (Academic, Research and Student Affairs) shall be to assist the Vice-Chancellor in

overseeing all academic, research, outreach and student welfare activities in the University and in particular:

- (a) To formulate and implement policies and procedures on planning, development and management of academic activities, research and outreach programmes.
- (b) To coordinate and ensure development and review of curricula in line with market demand, and regional and national regulatory bodies.
- (c) To create and maintain an environment which promotes and secures good and quality teaching, effective learning and achievement of the highest possible academic standards, good behavior and discipline amongst students body.
- (d) To ensure that the University attains a high level of competitiveness in its academic programmes.
- (e) To plan and advise on the recruitment and development of all teaching and technical staff.
- (f) To oversee student welfare and ensure availability of adequate resources for students.

- (g) To coordinate preparation and review of the University Academic Calendar, Prospectus and any other academic-oriented publications.
- (h) To oversee the management of the University library.
- (i) To ensure availability of suitable and adequate resources for proper delivery of training, research and outreach programmes.
- (j) To oversee the development of the University research agenda and coordinate research and outreach activities.
- (k) To coordinate collaboration with industry, other institutions of higher learning, research institutes, development partners, professional associations and other institutions with common interests.
- (l) To assist the Vice-Chancellor in the development of the University Statutes.
- (m) To ensure that staff in the Division meet performance contract targets.
- (n) To serve as Secretary to the Senate and
- (o) In the event that the Deputy Vice-Chancellor (Academic, Research and Student Affairs) is the Acting Vice-Chancellor, the Council shall appoint a senior member of staff to act on his/her behalf.
- (p) To undertake any other duties and responsibilities as may be determined by the Vice-Chancellor from time to time.

## Statute V

### **The Deputy Vice-Chancellor (Finance, Planning and Development)**

1. The Deputy Vice-Chancellor (Finance, Planning and Development) shall be appointed by the Council in consultation with the Chancellor and shall hold office for five (5) years but upon the expiration of that period shall be eligible for re-appointment, provided that the Deputy Vice-Chancellor (Finance, Planning and Development) shall cease to hold office in the event of resigning office by giving six months notice or the Council may terminate his/her services as Deputy Vice-Chancellor (Finance, Planning and Development) by giving six (6) months' notice in writing or pay six (6) months' salary in lieu of notice.
2. The duties and responsibilities of the Deputy Vice-Chancellor (Finance, Planning and Development) shall be to assist the Vice-Chancellor in overseeing all financial, planning and development activities in the University and in particular:
  - (a) To establish and maintain workable systems for regular monitoring and evaluation

- of the performance, quality, relevance and efficiency of all finance, planning and development programmes.
- (b) To ensure maintenance of proper books of accounts.
  - (c) To coordinate physical infrastructure, planning and development.
  - (d) To coordinate preparation of work plans and long and short term development plans.
  - (e) To review existing and develop new financial and accounting systems programmes based on regulations, legal framework and international standards.
  - (f) To coordinate the preparation of University budget, expenditure control, revenue collection and resources mobilization.
  - (g) To coordinate and monitor physical infrastructure planning and development, maintenance and repair of existing facilities.
  - (h) To ensure that all departments operate in the Division effectively and efficiently in line with the University and Government regulatory policies.
  - (i) To coordinate development, review and implementation of the University Strategic Plan.
  - (j) To ensure collection of all types of fees.
  - (k) To oversee catering and accommodation services.
  - (l) To oversee all income generating activities in the University.
  - (m) To oversee development of the Master Plan and implementation of procurement plans.
  - (n) To ensure that staff in the Division meet performance contract targets.
  - (o) To undertake any other duties and responsibilities as may be determined by the Vice-Chancellor from time to time.

## STATUTE VI

### **The Deputy Vice-Chancellor (Administration and Human Resource Management)**

- I. The Deputy Vice-Chancellor (Administration and Human Resource Management) shall be appointed by the Council in consultation with the Chancellor and shall hold office for five (5) years but upon the expiration of that period shall be eligible for re-appointment, provided that the Deputy Vice-Chancellor (Administration and Human Resource Management) shall cease to hold office in the event of resigning office by giving six months' notice or the Council

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- may terminate his/her services as Deputy Vice-Chancellor (Administration and Human Resource Management) by giving six (6) months' notice in writing or pay six (6) months' salary in lieu of notice.
2. The duties and responsibilities of the Deputy Vice-Chancellor (Administration and Human Resource Management) shall be to assist the Vice-Chancellor in overseeing all administrative activities in the University and in particular:
- (a) To coordinate human resource management functions, recruitment and selection.
  - (b) To coordinate health services, registry administration and central services.
  - (c) To plan, direct, organize, monitor and advise on the recruitment, deployment and development of all administrative staff.
  - (d) To coordinate labour relations, promotions, discipline, employee services and general staff welfare.
  - (e) To oversee performance contracting, measurement, monitoring and reporting, staff performance appraisal and reward management.
  - (f) To oversee fleet planning and control transport services including vehicle allocation, maintenance and servicing.
  - (g) To oversee, coordinate and facilitate training workshops and seminars, staff training and development, placement, team building retreats and induction.
  - (h) To oversee the development, implementation and review of QMS administrative and operational procedures.
  - (i) To oversee development processes and other activities on ISO certification and implementation.
  - (j) To coordinate all legal matters.
  - (k) To ensure that staff in the division meet performance contract targets.
  - (l) To formulate policies on standards and procedures governing terms and conditions of service and scheme of service for all cadres of staff and any other policy documents related to staff welfare.
  - (m) To oversee general maintenance of the grounds.
  - (n) To undertake any other duties and responsibilities as may be determined by the Vice-Chancellor from time to time.

## Statute VII

### Registrars

1. There shall be three (3) Registrars as follows:
  - (a) Registrar (Academic and Student Affairs)
  - (b) Registrar (Administration and Human Resource Management)
  - (c) Registrar (Planning and Development)
2. The Registrar shall be appointed by Council and shall hold office on Permanent and Pensionable terms or for a period of five (5) years renewable, as may be determined by the Council, provided that the Council may terminate appointment by giving six (6) months' notice in writing or the Registrar may resign by giving six (6) months' notice in writing or the pay six (6) months' salary in lieu of notice.
3. The Registrar shall perform such duties as may be delegated or assigned by the respective Deputy Vice-Chancellors.
4. The duties of the Registrar (Academic and Student Affairs) shall be:
  - (a) To assist the Deputy Vice-Chancellor (Academic, Research and Student Affairs) in the general administration in the division;
  - (b) To coordinate programmes/syllabi, rules and regulations governing the implementation of academic and research programmes and students conduct in the University.
  - (c) To coordinate continuous assessment, University and national examinations.
  - (d) To coordinate the preparation of teaching and examination timetables.
  - (e) To provide secretarial services to all Senate committees related to academics and student matters.
  - (f) To guide Deans of Schools, Directors of Institutes and Chairmen of Departments in running of academic, research and outreach programmes at the respective levels.
  - (g) To coordinate and collect evidence for performance targets and preparation of the division's performance contract quarterly reports.
  - (h) To oversee the administration of student welfare services and integrity of the student data base.
  - (i) To work closely with the Deputy Vice-Chancellor (Academic, Research and Student Affairs) on teaching and technical staff development, training needs and research collaboration programmes.

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- (j) To coordinate teaching staff evaluation by students.
  - (k) To work closely with academic departments to ensure success in Professional, Statutory and Regulatory Body interventions.
  - (l) To develop and administer the division's budget.
  - (m) To plan student's selection, admission and registration processes.
  - (n) To coordinate the administration and processing of examinations, academic transcripts and certificates.
  - (o) To communicate, follow-up and implement decisions of Management and Management Committees.
  - (p) To plan the semester schedule of classes each semester.
  - (q) To supervise the coordination, evaluation and certification of all graduation applications.
  - (r) To coordinate the allocation of resources for academic, research and outreach purposes.
  - (s) To perform any other duties that may be assigned to him by the Vice-Chancellor or the Deputy Vice-Chancellor (Academic, Research and Student Affairs).
5. The duties of the Registrar (Administration and Human Resource Management) shall be:
- (a) To assist the Deputy Vice-Chancellor (Administration and Human Resource Management) in the general administration in the University.
  - (b) To advise and coordinate the functions of all Heads of Departments/Sections within the Administration Division such as Human Resources, Central Services, Recruitment and Training, Legal Affairs, Health Services, Security Services.
  - (c) To provide secretariat to University committees related to administration function as defined by the University Statutes.
  - (d) To coordinate and collect evidence for performance targets and preparation of the division's performance contract quarterly reports.
  - (e) Identify training needs for administrative staff and make recommendations.
  - (f) To assist in the coordination, formulation and implementation of Human Resource Policies relating to Staff Training, Recruitment, Staff Evaluation, Staff Benefits, Labour

- Relations, Staff Conduct and Discipline, Job Descriptions, Scheme of Service, and Union matters in collaboration with Heads of Departments/Sections concerned.
- (g) To coordinate fleet planning and control transport services including vehicle allocation, maintenance and servicing.
  - (h) To communicate, follow-up and implement decisions of Management and Management Committees.
  - (i) To develop and administer the division's budget.
  - (j) To coordinate the preparation of Departmental budgets and estimates for the Administration Division;
  - (k) To coordinate staff performance appraisals and reward management systems.
  - (l) To identify team building activities for all staff.
  - (m) To serve as Secretary to the University Management Board.
  - (n) To perform any other duties as may be assigned by the Vice-Chancellor and Deputy Vice-Chancellor (Administration and Human Resource Management) from time to time.
6. The duties of the Registrar (Planning and Development) shall be:
- (a) To assist the Deputy Vice-Chancellor (Finance, Planning and Development) in the general administration in the University.
  - (b) To coordinate and monitor physical infrastructure planning and development, maintenance and repair of existing facilities.
  - (c) To coordinate facility and infrastructure planning and development.
  - (d) To work closely with the Deputy Vice-Chancellor (Finance, Planning and Development) in ensuring that the planning and development departments operate effectively and efficiently and are in line the University and government policies.
  - (e) To coordinate the development of the Master Plan.
  - (f) To coordinate and collect evidence for performance targets and preparation of the division's performance contract quarterly reports.
  - (g) To design and conduct surveys to obtain feedback from key stakeholders such as students, staff, alumni, research partners, public and private sector on satisfaction levels, service standards and educational needs.

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- (h) To generate comparative data on institutional performance in other Universities and Colleges within the region and globally for the purposes of facilitating benchmarking of performance.
- (i) To develop and administer the division's budget.
- (j) To coordinate the preparation, review and implementation of the strategic plan.
- (k) To communicate, follow-up and implement decisions of Management and Management and Management Committees.
- (l) To coordinate and implement development project and prepare capital project plans and management reports.
- (m) To perform any other duties as may be assigned by the Vice-Chancellor and Deputy Vice-Chancellor (Finance, Planning and Development) from time to time.

## Statute VIII

### Finance Officer

- 1 The Finance Officer shall be appointed by the Council.
- 2 A person appointed as the Finance Officer shall

hold office on Permanent and Pensionable terms or on Contractual terms as may be determined by the Council from time to time provided that the Finance Officer may resign by giving six (6) months' notice in writing or the Council may terminate appointment by giving six (6) months' notice in writing or by giving six (6) months' pay in lieu of notice.

- 3 The Finance Officer shall be responsible to the Vice-Chancellor for the management of the finances of the University.

## Statute IX

### The University Librarian

- 1 The University Librarian shall be appointed by the Council.
- 2 Subject to this Statute, the University Librarian shall hold office upon such terms and conditions as shall be determined by the University Council.
- 3 The University Librarian shall be responsible to the Vice-Chancellor for the organisation and operation of the Library services of the University.
- 4 The University Librarian shall also be responsible for setting technical standards for the Library providing certain centralized services and co-ordination.



## Statute X

### Dean of Students

- 1 The Dean of Students shall be appointed by the Vice-Chancellor from among staff of the rank of Senior Lecturer and above.
- 2 The Dean of Students shall hold office for a period of two (2) years renewable subject to satisfactory performance. The conditions of appointment of the Dean of Students shall be set out in the University Terms of Service.
- 3 The Dean of Students shall report to the Deputy Vice-Chancellor (Academic, Research and Student Affairs) and shall exercise such powers and perform such duties in respect to the students, which shall include welfare organization, discipline, counselling, accommodation, recreation, sports and job placement.
- 4 The specific duties of the Dean of Students shall be:
  - (a) To be the Chief Liaison Officer on all matters relating to student's welfare.
  - (b) To consult with Higher Education Loans Board (HELB), Students' Counselor, the Officer In-Charge of Games and Sports, Halls Officer, the Medical Officer and other officers in order to advise students on matters relating to their welfare.
  - (c) To organize social functions such as film shows and other forms of entertainment for the students.
  - (d) To assist the students in establishing a student union.
  - (e) To organize religious functions for students.
  - (f) To organize for external speakers for students in the University.
  - (g) To liaise with the students union.
  - (h) To serve as the Returning Officer for the student union elections.
  - (i) To register and monitor student clubs and associations.
  - (j) To identify disciplinary cases among students and forward them to the relevant committees.
  - (k) To mentor students in their development of leadership, moral reasoning, social intelligence and other skills required in their lives.
  - (l) To develop mechanisms to anticipate and promptly, efficiently and effectively respond to student needs.

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- (m) To advise the Vice-Chancellor and/or the Deputy Vice-Chancellor (Academic, Research and Student Affairs) constantly on matters relating to students' welfare.
- (n) To attend to any other duties as may be assigned by the Deputy Vice-Chancellor (Academic, Research and Student Affairs).

## Statute XI

### Terms and Conditions of Service for University Staff

- 1 The Council shall determine the Terms and Conditions of Service of all the staff of the University.
- 2 Subject to this Statute, the Council shall appoint such academic and administrative staff as it may deem necessary for the efficient functioning of the University with such duties and upon such Terms and Conditions as the Council may prescribe.
- 3 Subject to this Statute the Council may make all such other appointments (whether paid or honorary) as it may deem fit.

- 4 The Terms and Conditions of Service of Academic, Senior Library and Administrative staff, Senior Clerical and those in grades I-IV shall be determined by Council from time to time.

## Statute XII

### The University Council

- 1 The membership, powers and functions of the Council shall be as prescribed in the Charter.
- 2 Unless the Council otherwise determines, a meeting of the Council shall be held quarterly.
- 3 At all meetings of the Council a quorum shall be the nearest whole number above half of the membership of the Council.
- 4 Decisions of the Council shall be by a simple majority vote of those present and entitled to vote provided that the Chairman of the Council shall have a casting vote in the event of a tie.
- 5 The Chairman shall preside at all meetings of the Council at which he is present and in the absence of the Chairman, the members present shall elect a temporary Chairman from among themselves.
- 6 The Council may, at the discretion of the Chairman, transact any business by the circulation of papers and any decision so taken shall be submitted for ratification at the next meeting of the Council.

- 7 The Council may subject to such limitations as it may deem fit, delegate any of its powers or duties to the Chairman or to Committees consisting of members of the Council, provided that the Council shall not delegate to the Chairman or to a Committee the power to approve the annual Estimates of Expenditure and Accounts without further reference to the Council.
- 8 The following are the Committees of the Council and their Terms of References

### **I. Finance and General Purposes Committee**

#### **Membership**

Council Member - Chairman  
Vice-Chancellor  
Two Council Members  
Principal Secretary in the Ministry for the time being responsible for University Education  
Principal Secretary in the Ministry for the time being responsible for Finance

#### **In Attendance**

Deputy Vice-Chancellors  
Finance Officer

#### **Terms of Reference**

- (a) To act on behalf of the Council except so far as the Council may wish to limit the powers of the Committee in any respect;
- (b) Shall pay due regard to the necessity to refer matters of major importance to the Council for final approval;
- (c) Shall have no power to approve the annual estimates and expenditure.

### **2. Building and Physical Development Committee**

#### **Membership**

Council Member - Chairman  
Vice-Chancellor  
Two (2) member of Council  
Principal Secretary in the Ministry for the time being responsible for University Education  
Principal Secretary in the Ministry for the time being responsible for Finance

#### **In Attendance**

Deputy Vice-Chancellors  
Registrar (Planning and Development)

### Terms of Reference

- (a) To consider and recommend to the Council the priority development projects and receive reports, and the recommendations of management on the progress of the physical development of the University.
- (b) To oversee the development of the University Master Plan.
- (c) To report to the Council on the progress of physical infrastructure development of the University.
- (d) Any other duty as may be assigned by the Council.

### 3. Committee on Staff Terms and Conditions of Service

#### Membership

Member of Council - Chairman

Vice-Chancellor

Two (2) members of Council

Principal Secretary in the Ministry for the time being responsible for University Education

#### In Attendance

Deputy Vice-Chancellors

Registrar (Administration and Human Resource Management)

### Terms of Reference

- (a) To review and make recommendations to the Council on Staff Terms and Conditions of Service for the University employees as and when necessary;
- (b) To examine and recommend career structures within the University;
- (c) To establish and generally oversee, on behalf of the Council, a Staff Retirement Benefits pension Scheme.

### 4. Audit Committee

#### Membership

Member of Council -Chairman

Vice-Chancellor

One (1) member of Council

Principal Secretary in the Ministry for the time being responsible for Finance

#### In attendance

DVC FPD

Head of Internal Audit

#### Terms of Reference

- (a) To review internal and external audit findings recommendations and propose corrective and preventive action where necessary.
- (b) Assist the accounting officer/ chief executive officer in enhancing internal controls in order to improve efficiency and accountability.

## 5. Appeals Committee

### Membership

Chairman of Council - Chairman  
 One (1) member of Council  
 Vice-Chancellor  
 Dean of the relevant School  
 Chairman/Head of the relevant Department/  
 Section  
 Legal Officer - Secretary

### In Attendance

Deputy Vice-Chancellors

### Terms of Reference:

- (a) To hear and determine appeals made to it by staff from decisions of the Senior and Junior Staff Disciplinary Committee, which appeals may be made against a finding and/or a sentence.
- (b) The decision of the Staff Appeals Committee shall be final.

## 6. Graduation and Sealing Committee

### Membership

Chairman of Council - Chairman  
 Vice-Chancellor  
 Two (2) members of Council  
 Principal Secretary in the Ministry for the time being responsible for University Education

### In Attendance

Deputy Vice-Chancellors  
 Registrar (Academic and Student Affairs)

### Terms of reference

- (a) Approve University Certificates.
- (b) Approve the list of graduands to be issued with the certificates
- (c) Approve sealing of Certificates.

## 7. Appointments Committee

### (a) Appointments for Staff

#### (i) Appointments for Teaching Staff in Grades I4 and I5

### Membership

Chairman of Council - Chairman  
 One Council representative  
 Vice-Chancellor  
 Deputy Vice-Chancellors  
 Dean of the relevant School  
 Chairman of the relevant Department  
 Two (2) Full Professors  
 Registrar (Administration and Human Resource Management) –Secretary

### **Terms of Reference:**

To consider all appointments for academic staff in Grade 14 and 15

### **(ii) Appointments for Non-Teaching Staff in Grades 14 and 15**

#### **Membership**

Chairman of Council - Chairman

One Council representative

Vice-Chancellor

Deputy Vice-Chancellors

Two (2) Full Professors

Relevant Head of the relevant Department or Section

Registrar (Administration and Human Resource Management) - Secretary

### **Terms of Reference:**

To consider all appointments for non-academic staff in Grade 14 and 15

### **(iii) Appointments for Teaching Staff in Grades 11 to 13**

#### **Membership**

Vice-Chancellor - Chairman

Deputy Vice-Chancellors

Dean of the relevant School

Chairman of the relevant Department

Two (2) members of staff of at least Associate Professor Grade

Registrar (Administration and Human Resource Management) – Secretary

### **Terms of Reference:**

To consider all appointments for academic staff in Grades 11 to 13

### **(iv) Appointments of Non-Teaching Staff Grade in Grades 7 to 13**

#### **Membership**

Vice-Chancellor - Chairman

Deputy Vice-Chancellors

Dean of the relevant School

Head of the relevant Section / Department

Two (2) members of staff of at least Associate Professor Grade

Registrar (Administration and Human Resource Management) - Secretary

### **Terms of Reference:**

To consider all appointments for non-academic staff in Grades 7 to 13

### **(v) Appointments of Members of Staff in Grades 1 to 6**

#### **Membership**

Deputy Vice-Chancellor (Administration and Human Resource Management) -

Chairman

Deputy Vice-Chancellors

Two (2) members of staff of at least Associate Professor Grade  
Registrar (Administration and Human Resource Management)- Secretary

**Terms of Reference**

To consider all appointments for non-academic staff in Grades I to 6.

**(vi) Temporary appointment**

The Vice-Chancellor can make temporary appointment for a period not exceeding six (6) months.

**9. Staff Disciplinary Committee**

**(a) Senior Disciplinary Committee – Grade 7 - 15**

**Membership**

Vice-Chancellor - Chairman  
Deputy Vice-Chancellors  
Two (2) Full Professors  
Registrar (Academic and Student Affairs)  
Dean of the relevant School  
Chairman/Head of the relevant Department/Section  
Registrar (Administration and Human Resource Management) - Secretary

**In Attendance**

Legal Officer

**Terms of Reference**

To hear and determine disciplinary cases referred to it in regard to Senior Staff Discipline as per the established code of conduct.

**(b) Junior Disciplinary Committee : Grades I to 6**

**Membership**

Deputy Vice-Chancellor (Administration and Human Resource Management) - Chairman  
Deputy Vice-Chancellor (Finance, Planning and Development)  
Deputy Vice-Chancellor (Academic, Research and Student Affairs)  
Two (2) members of staff of at least Associate Professor Grade  
Dean of the relevant School  
Chairman/Head of the relevant Department/Section  
Registrar (Administration and Human Resource Management)- Secretary

**In Attendance**

Legal Officer

**Terms of Reference:**

To hear and determine disciplinary cases referred to it in regard to Junior Staff Discipline as per the established code of conduct.

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9. The Chairman of the Council may on request be an ex-officio member of every Committee of the Council but shall not be Chairman of any such Committee unless specifically so provided.
  10. The Council shall cause minutes of its proceedings to be kept by the Secretary and such minutes shall be confirmed, subject to any necessary amendment, at a subsequent Council meeting.
  11. Subject to the provisions of the Order and these Statutes, the Council shall have power to regulate by such means as it may think fit procedures at its own meetings and those of any of its Committees.
    - (h) such other member of senior management as the Council may determine in accordance with the Statutes.
2. The University Management Board shall assist the Vice-Chancellor in the day-to-day management of the University and shall, in this respect, be responsible for:
    - (a) the efficient management of the human, physical, and financial resources of the University;
    - (b) making proposals to the Council and Senate on policies that have a University wide application;
    - (c) the coordination of the University strategic and development plans; and
    - (d) any other matters related to the management of the University.

## Statute XIV

### The University Management Board

1. There shall be a University Management Board whose membership shall be:
  - (a) the Vice-Chancellor, who shall be the Chairperson;
  - (b) the Deputy Vice-Chancellors;
  - (c) the Principals of Colleges within the University;
  - (d) the Deputy Principals of Colleges within the University;
  - (e) Finance Officer
  - (f) Registrars
  - (g) the Registrar (Administration and Human Resource Management) shall be the secretary to the board; and
3. Unless the University Management Board otherwise determines, a meeting of the University Management Board shall be held at least once every month at such time and place as the Chairman may determine.
4. At all meetings of the University Management Board a quorum shall be the nearest whole number above half the membership of the University Management Board.



5. The Chairman, or in his/her absence, the Deputy Vice-Chancellor (Administration and Human Resource Management) shall preside at meetings of the University Management Board at which is present and in the absence of both the Chairman and the Deputy Vice-Chancellor (Administration and Human Resource Management) the members present shall elect a temporary Chairman from among themselves.
6. The University Management Board may, subject to such limitations as it may think fit, delegate any of its duties to the Chairman or to the Committee consisting of such members of the University Management Board and other persons as it may empower any such committee to act jointly with any committee appointed by either the Senate.
7. Subject to the provisions of this Statute, the University Management Board shall have power to regulate by such means as it may think fit procedures of its own meetings or those of any of its committees.
8. The University Management Board shall have such other powers and duties as may be assigned or delegated to it by the Council.

## **Statute Xv**

### **The Senate**

- I. There shall be Senate of the University, as provided for in the Charter; whose membership shall be:-
  - a) the Vice-Chancellor; who shall be the Chairperson;
  - b) the Deputy Vice-Chancellors;
  - c) the Principals of each constituent college;
  - d) the Principals of each college within the University;
  - e) the Deputy Principals of Colleges within the University;
  - f) One (1) Full Professor from each of the schools;
  - g) the Registrars;
  - h) the Deans/Directors of Schools, institutes, centres and other academic units;
  - i) the Chairpersons of Departments;
  - j) the University Librarian;
  - k) one representative of each of the college academic boards appointed by the respective boards from amongst its members;

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- l) the Dean of Students or the equivalent;
  - m) the head of information, communication and technology services of the University;
  - n) two members elected by the students' organization, who shall not be entitled to attend deliberations of the Senate on matters which are considered by the Chairperson of the Senate to be confidential or which relate to examinations, the general discipline of students, and other related matters; and
  - o) such other member as Council may determine in accordance with these Statutes.
  - p) Two members elected by the academic board or equivalent body of each Constituent College from amongst the members of such board or body;
  - q) One representative of each of the School Academic Boards appointed by the respective boards from amongst its members
2. The Deputy Vice-Chancellor (Academic, Research and Student Affairs) shall serve as Secretary to the Senate.
  3. In the event that the Deputy Vice-Chancellor (Academic, Research and Student Affairs) is the Acting Vice-Chancellor, the Council shall appoint a senior member of staff to act on his behalf.
  4. The Senate shall have the following powers and duties:-
    - (a) to satisfy itself regarding the content and academic standard of any course of study in respect of any degree, diploma, certificate or other award of the University;
    - (b) to propose regulations to be made by the Council regarding the eligibility of persons for admission to degree, diploma and certificate programmes;
    - (c) to propose regulations to be made by the Council regarding the standard of proficiency to be gained in each examination for a degree, diploma, certificate or other awards of the University;
    - (d) to decide which persons have attained such standard of proficiency and are otherwise fit to be granted a degree, diploma, certificate or other awards of the University;
    - (e) to make recommendations to council on matters dealing with student conduct or behavior;

- (f) to make regulations governing such other matters as are within its powers in accordance with the Charter or these statutes.
5. Unless the Senate otherwise determines, meetings of the Senate shall be held at least three times in each semester at such a time and place as the Chairman of the Senate may appoint.
  6. The Chairman of the Senate or, in his/her absence, the Deputy Vice-Chancellor (Academic, Research and Student Affairs) shall preside at all meetings of the Senate at which he/she is present and, in the event of the absence of both the Chairman of Senate and the Deputy Vice-Chancellor (Academic, Research and Student Affairs) the members present and constituting a quorum shall elect a temporary Chairman from among their number.
  7. At any meeting of the Senate a quorum shall be the nearest whole number above half the membership of the Senate.
  8. The Chairman of the meeting shall have an original and a casting vote.
  9. The Senate may, subject to such limitations as it may think fit, delegate any of its powers or duties to committees/boards consisting of such members of the Senate and other persons as it may think fit; and the Senate may empower, any such committees/board to act jointly with any committee/board appointed by the Council.
  10. The following are the Committees of the University Senate and their Terms of References (TORs).
    - (a) Deans Committee**  
**Membership**  
Deputy Vice-Chancellor (Academic, Research and Student Affairs) - Chairman  
Deputy Vice-Chancellor (Administration and Human Resource Management)  
Deputy Vice-Chancellor (Finance, Planning and Development)  
Deans of Schools  
Dean of Students  
University Librarian  
Directors of Institutes/Directorates  
Registrar (Academic and Student Affairs)-  
Secretary

### Terms of Reference

- (a) To deal with matters that may properly be referred to it by the Vice-Chancellor or the Senate.
- (b) To function as the University's Admission Board in order to:
  - (i) Approve all applications for admission to the University for Undergraduate Courses and to make recommendations to Senate from time to time on the University's admission policy including the admission requirements and procedures.
  - (ii) Review applications for admission from occasional students.
  - (iii) Consider and approve as appropriate applications for inter-school transfer of students.
  - (iv) Administer all scholarship received by the University for undergraduate students.
  - (v) To make recommendations to Senate on regulations governing levels of fees and other regulations governing the Academic Programs and student conduct or behavior.
  - (vi) To make recommendations to senate on rules and regulations governing student behavior.

### (b) Students' Welfare Committee

#### Membership

Deputy Vice-Chancellor (Academic, Research and Student Affairs) -  
Chairman  
Deputy Vice-Chancellor (Administration and Human Resource Management)  
Deputy Vice-Chancellor (Finance, Planning and Development)  
Dean of Students  
Chief Medical Officer  
Director, Catering and Accommodation Services  
Officer in Charge of Sports  
Three Senate Representatives  
Two student representatives  
Registrar (Academic and Student Affairs)  
- Secretary

#### In Attendance

Estates Manager  
Planning Officer  
Procurement Officer  
Finance Officer

#### Terms of Reference

- (i) To deal with such matters on students affairs as the Committee may deem appropriate.

- (ii) To deal with matters referred to the Committee by the Catering and Accommodation Manager on questions affecting the functions of the University Estates Department.
- (iii) To deal with matters regarding the development of games and sporting facilities.
- (iv) To make recommendations to the appropriate University committees on the above subjects.

**(c) Student Disciplinary**

**I. Students' Disciplinary Committee**

**Membership**

Deputy Vice-Chancellor (Academic, Research and Student Affairs)  
- Chairman  
Deputy Vice-Chancellor (Administration and Human Resource Management)  
Deputy Vice-Chancellor (Finance, Planning and Development)  
Dean of Students  
Two Senate Representatives  
Chairman of Students Organization  
Two Students representatives  
Registrar (Academic and Student Affairs) - Secretary

**In Attendance**

Dean and/Chairman of respective School/Department

**Terms of Reference**

- (i) To deal with any matters referred to it by the Vice-Chancellor and the University authority or other committee and make recommendations to the Senate.
- (ii) To deal with any other disciplinary cases of students and make recommendations to the Senate.

**2. Students Appeals**

- (i) The students are allowed to appeal against the decision of the Students' Disciplinary Committee to the Vice-Chancellor.
- (ii) The Vice-Chancellor shall constitute and appoint a committee to listen to the appeals.

**(d) Library Committee**

**Membership**

Deputy Vice-Chancellor (Academic, Research and Student Affairs) – Chairman  
Deputy Vice-Chancellor (Finance, Planning and Development)  
Librarian

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Bookshop Manager  
Three (3) Senate representatives  
Two (Students Representatives  
Registrar (Academic and Student Affairs) -  
Secretary

### Terms of Reference:

- (i) To assist and advise the Librarian on all matters relating to the Library.
- (ii) To make recommendations to the Senate on Library policy.
- (iii) To prepare and submit to Senate an annual report on the functioning of the University Libraries and the University Bookshop.
- (iv) To make recommendations to the Senate with regard to the matters concerning the running of the Bookshop

### (e) Industrial Training and Attachment Committee

#### Membership

Deputy Vice-Chancellor (Academic, Research and Student Affairs) – Chairman  
Deputy Vice-Chancellor (Administration and Human Resource Management)  
Two (2) Deans and Director of Research,

Innovation & Technology  
Two (2) Senate Representatives  
Chairman of Students Organization  
Registrar (Academic and Student Affairs) -  
Secretary

### In attendance

Public Relations Officer

### Terms of Reference

- (i) To act as a clearing house for links initiated by Departments, institutes, and schools.
- (ii) To recommend to Senate regulations governing industrial attachment.
- (iii) To promote interchange, contact and co-operate with other universities, institutions, and industry.
- (iv) Co-ordinate student exchange programmes.
- (v) Formulate and recommend to the Senate guidelines for Departments and schools on procedures to be followed in formulating links.
- (vi) To deal with any other matters referred to it by the Senate, the Vice-Chancellor, or any other University Committee.

**(f) Promotions and Appraisal Committee**

**(I) Teaching Members of Staff**

**Membership**

Senior member of staff (Full Professor) - Chairman  
 Three (3) members of Senate of the rank of Professor (I), Associate Professor (I) and Senior Lecturer (I)  
 Two representative members of Teaching Staff  
 Registrar (Administration and Human Resource Management) - Secretary  
 Committee may Co-opt members as it deems necessary

**Terms of Reference:**

- (a) To draw up criteria for appointments and promotions of teaching staff.
- (b) To appraise members of teaching staff who have applied for promotions and make recommendations for consideration by the appropriate Appointments and Promotions Committee.

**(2) Non-Teaching Members of Staff**

**Membership**

Senior member of staff (Full Professor)  
 - Chairman  
 Two members of Senate  
 Two representative members of Non Teaching Staff  
 Registrar (Administration and Human Resource Management) – Secretary  
 Committee may Co-opt members as it deems necessary

**Terms of Reference:**

- (a) To draw up criteria for appointments and promotions of non-teaching staff.
  - (b) To appraise members of non-teaching staff who have applied for promotions and make recommendations for consideration by the appropriate Appointments and Promotions Committee.
3. The Vice-Chancellor shall be an ex-officio member of every Committee of the Senate but shall not be Chairman of any such Committee unless specifically so provided.

# Statute XVI

## Board of Postgraduate Studies

1. There shall be a Board of Postgraduate Studies.
2. The Board shall be headed by a Director, who shall be appointed by the Vice-Chancellor from among persons holding the rank of Senior Lecturer and above for a period of two (2) years renewable once.
3. The membership of the Board shall constitute of:
  - (a) Chairman of the Board who shall be appointed by the Vice-Chancellor from among the Professors of the University.
  - (b) Director – Secretary.
  - (c) Four Representatives from the Senate.
  - (d) The person in charge of postgraduate studies in each School.
  - (e) Two (2) postgraduate students.
  - (f) Registrar (Academic and Student Affairs)
4. The Board shall have and carry the statue of a School and shall in that capacity enjoy all the rights, privileges, immunities and powers that are consistent with the provisions of this Statute.
5. The Board shall meet at least once in every month.
6. The Board shall have the power to regulate in such manner as it may deem fit, its own procedures.
7. Notwithstanding the provisions of any other statute, the Board shall be answerable to the Senate in respect to the conduct of postgraduate studies throughout the University and shall, in particular, have responsibility over the following matters:
  - (a) Co-ordination of postgraduate syllabi and regulations;
  - (b) Admission of postgraduate students;
  - (c) Administration of postgraduate scholarships;
  - (d) Administration of postgraduate research grants;
  - (e) Administration and processing of postgraduate theses, projects or research papers;
  - (f) Proper conduct and supervision of the postgraduate studies programmes;
  - (g) Any other business as may be determined by the Senate from time to time.
8. The Board shall, in respect of each of the matters set out in Clause 4 herein, exercise the powers and perform the duties set out in clauses next following:



- 8.1. In respect of the co-ordination of postgraduate syllabuses and regulations, the Board shall:-
- (a) Have primary responsibility for the enforcement of the common regulations for the Masters, Doctorate and Higher Doctorate Degrees in all Schools;
  - (b) Liaise with all Schools and Departments and make such recommendations as regards the content and organization of postgraduate programmes available therein as it may deem fit;
  - (c) Make available all information relating to postgraduate studies throughout the University by publishing a prospectus, and bibliographies of records of postgraduate research done or to be done within the University;
  - (d) Publish and make available records of published work arising from postgraduate research undertaken within the University, or within any other University as long as such work is, in the opinion of the Board, of particular relevance to postgraduate research in the University; and
  - (e) Cause to be published and disseminate any material it considers of relevance to the general conduct of postgraduate studies within the University
- 8.2. In respect of admissions of postgraduate students, the Board shall:
- (a) Receive from Departments through Schools details of all postgraduates programmes;
  - (b) Advertise all such programmes and receive in such format as may be specified by Senate, applications in respect thereof;
  - (c) Send letters of admission to successful candidates and also notify the Schools and Departments;
  - (d) Send all relevant information to the successful and unsuccessful candidates;
  - (e) Register all postgraduate students and thereafter refer them to their respective schools and departments;
  - (f) Publish the postgraduate nominal roll;
  - (g) Keep under review (in coordination with relevant school and department), the progress of each postgraduate student and make such recommendations thereon to the Senate as may be appropriate; and
  - (h) Remove from the nominal roll the name of any postgraduate student whose discontinuation or de-registration is approved by the Senate.

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- 8.3. In respect of the administration of postgraduate scholarships, the Board shall:-
- (a) Be responsible for receiving from the University all scholarships for postgraduate studies which shall, on that behalf, be dealt with in the manners specified thereafter;
  - (b) Advertise all such scholarships;
  - (c) Allocate such scholarships to those applicants who fulfill the applicable academic requirements as well as any specific terms that may be attached to the scholarships in question; and
  - (d) Have powers to solicit scholarships from prospective donors, and to liaise with other bodies within or outside University that are recipients of scholarships tenable at the University.
- 8.4. In respect of the administration of postgraduate research grants, the Board shall:-
- (a) Be responsible for receiving application for postgraduate research funds through schools;
  - (b) Allocate postgraduate research funds from prospective donors, and to liaise with other bodies within or outside the University that are recipients of such funds; and
  - (c) Have power to solicit postgraduate research funds from prospective donors, and to liaise with other bodies within or outside the University that are recipients or such funds.
- 8.5. In respect of the administration and processing of postgraduate thesis, projects and research papers, the Board shall:-
- (a) Be responsible for receiving and approving the nominations by Schools, of supervisors for all postgraduate research leading to the preparation of thesis, projects or other similar work, and acting always on that behalf, hold the responsibility specified hereinafter;
  - (b) Keep records on the progress of postgraduate research and in this connection receive from schools recommendations for the deregistration of candidates whose work is unsatisfactory, or for discontinuation for sufficient cause and make such recommendation of the Senate as it shall deem appropriate;
  - (c) Process the appointment of boards of examiners for postgraduate thesis, projects and other related presentations;

- (d) Send out invitations to examiners for postgraduate research presentations, on the recommendations of the relevant schools;
  - (e) Cause copies of submitted thesis, projects or similar presentations to be forwarded to the examiners;
  - (f) Receive the written assessment of such thesis, projects or similar presentation from the examiners;
  - (g) Convene board of examiner's meeting in consultation with the Dean concerned;
  - (h) Cause secretarial services to be provided for the board of examiners' meetings; and
  - (i) Forward recommendations of the board of examiners to the Vice-Chancellor for approval on behalf of the Senate where the verdict of such board is.
- 8.6. In respect of the conduct and supervision of postgraduate studies programmes, the Board shall:
- (a) Be responsible for the effective and regular management and conduct of that entire postgraduate studies programme, and on this behalf maintain close coordination with various schools and departments that conduct postgraduate courses without prejudice to the generality to the following regulations and requirements:-
    - (i) That postgraduate research supervisors are competent and specialized in the subject area within which the proposed research falls;
    - (ii) That supervisors keep regular contact with their students as it is stipulated in the relevant regulations;
    - (iii) That joint supervisors do maintain regular consultations with one another, with regard to the progress of the student;
    - (iv) That supervisors submit progress report on their students, as it is stipulated in the relevant regulations;
    - (v) That students submit up-to-date reports regarding their own research work in the manner stipulated in the relevant regulations;

- (vi) That students are afforded that forum of Departmental or School seminars for presenting any aspect of their research work, for discussion, and that a report on such proceedings is submitted by or on behalf of the Dean or School to the Board;
  - (vii) That the students are encouraged to publish their work, or any part thereof, in scholarly or professional journals such work;
  - (viii) That the student's role as researcher is fully reflected in any joint publication with the supervisor or any publication by the supervisor that resets on the student's work;
  - (ix) That he supervisor shows dedication to the student's research as a basis of avoiding delay in communication, or unnecessary misunderstanding, between student and supervisor; and
  - (x) That appropriate disciplinary or other action is recommended to the relevant authority, in relation to any supervisor who fails to perform his/her duties of supervision.
- 8.7. In respect of the welfare and discipline of post-graduate students, the Board shall:-
- (a) Be responsible for receiving any reports on the welfare and conduct of postgraduate students, and deliberate upon and make such recommendations thereon to the Senate as it deems appropriate; and
  - (b) Of its own motion, consider any matter affecting the welfare and conduct of postgraduate students, or their conditions of research, and make appropriate recommendations thereon to the Senate.
9. The board may, in addition, exercise such other powers, or perform such other functions as may be assigned or delegated to it by the Senate.

## Statute XVII

### **Directorate for Research, Innovation and Technology**

1. There shall be a Directorate for Research, Innovation and Technology.
2. There shall be a Director who shall be appointed by the Vice-Chancellor from among persons

- holding the rank of Senior Lecturer and above and who shall be responsible for the execution of the policy of the Directorate and for the control and management of its day-to-day business.
3. The Director shall serve for a term of three (3) years which may be renewable once only for an equivalent term.
  4. The Directorate shall be governed by a Management Board which shall consist of the following members:
    - (a) Chairman of the Board who shall be appointed by the Vice-Chancellor from among the Professors of the University.
    - (b) Director of the Directorate who shall be the secretary to the Board
    - (c) Registrar (Academic and Student Affairs)
    - (d) Four Deans nominated by the University Management Board
    - (e) Four (4) Representatives of the Senate
    - (f) Two (2) student governing council representatives
  5. The Board shall be answerable to the Vice-Chancellor and shall, in conjunction with the units, be responsible for the following functions:-
    - (a) To develop and recommend to the Senate the research policy of the University;
    - (b) To review University research policy and make recommendation to Senate;
    - (c) To establish research priorities for the University;
    - (d) To receive and approve all research proposals and co-ordinate collaborative research projects;
    - (e) To make recommendations to College Senate on the allocation of funds available for research and travel in connection with research and for traveling to conferences;
    - (f) To receive reports from recipients of grants on the use of research funds received from all sources;
    - (g) To allocate research funds to individual applicants out of the funds voted by College Senate for this purpose;
    - (h) To formulate proposals for applications for research funds from external donors;
    - (i) To prepare annually budget estimates or a submission for all allocation of funds from the University resources;
    - (j) To identify and recommend to the University the establishment of research facilities or laboratories e.g. for testing chemicals, animal feeds, soil and water and fertilizers, vegetable oil processing;

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- (k) To administer Intellectual Property;
- (l) The term “Intellectual Property” shall be used broadly to include inventions, copyrightable works, and tangible research property;
- (m) For internally funded research, the Principal Investigator, the Collaborators and the University shall be co-owners of the patent in case of an invention;
- (n) For externally funded research the Principal Investigator, the Collaborators and the University, and if the donor so wishes, shall be co-owners of the patent; and
- (o) All inventions shall be vetted by the Patenting Office.

## Statute XVIII

Schools, Institutes and Departments of the South Eastern Kenya University

- I. There shall be Schools, Institutes and Departments within the University approved by the Council following recommendations from the Senate. The following constitute the current Schools and respective departments of the University:

### **(a) School of Agriculture and Veterinary Sciences**

- (i) Department of Dry land Agriculture
- (ii) Department of Agricultural Economics and Agribusiness
- (iii) Department of Range and Wildlife Sciences
- (iv) Department of Food Science and Technology
- (v) Department of Horticultural Sciences

### **(b) School of Water Resources, Science and Technology**

- (i) Department of Hydrology and Water Resources Management
- (ii) Department of Fisheries and Aquaculture Technology
- (iii) Department of Applied Limnology and Marine Science

**(c) School of Environment and Natural Resources Management**

- (i) Department of Environmental Sciences and Technology
- (ii) Department of Environmental Conservation and Management
- (iii) Department of Forestry Resources Management

**(d) Institute of Mining and Mineral Resources**

- (i) Department of Geological Sciences
- (ii) Department of Meteorology

**(e) School of Humanities and Social Sciences**

- (i) Department of Sociology and Anthropology
- (ii) Department of Community and Development Studies
- (iii) Department of Linguistics and Literature
- (iv) Department of History and Political Science
- (v) Department of Philosophy and Religious Studies
- (vi) Department of Geography

**(f) School of Pure and Applied Sciences**

- (i) Department of Physical Sciences
- (ii) Department of Biological Sciences
- (iii) Department of Mathematics and Actuarial Sciences

**(g) School of Engineering and Technology**

- (i) Department of Mechanical Engineering
- (ii) Department of Civil Engineering
- (iii) Department of Agricultural Engineering
- (iv) Department of Architecture
- (v) Department of Land Management
- (vi) Department of Electrical and Electronics Engineering

**(h) School of Business and Economics**

- (i) Department of Business and Entrepreneurship
- (ii) Department of Management Science
- (iii) Department of Economics

**(i) School of Information and Communication Technology**

- (i) Department of Computer Science and Software Engineering
- (ii) Department of Information Communication Technology

**(j) School of Education**

- (i) Department of Educational Administration and Planning
- (ii) Department of Educational Foundation
- (iii) Department of Educational Communication and Technology
- (iv) Department of Educational Psychology

**(k) School of Continuing Education and External Studies**

**(l) School of Law**

- (i) Department of Commercial Law
- (ii) Department of Private Law
- (iii) Department of Public Law

**(m) School of Governance and Leadership**

- (i) Department of Governance and Public Administration
- (ii) Department of Ethics and Leadership

**(n) School of Health Sciences**

- (i) Department of Human Anatomy
- (ii) Department of Medical Physiology
- (iii) Department of Clinical Medicine
- (iv) Department of Medical Microbiology
- (v) Department of Surgery
- (vi) Department of Nursing
- (vii) Department of Obstetrics and Gynaecology
- (viii) Department of Paediatrics and Child Health
- (ix) Department of Human Pathology
- (x) Department of Public Health
- (xi) Department of Biochemistry
- (xii) Department of Psychiatry
- (xiii) Department of Pharmacy

**(o) School of Arts and Industrial Design**

- (i) Department of Arts
- (ii) Department of Industrial Design

**(p) Institute of Mining and Mineral Processing**



2. Each School shall be headed by a Dean who shall be elected by members of the School Board for a period of two (2) years renewable once. In the absence of an elected Dean, the Vice-Chancellor shall have powers to appoint a Dean from amongst the cadres in (b) below.
- (a) Deans shall be elected from qualified permanent academic staff members, holding the position of at least Senior Lecturer in the respective School.
  - (b) The election for the position of the Dean shall be subject to confirmation by Senate and Council, and the Dean-elect shall not assume office before such confirmation.
  - (c) No person shall be eligible for election if such person is serving a second of two continuous terms as Deans. Where a person previously served but has already ceased to be Dean, such a person shall not become eligible for election until two consecutive years have elapsed since such a person last ceases to be Dean.
  - (d) Where the School fails or is unable for whatever reason to elect a Dean, or where no person from within the School is eligible for election as is provided in paragraph (a) of this clause, the person who is current or outgoing Dean shall continue to hold office and perform all the functions and duties of the Dean until such time as the Council is able to appoint a new Dean.
  - (e) Where a School has failed or is unable to elect a Dean due to circumstances mentioned under paragraph (c) of this clause, the Council shall appoint a Senior Academic member of staff and such person shall assume office of Dean on such terms and conditions as the Council may deem fit.
  - (f) The Office of the Dean of a school shall be declared vacant three (3) weeks prior to expiry of the term.
  - (g) There shall be a Returning Officer who shall be appointed by the Vice-Chancellor; and the Returning Officer shall have the power, under this Statute, to conduct elections of Dean and thereafter report to the Vice-Chancellor the outcome thereof.

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3. Each school shall be governed by a Board whose membership shall consist of the following:
- (a) Dean of School - Chairman to the Board.
  - (b) All Professors, Associate Professors, Senior Lecturers, Lecturers and Assistant Lecturers/Tutorial Fellows within the School.
  - (c) Professors from teaching staff of Schools and Institutes associated with the academic business of the School and who are currently teaching in the Departments within the School.
  - (d) One student representative elected by secret ballot, from each year of study, from among full-time students of the School provided that the student representative will not attend when sensitive issues like examinations are being discussed.
  - (e) Such other members not exceeding two in number and not being members of the full time academic staff of the University appointed by Council on the recommendations of the School.
  - (f) Each Board of School may at its own discretion, invite/co-opt five other persons to attend its meetings in an advisory capacity; provided that persons so invited shall not acquire right of membership to the Board and shall have no voting rights.
  - (g) The Vice-Chancellor, the Deputy Vice-Chancellor (Administration and Human Resource Management), the Deputy Vice-Chancellor (Academic, Research and Student Affairs), and the Deputy Vice-Chancellor (Finance, Planning and Development) shall be ex-official members.
4. The Board of each School shall have the following powers:-
- (a) To consider and make recommendations to Council through the College Senate concerning the progress of students within the School;
  - (b) To make recommendations to Senate through the College Senate concerning syllabi and regulations dealing with courses of study for Degrees and other awards;
  - (c) To regulate and conduct examinations in courses assigned to the School and make recommendations thereon to the Senate;
  - (d) To recommend to the Senate through the Senate the names of examiners for appointment;
  - (e) To consider and make recommendations in any question relating to the School;

- (f) To regulate in such manner as it may deem fit, its own procedures; and
  - (g) To deal with any matters referred to it by the Senate or the Senate.
5. Academic Departments
- (a) Each School shall consist of such constituent departments or units as the Council may from time to time determine;
  - (b) Each academic department shall be regarded for administrative purposes as being a constituent part of one School. Departments/units may be involved in other Schools in the provision of service course teaching;
  - (c) Each Department shall be headed by a Chairman who shall be appointed by the Vice-Chancellor in consultation with the Deputy Vice-Chancellor (ARSA) and the Dean of the School. A Chairman shall serve for a term of two (2) years, renewable once;
  - (d) A Departmental Board shall consist of all Professors, Associate Professors, Senior Lecturers, Lecturers, Assistant Lecturers, Tutorial Fellows and Chief and Principal Technologists in the Department;
  - (e) The Vice-Chancellor, the Deputy Vice-Chancellor (Administration and Human Resource Management), the Deputy Vice-Chancellor (Academic, Research and Student Affairs), the Deputy Vice-Chancellor (Finance, Planning and Development), and Dean shall be ex-official members.
- (f) There shall be Departmental Board meetings called by the Chairman of the Department at least once a semester. Such meetings shall constitute all members of academic staff of the Department and members of associated departments who are currently teaching in the department. The quorum shall be fifty percent plus one person of the full time members of the Departmental Board;
  - (g) The department shall be the basic unit in the academic functioning of the University and shall be responsible for the following functions:-
    - (i) To make recommendations to the School concerning students academic progress;
    - (ii) To make recommendations to the School on teaching, syllabi and examinations;
    - (iii) To recommend to the management on matters pertaining to personnel and resources for the conduct of academic programmes; and
    - (iv) To deal with other matters referred to it by the School or the Senate.

### Statute XIX

Directorate of Information and Communication Technology Services

1. There shall be a Directorate of Information and Communication Technology Services that shall be managed by a Director and an ICT Committee.
2. The Director shall be appointed by the Vice-Chancellor from among teaching staff at the rank of Senior Lecturer and above and shall serve for a term of two (2) years, renewable once and upon satisfactory performance.
3. There shall be an ICT Services Committee of the University whose membership shall consist of the following:
  - (a) Chairman of the Committee who shall be appointed by the Vice-Chancellor from among the Associate Professors and Professors of the University;
  - (b) Two representatives of the Senate;
  - (c) Three members chosen based on their ICT competencies;
  - (d) Two student governing council representatives.
  - (e) The Director of the Directorate, who shall also serve as the Secretary.
4. The ICT Committee may at its discretion, co-opt other persons not exceeding three to attend meetings in an advisory capacity.
5. The Directorate shall have the following functions:
  - (a) To develop, implement, evaluate and review the University ICT policy;
  - (b) To consider and recommend ICT plans, strategies and policies in line with the University priorities;
  - (c) To consider and recommend ICT budget and the allocation of ICT resources among users;
  - (d) To facilitate implementation of large ICT projects;
  - (e) To provide guidance in the development, use and maintenance of a reliable, secure and cost effective ICT infrastructure;
  - (f) To assure the confidentiality, integrity and availability of information within University;
  - (g) To ensure ICT accessibility to the University community regardless of gender, age, religion, location and race;
  - (h) To enrich learning for students and effective content delivery for staff through use of ICT.
  - (i) Ensure the establishment of an efficient ICT environment that provides for collaboration and sharing of information over University networks.

- (j) To address any other ICT strategic and policy matters as may be referred by the University Management Board, Senate or the Council from time to time.

## **Statute XX**

### **Gender Mainstreaming Unit**

1. There shall be a Gender Mainstreaming and Development Unit that shall be headed by a Coordinator.
2. The Coordinator shall be appointed by the Vice-Chancellor from among teaching staff at the level of Lecturer and above and shall serve for a term of two (2) years, renewable once and upon satisfactory performance.
3. The Unit shall have the following functions:
  - (a) To develop, implement, evaluate and review the University Gender Policy;
  - (b) To prepare proposals for funding of gender mainstreaming activities in and around the University community;
  - (c) To actively participate in resource mobilization to implement the Gender Mainstreaming Policy;
  - (d) To mainstream gender issue in all University policies, programmes and activities;

- (e) To advocate for increased participation of women in governance and management within the University;
- (f) To ensure that the University community, infrastructure and work environment is gender responsive;
- (g) To encourage and facilitate empowerment of women and men on gender issues;
- (h) To establish and strengthen existing partnerships and collaborations in gender and education;
- (i) To undertake any other gender matters as may be referred by the University Management Board, Senate or the Council from time to time.

## **Statute XXI**

### **HIV and AIDS Control Unit**

1. There shall be an HIV and AIDS Control Unit that shall be headed by a Coordinator.
2. The Coordinator shall be appointed by the Vice-Chancellor from among teaching staff at the level of Lecturer and above and shall serve for a term of two (2) years, renewable once and upon satisfactory performance.

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3. The Unit shall have the following functions:
- (a) To develop, implement, evaluate and review the University HIV and AIDS policy;
  - (b) To mainstream HIV and AIDS into the core functions of the University;
  - (c) To prepare proposals for funding of HIV and AIDS activities in and around the University community;
  - (d) To actively participate in resource mobilization from government Ministries, Department and Agencies to implement the HIV and AIDS Policy;
  - (e) To lay down sustainable mechanism for prevention, control and management of HIV and AIDS;
  - (f) To set up mechanisms for provision of appropriate care and support of the infected and affected within the University;
  - (g) To provide access to information and materials on HIV and AIDS;
  - (h) To promote progressive and non discriminatory policies and practices;
  - (i) To mobilize of the University community to participate in HIV and AIDS prevention, control and management programmes;
  - (j) To educate and sensitize University community on the need to change their behaviour, attitude and beliefs;
  - (k) To promote partnership and networking with other stakeholders for support and resource mobilization;
  - (l) To provide adequate and appropriate information education and communication material;
  - (m) To encourage staff and communities to visit VCTs to know their HIV status and Persons Living with HIV and AIDS (PLWHAs) to take ARV's as prescribed;
  - (n) To organize sensitization workshops on HIV and AIDS and to build the capacity of the University to develop, implement, monitor and evaluate HIV and AIDS programmes;
  - (o) To undertake any other HIV and AIDS matters as may be referred by the University Management Board, Senate or the Council from time to time.

## Statute XXII

### Directorate of Performance Contracting and Quality Management Systems

- I. There shall be a Directorate of Performance Contracting and Quality Management Systems that shall be managed by a Director and a Board of Management.

2. The Director shall be appointed by the Vice-Chancellor from among teaching staff at the rank of Senior Lecturer and above and shall serve for a term of two (2) years, renewable once and upon satisfactory performance.
3. There shall be a Board of Management of Performance Contracting and QMS Management whose membership shall consist of the following:
  - (a) Chairman of the Management Board who shall be the Deputy Vice-Chancellor (Administration and Human Resource Management);
  - (b) Three representatives of the Senate;
  - (c) Three members chosen from among members of both teaching and non-teaching staff;
  - (d) Registrar (Administration and Human Resource Management);
  - (e) Two student governing council representatives.
  - (f) The Director of the Directorate, who shall also serve as the Secretary;
4. The Directorate shall have the following functions:
  - (a) To oversee and manage the University's functions of Performance Contracting and Quality Management Systems (QMS) in line with the University strategic plan;
  - (b) To facilitate pre-negotiation, negotiation and vetting of performance targets with the Ministry of Higher Education, Science and Technology and prepare the final annual Performance Contract and eventual signing of the same;
  - (c) To maintain a working contact with other University organs/officers on quality assurance, performance contracting and appraisal matters;
  - (d) To advise the University management on the current national, regional and international trends on performance contracting and appraisal;
  - (e) To facilitate preparation of evidence and evaluation of performance targets;
  - (f) To coordinate cascading and signing of performance contracts within the University;
  - (g) To coordinate all aspects of ISO 9001:2008 QMS and other ISO QMS;
  - (h) To advise the University management on the current national, regional and international trends in quality assurance in higher education;
  - (i) To conduct self assessment of academic programmes and evaluation of lecturers and facilities by students;

- (j) To initiate and prepare relevant quality assurance policy documents;
- (k) To coordinate and facilitate all trainings and sensitization workshops outlined in the performance contract;
- (l) To collect on a timely basis and store in an easily retrievable form performance target evidence from all sections/departments within the University;
- (m) To collate, review and submit through the relevant office periodic performance reports to the relevant Government agencies;
- (n) To ensure that divisions, sections and departments submit their quarterly reports on a timely basis;
- (o) To facilitate and coordinate end of the year performance contract evaluation;
- (p) To prepare monthly management briefs on performance contract;
- (q) To undertake any other Performance Contracting and Quality Management Systems matters as may be referred by the University Management Board, Senate or the Council from time to time.

## Statute XXII

### Directorate of Catering and Accommodation Services

1. There shall be a Directorate of Catering and Accommodation Services that shall be managed by a Director and a Board of Management.
2. The Director shall be appointed by the Vice-Chancellor from among teaching staff at the rank of Senior Lecturer and above and shall serve for a term of two (2) years, renewable once and upon satisfactory performance.
3. There shall be a Management Board of Catering and Accommodation Services whose membership shall consist of the following:
  - (a) Chairman of the Management Board who shall be the Deputy Vice-Chancellor (Finance, Planning and Development);
  - (b) Three representatives of the Senate;
  - (c) Three members chosen from among members of both teaching and non-teaching staff;
  - (d) Registrar (Planning and Development);
  - (e) Two student governing council representatives.
  - (f) The Director of the Directorate, who shall also serve as the Secretary.



4. The Directorate shall have the following functions:
- (a) To offer functional and efficient catering and accommodation services to students in and outside University;
  - (b) Development, implementation, evaluation and review of catering and accommodation policies and procedures;
  - (c) To ensure quality of accommodation and food services provided to students and staff by all University kitchens;
  - (d) To oversee the inventory, maintenance and upkeep of kitchens, kitchen utensils, cookware and equipment;
  - (e) To coordinate with and supervise the services provided by contract catering companies;
  - (f) To Co-ordinate, procurement, preparation and storage of all accommodation and catering materials;
  - (g) To co-ordinate preparation and serving of meals, during official University occasions, such as, departmental, school and management meetings, and conferences;
  - (h) To ensure maintenance of discipline and security in kitchen and halls of residence;
  - (i) To look into immediate and future needs of Catering and Accommodation services and make appropriate recommendation to the University Management Board;
  - (j) To look into effective procurement procedures of stores and food stuffs;
  - (k) To implement policy decisions of the University concerning Catering and Accommodation services;
  - (l) To liaise closely with maintenance department concerning repairs and maintenance aspects where required;
  - (m) To liaise closely with Finance Department concerning day to day accounting of the departments' expenses;
  - (n) Issue directions and advisory information to the staff as instructed from time to time by University Management;
  - (o) To prepare staff establishments for the directorate and to ensure establishment levels are kept;
  - (p) Preparation of budgets and monitoring of the Directorate revenues and expenses;
  - (q) To undertake any other Catering and Accommodation Services matters as may be referred by the University Management Board, Senate or the Council from time to time.

# Statute XXIII

## Directorate for Linkages and International Programmes

- 1 There shall be a Directorate for Linkages and International Affairs that shall be managed by a Director and a Board of Management.
- 2 The Director shall be appointed by the Vice-Chancellor from among teaching staff at the rank of Senior Lecturer and above and shall serve for a term of two (2) years, renewable once and upon satisfactory performance.
- 3 There shall be a Management Board of Linkages and International Affairs whose membership shall consist of the following:
  - (a) Chairman of the Management Board who shall be the Deputy Vice-Chancellor (Academic, Research and Student Affairs);
  - (b) Three representatives of the Senate at the level of Dean or Director;
  - (c) Three members chosen from among members of teaching staff;
  - (d) Registrar (Academic and Student Affairs);
  - (e) Two student governing council representatives.
  - (f) The Director of the Directorate, who shall also serve as the Secretary.

4. The Directorate shall have the following functions:
  - (a) To develop, implement, evaluate and review of linkages and international affairs policy;
  - (a) To coordinate local and international industrial attachments and extension;
  - (b) To be responsible for welfare of external/international visiting staff and occasional/exchange staff/students while at the University;
  - (c) To assist in travel arrangements for the University teaching staff/students as well as visiting scholars and occasional students;
  - (d) To coordinate external activities by University staff/students visiting other institutions/universities locally and internationally;
  - (e) To draft negotiations leading to the signing of Memoranda of Understanding (MOU) links and/or aid/research agreements and scrutinizing the same before they are executed;
  - (f) To receive and review progress reports periodically submitted to the donor under the terms of the MOU/agreement and recommending renewals or otherwise;
  - (g) To ensure compliance by the benefiting departments and their international counterparts with the terms of the MOU and agreements;

- (h) To keep records and updating of all links and agreements the University has with International Universities/Organizations;
- (i) To process all Linkage and Cooperation MOU's for signing by the Vice-Chancellor after approval by the Senate.
- (j) To undertake any other Linkages and International Affairs matters as may be referred by the University Management Board, Senate or the Council from time to time.

## Statute XXIV

### University Entry Requirements

- I. The entrance requirements set out below must be regarded as minimum requirements, which in no way entitle the applicant to a place in the University. In addition candidates will be required to fulfill specific admission requirements of the schools to which they seek admission.
- (a) A Kenya Certificate of Secondary Education (KCSE) with an aggregate minimum grade of C+ from at least 7 approved subjects obtained at the same sitting; and
- (b) For the purposes of this regulation approved subjects shall be such subjects as Senate shall from time to time determine.

### The list of such approved subjects include:-

Group I		
ENG	English	)
KIS	Kiswahili	) Compulsory 3
MAT	Mathematics	)
Group II		
BIO	Biology	)
PHY	Physics	) At Least 2
CHE	Chemistry	)
Group III		
HAG	History and Government	)
GEO	Geography	)
CRE	Christian Religious Education	) At Least 1
IRE	Islamic Religious Education	)
HRE	Hindu Religious Education	)
Group IV		
HSC	Home Science	)
ARD	Art and Design	)
AGR	Agriculture	) At Least 1
AVT	Aviation Technology	)
CMP	Computer Studies	)
Group IV		
FRE	French	)
GER	German	)
ARB	Arabic	) At Least 1
MUS	Music	)
BST	Business Studies	)

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2. There shall be a mature age qualifying scheme for admission to the University, the condition for which shall be as follows:-
  - (a) Candidates must be 25 years of age, or older on 1st July of the Year in which admission is sought.
  - (b) Candidates should have completed their full-time school at high school or college education at least five years before the date they are seeking admission.
3. Candidates should be able to show:-
  - (i) That they have attended Extra-Mural classes or Residential courses in which case a recommendation from the Extra-Mural Class Tutor(s) or Residential Tutor will be necessaryor
  - (ii) That they have attended a residential course at an Adult Education centre or post-secondary institution in which cases a recommendation from the Principal of the College attended will be necessary;or
  - (iii) That they can obtain, from a person acceptable to the University a recommendation that they are qualified to profit from a University education.
4. Candidates must give the name and full address of a referee who is a person conversant with University Standards- preferably a graduate and who is well placed to assess the candidate's potential as a University student. Candidates are requested to see to it that the referee has consented to report on them, and that their addresses are correct.
5. No candidate who has previously attended any University shall be admitted to a degree course, under these regulations, for which they failed to qualify during their previous attendance, unless they produce evidence of further study satisfactory to the University.

## STATUTE XXV

### Designation of Degrees

- I. The University shall have power to confer the following degrees:-

Bachelor of Science	B.Sc.
Bachelor of Veterinary Medicine	BVM
Master of Science	M.Sc.
Doctor of Philosophy	Ph.D.
Doctor of Science	D.Sc.

### School of Environment & Natural Resources Management

Bachelor of Science	B.Sc.
Master of Science	M.Sc.
Doctor of Philosophy	Ph.D.
Doctor of Science	D.Sc.

### School of Earth Sciences

Bachelor of Science	B.Sc.
Master of Science	M.Sc.
Doctor of Philosophy	Ph.D.
Doctor of Science	D.Sc.

### School of Humanities and Social Sciences

Bachelor of Arts	B.A.
Master of Arts	M.A.
Doctor of Philosophy	Ph.D.
Doctor of Letters	D.Litt.

### School of Pure and Applied Sciences

Bachelor of Science	B.Sc.
Master of Science	M.Sc.
Doctor of Philosophy	Ph.D.
Doctor of Science	D.Sc.

### School of Engineering and Technology

Bachelor of Science	B.Sc.
Bachelor of Architecture	B.Arch.
Master of Science	M.Sc.
Doctor of Philosophy	Ph.D.
Doctor of Science	D.Sc.

### School of Business and Economics

Bachelor of Commerce	B.Com.
Bachelor of Economics	B.Econ.
Bachelor of Economics & Statistics	B.Econ. Stat.
Bachelor of Procurement and Supply Chain Management	BPSCM
Master of Business Administration	MBA
Doctor of Philosophy	Ph.D.
Doctor of Letters	D.Litt.

### School of Information & Communication Technology

Bachelor of Information Technology	BIT
Bachelor of Science	B.Sc.
Master of Science	M.Sc.
Doctor of Philosophy	Ph.D.
Doctor of Science	D.Sc.

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### School of Water Resources Science & Technology

Bachelor of Science	B.Sc.
Master of Science	M.Sc.
Doctor of Philosophy	Ph.D.
Doctor of Science	D.Sc.

### School of Education

Bachelor of Education	B.Ed.
Master of Education	M.Ed.
Doctor of Philosophy	Ph.D.
Doctor of Letters	D.Litt.

### School of Law

Bachelor of Laws	LL.B
Master of Laws	LL.M
Doctor of Philosophy	Ph.D.

### School of Health Sciences

Bachelor of Science	B.Sc.
Bachelor of Public Health	BPH.
Bachelor of Medicine and Bachelor of Surgery	MB.Ch.B.
Bachelor of Dental Surgery	BDS
Bachelor of Pharmacy	B.Pharm.
Master of Medicine	M.Med.
Master of Pharmacy	M.Pharm.
Master of Public Health	MPH
Master of Science	M.Sc.
Doctor of Philosophy	Ph.D.

## Statute XXVI

### Awarding of Degrees

#### Bachelor's Degree

1. Save as otherwise provided by this Statute, a candidate shall not be awarded the Bachelor's degree unless he/she shall have undertaken approved courses and satisfied the requirements of the University as a student of the University after admission and subsequent registration with the School as follows:
  - (a) For the degree of Bachelor of Arts, Bachelor of Laws, Bachelor of Commerce, Bachelor of Science and Bachelor of Science in Nursing for at least four academic years;
  - (b) For the degree of Bachelor of Veterinary Medicine, Bachelor of Dental Surgery, Bachelor of Pharmacy and Bachelor of Science (Engineering) for at least five academic years; and
  - (c) For the degrees of Bachelor of Architecture, Bachelor of Medicine and Bachelor of Surgery, for at least six academic years.
2. The School may accept, as part of the attendance of a student of the University qualifying him for the award of Bachelor's degree, a period of attendance as a student of another University or Institution specially recognized by the Senate for this purpose; the School may accept certificates

of proficiency in any subject by a University aforesaid, exempting from the examination of the University in a course or courses in such subject; provided that no student shall be awarded the Bachelor's degree unless:

- (a) They shall have undertaken an approved course of the University as follows:
    - (i) For the degree of Bachelor of Arts, Bachelor of Commerce, Bachelor of Laws, Bachelor of Science in Nursing, Bachelor of Science for at least three academic years, of which one shall be the final year;
    - (ii) For the degrees of Bachelor of Architecture, Bachelor of Veterinary Medicine, Bachelor of Dental Surgery, Bachelor of Pharmacy, Bachelor of Science (Engineering) for at least the final three academic years;
    - (iii) The degree of Bachelor of Medicine and Bachelor of Surgery, for at least the final four years.
  - (b) His/her periods of attendance as a student at such University or institution and at the University are together not less than the complete period prescribed for the award of the degree;
  - (c) He/she shall have passed the final examination and such other examinations of the University as the School may determine;
  - (d) He shall have paid such fees to the University as may be determined by the Council; and
  - (e) He shall have complied in other respects with the requirements for the degree;
  - (f) No candidate who has already applied twice without success for admission under the Mature-Age Entry Scheme can be considered for this form of entry;
3. Candidates who have complied with conditions (a) to (vi) above, shall be required to take special Entrance Examination. These examinations will consist of papers of general character for which specific preparation is not possible;
  4. Candidates who, in the opinion of the examiners, merit further consideration will be called for interview before the final selection of candidates is made, except that candidates who obtain at least 60% in the Special Entrance Examination may, at the discretion of the University be exempted from the interviews.

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5. Candidates who comply with conditions (i) to (vii) above may be admitted to degree courses for which Mature – Age students would normally be eligible viz: Bachelor of Arts; Bachelor of Science, Bachelor of Education; Bachelor of Commerce and Bachelor of Laws; or such other degree courses as the University may approve.
6. Subject to the provisions of clauses (a) to (e) of paragraph 2, the School may accept period of attendance and examinations in any subject of a candidate in any School of the University, or any other University recognized by the Senate for this purpose, as exempting from attendance in such subject prescribed for a degree in another School.
7. A person who has graduated in another University, or who is able to give satisfactory evidence of his/her qualifications, may be admitted as a student to courses of study and research in the University and may proceed to a higher degree under such special conditions as Senate may prescribe.

### Masters Degree

8. A candidate shall not be awarded the Master degree in any School/Institute, unless he has been registered for the degree as a student of

the University, for a period of at least eighteen months and has pursued such advanced study of research, or both, as may be approved by the Senate, and has performed such other work and complied with other requirements for the award of the Bachelor's degree in the School concerned, or after admission by the Senate to that degree in the School concerned, or after admission by the Senate to that degree, or admission by the terms of paragraph 4, subject to such decisions as may from time to time be made by the Senate.

### Doctor of Philosophy Degree

9. A candidate shall not be awarded the degree of Doctor of Philosophy in any School/Institute unless;
  - (a) He has been registered for the degree, as a student of the University for a period of not less than 18 months after satisfying the requirements for the award of Master's degree in the School concerned, or other admission to the status of that degree, or after admission as a research student in terms of paragraph 4, subject to such decisions as may from time to time be made by the Senate.



- (b) He has pursued a subject of special study approved by the Senate;
- (c) He has worked in such association with a supervisor of supervisors as the Senate may direct; and
- (d) He has submitted a thesis which makes a distinct contribution to the knowledge and understanding of the subject and affords evidence of the exercise of independent critical thinking.

### **Higher Doctorate**

- 10. Subject to provisions of paragraph 4 of this Statute, a candidate shall not be awarded a higher doctorate in any School, until at least five years after he has been awarded the degree of Doctor of Philosophy/Doctor of Medicine of the University.

## **Statute XXVII**

### **University Examinations**

- 1. University Examinations shall be conducted under the control of the Senate.
- 2. There shall be internal and external examiners for the University Examinations appointed by the Senate upon the recommendations of the

School Boards, who shall prepare examinations papers where appropriate and examine students in the papers assigned to them by the School or Institute.

- 3. External examiners shall be appointed from outside the University.
- 4. In the case of reexamination, at a special examination of candidates who have failed in the ordinary University examination, a moderator may be appointed from within or outside the University provided he has had no part in teaching the candidate in the subject of the paper under examination.
- 5. Every candidate for a University Examination shall pay to the University in respect of such examination, such fees as the Council shall from time to time, prescribe.
- 6. In the event of alleged examination irregularity, Senate shall appoint a committee which shall investigate the alleged irregularity. Any person involved in the alleged irregularity shall be required to appear before this committee in person. The Chairman shall then report the findings of the committee to the Vice-Chancellor who, on behalf of the Senate, shall decide what further action may be necessary.
- 7. The only penalty for cheating in examination is immediate suspension followed by EXPULSION

# Statute XXVIII

## Honorary Degrees

1.
  - (a) A proposal to grant an honorary degree may be made by a member of the Council, or a member of the Senate and shall be communicated in writing to the Vice-Chancellor.
  - (b) Every such proposal shall be accompanied by a statement setting forth the degree recommended and the detailed grounds on which the recommendation is based.
2. The Vice-Chancellor shall refer such a proposal to an Honorary Degrees Committee consisting of the Vice-Chancellor; the Deputy Vice-Chancellor (Academic, Research and Student Affairs), the Chairman of the Council, three members of the Senate, appointed by the Senate, and two members of the Council appointed by the Council. Provided that the Committee shall have the power to co-opt any person or persons to assist in the due assessment of the credential of the nominee.
3. The Vice-Chancellor shall be Chairman of this committee, and in the absence of the Vice-Chancellor; the committee shall appoint a Chairman from among its members.
4. Any recommendation made by this Committee for the conferring or otherwise of any degree shall be reported to both the Council and the Senate for confirmation.
5. The conferment of an honorary degree upon any person shall be preceded by a proclamation of such a person's Citation to the Congregation by an Orator nominated by the Honorary Degrees Committee from among the Professors of the University.

# Statute XXIX

## Emeritus Professorship

1. A Professor who has retired from active service in the University may be considered for appointment as an Emeritus Professor of the University.
2. For a person to be considered for appointment as an Emeritus Professor such a person shall satisfy the following conditions;

- (a) Shall have demonstrated academic excellence through scholarship, as evidenced by research and publications;
  - (b) Shall have taught with distinction at the University for at least ten years, five of which as a Professor; and
  - (c) Shall have achieved international reputation as a scholar.
3. Nominations for designation as Emeritus Professor shall originate from Departments, Schools/ Institutes and shall thereafter be forwarded to the Emeritus Professors Appointments Committee set up under paragraph 5 hereof. The recommendations of the Committee shall be forwarded to the Council for confirmation.
4. The terms of appointment as an Emeritus Professor shall be as follows:-
  - (a) An emeritus Professor shall for all purposes be regarded as Professor of the University;
  - (b) The position of Emeritus Professor shall be personal;
  - (c) The Council, taking into account all relevant matters, shall make provision for compensation for services rendered and for housing, health care and any other matters for the benefit and welfare of the Professor and family;
  - (d) An Emeritus Professor shall be provided with such facilities as may be required for the discharge of academic responsibilities; and
  - (e) An Emeritus Professor shall be a full member of the Senate.
5. There shall be a Staff Appointments Committee of the Council called "The Emeritus Professors' Appointments Committee" whose membership shall be:
  - (a) Chairman of the Council - Chairman
  - (b) Vice-Chancellor
  - (c) Deputy Vice-Chancellors
  - (d) One Council Representative
  - (e) Principal of the relevant College
  - (f) Dean/Director of the relevant School/ Institute
  - (g) One Professor; whose area of specialization is related to that of the nominee, appointed by the Vice-Chancellor
  - (h) Two Senate representatives
  - (i) Chairman of the relevant Department
  - (j) Registrar (ASA) - Secretary

### Statute XXX

#### Conferring of Degrees

1. Congregations of the University shall be at least once a year at the University Main campus and shall be presided over by the Chancellor or, in his/her absence, by the Vice-Chancellor or some other person nominated by the Chancellor.
2. Degrees shall be conferred at a congregation of the University.
3. A candidate shall not be admitted to a degree other than an honorary degree unless the candidate has paid such fees as may be prescribed by the Council, and unless the Deputy Vice-Chancellor (Academic, Research and Student Affairs) has certified that such candidate has satisfied all the conditions prescribed for such a degree.
4. The procedure as to the conferring of degrees, the academic dress to be worn and all other matters regarding congregation not provided for in this Statute shall be determined by the Senate.

### Statute XXXI

#### Convocation

1.
  - (a) Congregation of the University shall consist of all persons whose names appear on the Convocation Roll, to be compiled and kept by the Deputy Vice-Chancellor (Academic, Research and Student Affairs).

- (b) The Vice-Chancellor; Deputy Vice-Chancellors, College Principals and Deputy Principals, Professors and Lecturers of the University (including, for this purpose, honorary and titular professors and lecturers); the Librarian, the Finance Officer shall be ex-officio member of the convocation and shall be entitled to have their names entered on the Convocation Roll.
- (c) All persons who become graduates of the University shall be entitled to have their names entered on the convocation Roll.

2. Subject to the provisions of these Statutes, Convocation shall be empowered:

- (a) To discuss and state its opinion upon any matter or matters within the sphere of operations or competence of the University.
- (b) To elect from among its members an executive committee, the constitution, functions and duties of which shall be prescribed by regulations framed by the Council after consultation with convocation.

3. The Deputy Vice-Chancellor (Academic, Research and Student Affairs) shall provide the Secretariat for the Convocation and shall keep the roll thereof. The Roll shall be conclusive evidence that any person or persons whose name appears therein at the time of voting as member of Convocation is entitled so to vote, and that any such person or persons whose name does not appear therein is not so entitled. The names of new graduates of the University shall be considered to be automatically included in the roll immediately after conferment of the degrees. Such automatic inclusion shall not, however, relieve the new graduate of the duty of registering his/her address with the secretariat informed of any subsequent change of address.
4. There will be a Chairman of the Convocation who shall be elected by Convocation from amongst its members and shall hold office for a period of two years. In the case of the incapacity or resignation of a Chairman, Secretariat shall take the necessary steps to initiate the election of a successor to fill the vacancy. No member shall be eligible to be elected Chairman unless he is normally resident in Kenya.
5. It shall be the duty of the Secretariat to take steps for the holding annually of a meeting of the Convocation. Notices of such meetings shall be given two months before the date of the meeting. Any member desiring to bring forward any business at such meeting shall submit a statement in writing to the Secretariat setting forth in the form of motions the subject or subjects such person proposed for consideration thereat. Such motions must be lodged with the Secretariat at least four weeks prior to the date of the meeting.
6. Notice of every meeting of the Convocation, with a statement of the business to be brought before the meeting, shall be sent to each member at his/her last known address at least fourteen days prior to the day appointed for holding such a meeting.
7. The quorum and procedure of the Convocation shall be as prescribed in rules made by the Convocation and approved by the Council.
8. A copy of the proceedings and all resolutions relating thereto, and a statement of such other matters discussed and passed by the Convocation from time to time shall be duly certified by the Chairman of the Convocation and thereafter sent to the Chairman of Council and Chairman of Senate for information.

### Statute XXXII

#### Fees

1. All students admitted to the University for any degree, diploma, certificate or other award of the University shall pay the University such registration Fees, Tuition Fees and other fees and charges as Council may from time to time determine.
2. All fees and other charges due shall be paid at the commencement of the semester they are due and in any case not beyond the third week of the semester. No students shall be allowed into university facilities, lectures, examination room or participate in activities which have not been fully paid for.
3. The University shall withhold any and all services, examination results, conferment of any degree, certificate or award until all outstanding fees are settled and further reserve the right to institute other legal recovery proceedings against students with outstanding fees and also surcharge an interest at a rate to be determined by Council from time to time.

### Statute XXXIII

#### Financial Regulations

1. All the funds, assets and property, movable and immovable, of the South Eastern Kenya University shall be managed and utilized by the Council, in accordance with the provisions of this Statute, the charter and the Act in such manner and for such purposes as in the opinion of the Council, would promote the best interests of the University.
2.
  - (a) All the monies of the University shall be paid into one or other of the following accounts:
    - (i) The Endowment Fund
    - (ii) The Special Account
    - (iii) The Capital Account
    - (iv) The Revenue Account
    - (v) Research Grants Account
  - (b)
    - (iii) There shall be paid into Endowment Fund all such monies as are received by the University and declared specifically to be payable into that Fund.

- (iv) The Council shall not, save with the prior approval of the Chancellor expend any capital monies of the Endowment Fund and shall pay into the Revenue Account all interest received from investment of the monies of the Endowment Fund.
  - (c)
    - (i) There shall be paid into Special Account all such monies as are received by the University for special purposes and as are not payable into the Endowment Fund
    - (ii) The Capital monies and the interest thereof from the Special Account shall be used and applied for special Purposes of which such monies were donated in accordance with conditions of the donation;
- Provided that if the conditions of the donation do not permit capital monies thereof to be expended the Council may, nevertheless with prior approval of the Chancellor, expend such capital monies, or any portion thereof, if in the opinion of the Council, it is in the best interest of the University to do so.
- (d)
    - (i) There shall be paid into the Capital account all such monies as are received by the University for the purpose of capital expenditure for the construction and improvement of the University.
    - (ii) The capital moneys and the interest thereof from the Capital Account shall be used and applied on Capital expenditure for the construction and improvement of the University.
  - I. There shall be paid into the Revenue Account:
    - (i) The Interest received from the investment of monies in the Endowment Fund;
    - (ii) all fees, dues and other amounts payable by or in respect of students;
    - (iii) all revenue grants by the Kenya Government or by any other Government or person;
    - (iv) all sums transferred from the Endowment or any other amount to the Revenue Account;
    - (v) All sums received by the University and not payable into the Endowment or any

other account; The monies standing to the credit of the Revenue Account shall be used and applied for the management and working of the University in such manner and for such purposes as, in the opinion of the Council, are best suited to promote the interests of the University.

- (f)
  - (i) There shall be paid into the Research Grants account all such monies as are received by the University for research purposes;
  - (ii) Such monies shall not be paid into any account; and
  - (iii) Monies in the Research Grants Account shall be used and applied by the Council for specific purposes in accordance with the agreements made between donors and the Council.
  
- (h) Subject to the provisions of the Act the Council may borrow, either by way of overdraft from a banker or otherwise, such sums as it may from time to time require for the administration of the University.

- 3.
  - (i) Subject to provisions of the Charter, the monies standing to the credit of the Endowment Fund shall be invested by the Council in such securities as trustees are authorized to invest in under the provisions of any law of Kenya.

Provided that where any sums are received by the Council for any payment into the Endowment Fund in the form of stocks and shares of any kind other than securities, then the Council may in its discretion retain such stocks or shares without converting them into such securities.

- (ii) The monies or any portion thereof standing to the credit of any of the accounts other than the Endowment Fund of the University may be invested by the Council in securities as the Council may think fit.
- (iii) Notwithstanding the provision of subsections (1) and (2) of this section, any monies standing to the credit of any of the accounts of the University including the Endowment Fund, may be temporarily invested for a period not exceeding 12 months pending utilization and in accordance with provisions of the Charter



## Statute XXXIV

### Miscellaneous

1. These Statutes and the Regulations referred to hereunder shall commence on the date of gazettelement as is required in the Act and Charter except that where it is provided otherwise in any Statute or regulation, such other date shall be deemed to be the commencing date for that particular Statute, or regulations.
2. The University Council may amend, add to or alter these Regulations as it deems fit from time to time. Provided that in accordance with the Act, the Council shall not amend, alter or add to the Regulations governing courses of study and other academic matters without the receipt of a proposal or report thereon by the Senate and provided further that the Council shall not reject any such report or request or amend any regulations so proposed without further reference to the Senate.
3. The Rules and regulations in force in the day prior to the commencement of these Statutes and Regulations shall, unless superseded by these Statutes and Regulations of this Statute continue

to apply as though they had been incorporated into these Statutes and Regulations and in so far as they are not inconsistent with these Statutes and Regulations. Provided these Statutes and Regulations, or the Rules and Regulations in force prior to the commencement date aforesaid, shall be subject to the provisions of the South Eastern Kenya University.

- (a) Common Regulations for the Masters Degree in All Schools

### Eligibility for Masters Programmes

1. The following shall be eligible for registration for the Masters degrees in the University:
  - (a) Holder of a Bachelor's degree of the South Eastern Kenya University;
  - (b) A candidate who has obtained a degree or an equivalent qualification from other institutions recognized by Senate as of comparable academic status;
  - (c) In exceptional cases, Senate may also admit to the Masters' programme, non-holders of a first degree provided such candidates can,

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on the basis of the research and academic work they have done show that they are well qualified to undertake postgraduate work by passing qualifying exams; and

- (d) An intending candidate shall be required to produce evidence of his/her competence to work for the degree. The Senate may decline to admit as a candidate for the degree any person whose attainments are in its opinion, not sufficiently high to warrant such admissions.

2. In addition to producing evidence of eligibility for registration, candidates for the Masters degree may be required to appear for interview by the School concerned to determine their suitability for registration.
3. Subject to the approval of Senate, Schools may formulate regulations requiring applicants to have attained such academic or equivalent qualifications as may be consistent with the goals of their masters programmes.

### Duration of the Masters Programmes

4. The masters' programmes in all Schools shall extend over a period of at least eighteen months from the date of registration.

5. The masters' programme in any School shall consist of:-

- (a) Either coursework and examination involving full-time attendance at the University; OR
- (b) Coursework, examination and thesis also involving full-time attendance at the University, and where the entire second year of the programme is devoted to the thesis.

No candidate for the masters degree shall be registered as a full-time student for more than three years without the permission of Senate.

### Submission and Processing of Applications

6. Applications shall be submitted to the Director (Board of postgraduate Studies) on the prescribed forms.
7. In submitting an application, an intending candidate for the degree shall submit for approval of the School Board concerned and the Senate, a statement on the proposed field of study and the place at which he intends to carry out the study.

8. All applications for registration shall be processed in the first instance through the relevant School Postgraduate Studies Committee (SPSC) in consultation with the department in which registration is sought. The SPSC shall then forward all such applications with appropriate comments to their respective School Boards for approval and onward transmission to the Board of Postgraduate Studies (BPS).
9. If satisfied with an applicants' registrability, the BPS shall recommend to Senate that the applicant be registered.
10. Before recommending a candidate for registration, the School concerned shall satisfy itself that:-
  - (a) The proposed field of study is academically sound and can profitably be pursued under the supervision of the South Eastern Kenya.
  - (b) The candidate has adequate opportunities for consulting his/her supervisor (s) at least once a month.
  - (c) The candidate can obtain access to material relevant to his/her study or research.
  - (d) The candidate has adequate facilities for practical work, where this is applicable.

### **Conduct of Studies and Supervision**

11. A candidate registered in accordance with these regulations shall be required to pursue his/her programme of study under instruction or supervision by academic staff appointed in that capacity by the Senate on the recommendation of the School Board concerned.
12. Candidates shall be required to consult their supervisor(s) at least once a month and to submit every term/semester a written progress report to the Dean of the School through the supervisor and the chairman of the Department with a copy to the Board of Postgraduate Studies.
13. Recommendations on the appointment of supervisors shall be processed in the first instance by the Department through the relevant SPSC. The recommendation shall then be forwarded to the School Board concerned for approval and onward transmission to the Senate through the BPS.
14. Before recommending the appointment of any supervisor, the School Board concerned shall satisfy that the proposed supervisor is competent in the subject area and field of research in which the candidate proposes to work.

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15. Normally, only one supervisor will be appointed for each candidate from among the academic staff of the School concerned. However, School Boards may appoint additional supervisor(s) as they may deem necessary in individual cases.
16. Where an additional supervisor is appointed from outside the University, such a supervisor should show evidence of competence in the area of study through publications produced since obtaining his/her higher degree.
17. It shall be the duty of the supervisor to direct and supervise the work of the student in so far as it relates to his/her programme of study. In particular, a supervisor shall be required to:-
  - (a) Maintain constant and effective contact with candidates assigned to him.
  - (b) Submit individually or jointly academic reports through the relevant School Boards to the BPS on the progress of each candidate at the end of every term/semester.
  - (c) Certify at the end of every term/semester that the candidate has received supervision. The candidate should also certify that he has received adequate supervision.
  - (d) To inform the BPS through the relevant FPSC and School Board at once if in his/her opinion a given candidate is unlikely to reach the standard for the award of a master's degree.
18. Where the progress of a given candidate is unsatisfactory as to result in his/her being de-registered, such a candidate shall be given written warning by the Dean of the School to the effect that unless he shows signs of improvement within three months, he would have to be de-registered. A recommendation for deregistration shall be made to Senate through the BPS after two consecutive negative reports after the warning.

### Examination of Candidates

19. Candidates by coursework and examination shall be examined in all the courses for which they have registered during the particular year of study.
20. Candidates by coursework, examination and thesis shall have the coursework examined at the end of the first year of study while the second year of study shall be devoted to research, seminars, and the preparation of a thesis.

21. Assessment at the end of the first year of study shall consist of:-
  - (a) A written examination which shall constitute 70% of the total marks in each subject, and
  - (b) Continuous coursework assessment based on essays, laboratory assignments and such other tests as the regulations of the School concerned may prescribe, constituting 30% of the overall end year assessment.
22. For programmes involving coursework and examination assessment at the second year of study shall be the same as in 22(a) and (b) above.
23. The pass-mark in all schools shall be 50%. Candidates taking the first year examinations shall be required to pass in all the courses for which they are registered, before they can proceed to the second year. Supplementary examinations if any, shall be governed by School regulations approved by Senate.
24. The first year examination results shall be processed through the School Board concerned and reported directly to the Senate.

**Submission and Examination of Thesis**

25. A candidate shall give a notice in writing together with an abstract of the work to the Director, Board of Postgraduate Studies at least three months before the intended date of submission with copies to the Dean and Chairman of Department.
26.
  - (c) Every thesis submitted for examination shall be 4 copies and in unbound form, and must include a declaration by the candidate confirming that the thesis has not been submitted for a degree in any other Institution, and that the contents of the thesis are the original work of the candidate. Every thesis shall bear the signature of the supervisor(s) indicating that the thesis shall bear the signature of the supervisor(s) indicating that the thesis has been submitted “with the knowledge of the supervisor”.
  - (d) The final version of the thesis, (6 copies) 3 bound and 3 in unbound form, after examination shall remain the property of the University.

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27. A thesis submitted for the degree must be adequate in form and content. It must also include full bibliography of the materials used in its preparation whether published or otherwise, and it must also conform with the regulations for the submission of thesis of the South Eastern Kenya University.
28. The Senate shall on the recommendation of the Board of the School concerned in respect of each candidate presenting a thesis, appoint a Board of Examiners consisting of:-
- (a) Dean of the School as Chairman or his/her representative.
  - (b) An external examiner.
  - (c) Two Internal Examiners one of whom must not have supervised the candidate, and
  - (d) Two other persons competent in the disciplines related to the candidate's area of research, at least one of whom should be external to the Department.
29. The examiners shall be required to submit within two months, an independent written assessment of the thesis direct to the Director (BPS) indicating:-
- (a) Whether or not the thesis is adequate in form and content.
  - (b) Whether or not the thesis reflects an adequate understanding of the subject, and in consequence.
  - (c) Whether or not the degree should be awarded.
30. As soon as all the examiners' reports are received, the Director (BPS) in consultation with the Dean of the School concerned shall convene a meeting of the Board of Examiners at which the examiners' reports and other academic matters arising from the thesis shall be considered. A consolidated report and appropriate recommendation shall be prepared for submission to Senate through the Board of Postgraduate Studies within two weeks. Provisional results shall be released to the candidates after the meeting only where the recommendation of the Board of Examiners is unanimous.
31. Where the recommendation of the Board of Examiners is unanimous for or against the award of the degree and where such unanimous recommendation is consistent in all respects with the reports of the examiners, and the results of an oral examination, the Director BPS shall forward such recommendation to the Vice-Chancellor for approval on behalf of the Senate.

32. Where the recommendation of the Board of Examiners is not unanimous or where in the opinion of the Director of the BPS the recommendation is not consistent in material respects with the matters referred to in Regulation 30, it shall be referred to the full Board of BPS for an appropriate recommendation to Senate.
  33. The Senate may on the advice of the Board of Examiners and the BPS invite a candidate to re-submit a thesis in revised or extended form only once. Provided that a candidate whose re-submit is within twelve months.
  34. A thesis accepted by the University and subsequently published in part or in whole and in whatever form, shall bear the inscription, “ work forming part of the requirements for the degree of Master of the South Eastern Kenya University”.
    - (b) Common Regulations for the Degree of Doctor of Philosophy in all Schools
2. Subject to the approval of Senate, Schools may formulate regulations requiring applicants to have obtained such academic or equivalent qualifications as are considered necessary for registration within the academic area of interest of the School and may require applicants to submit to such tests or interviews as the School regulations permit.
  3. For schools with Masters programmes, the Ph.D. programme can either be by coursework, examination and thesis or by thesis only.
- (b) a holder of a Master’s degree or equivalent academic qualifications of another institution recognized by the South Eastern Kenya University Senate as of comparable status. In either case, the applicant should be able to produce evidence, to the satisfaction of Senate, of his/her capacity to carry out original research.

### **Eligibility for Registration**

- I. The following shall be eligible to apply for registration for the degree of Doctor of Philosophy in the university:- either
  - (a) a holder of a Master’s degree from the South Eastern Kenya UniversityOr

### **Submission and Processing of Applications**

4. Applications shall be submitted to the appropriate University postgraduate studies authority of Senate on the prescribed forms.

5. In submitting an application, an intending candidate shall submit for approval of the School Board concerned and the Senate, a study or research proposal not exceeding 40 typed pages, and the place at which he intends to carry out the study or research.
6. All applications for registration shall be processed in the first instance through the relevant School Board of Postgraduate Studies (SPSC) in consultation with the Department in which registration is sought. The (SPSC) shall then forward all such applications with appropriate comments to their respective School Boards for approval and onward transmission to the Board of Postgraduate Studies.
7. Before recommending a candidate for registration, the School concerned shall satisfy itself that:-
  - (a) The proposed field of study is academically sound and can successfully be pursued under the supervision of the South Eastern Kenya University.
  - (b) There exist adequate opportunities for consulting his/her supervisor(s);
  - (c) There exist adequate acidic facilities and resources for effective research.

### Form and Duration of Registration

8.

#### (b) Minimum Duration

A candidate registered for the degree of Doctor of Philosophy shall carry out a programme of original study or research over a minimum period of 36 months after the date of registration or after completion of any required coursework examination, shall submit a thesis based on the study or research done.

#### (c) Maximum Duration

No candidate for the degree of Doctor of Philosophy shall be registered as a full-time student for more than four years or as a part-time student for more than five years without submitting his/her thesis, except by permission of Senate.

9.

Subject to the approval of Senate, Schools may require the candidate to attend such a course or course as may be considered appropriate to remedy deficiencies in the candidate's academic background or to endow the candidate with



specialized skills or knowledge to assist him in his/her study or research. Performance in courses offered may be assessed.

10. On the recommendation of the School Board concerned the Senate may permit a candidate to change his/her registration status from part-time student or vice versa once only, in which case regulation 7(b) above shall apply to such a candidate as if he had initially been admitted to the status he now seeks.

### **Conduct of Studies and Supervision**

11. A candidate registered in accordance with these regulations shall be required to pursue his/her programme of study under the supervision of an academic staff appointed in that capacity by Senate on the recommendation of the School Board concerned and the Board of postgraduate studies.
12.
  - (c) Candidates shall be required to consult their supervisor(s) at least once every month, and to submit a termly written progress report to the Dean of the School

through the supervisor(s) and Chairman of the Department with the copy to the Board of postgraduate studies.

- (d) Each candidate shall be required to attend and participate in seminars organized at eh relevant School/department once a month to enable the schools and the supervisors to assess the candidate's progress more effectively and to keep candidates in constant tough with their respective schools.
13. Recommendations of the appointment of supervisors shall be processed in the first instance by departments through the School postgraduate studies committee. The recommendation shall then be forwarded to the School board for approval and onward transmission to the Senate through the board of postgraduate studies.
14. Before recommending the appointment of any supervisor, the School board shall satisfy itself that the proposed supervisor is competent in the subject area and field of research in which the candidate proposes to work.
15. Where a supervisor is appointed from outside the University, such a supervisor should show evidence of competence in the area of study through publications produced since obtaining

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- his/her higher degree, and as indicated in a curriculum vitae. Such evidence should be requested only once from respective external supervisor.
16. Normally two supervisor will be appointed for each candidate, one of whom must be among the academic staff in the department. However, School boards may appoint additional supervisor(s) as they may deem necessary in individual cases.
17. It shall be the duty of each of the supervisors to direct and supervise the work of the student in so far as it relates to the programme of study. In particular, the supervisor shall be required to:-
- (a) Maintain constant and effective contact with candidates(s) assigned to him.
  - (b) submit individually or jointly with other supervisor(s) academic reports through the chairman of department to the Dean on the progress of each candidate at the end of every term.
  - (c) certify at the end of every term that the candidate has received adequate supervision.
  - (d) inform the Dean through the department and School PSC at one if in his/her opinion a given candidate's work is unsatisfactory and unlikely to reach the standard required for the award of a degree of Ph.D.
18. Where the performance of a candidate is considered unsatisfactory as shown by:- either
- (a) Failure to consult the supervisor as required under (b) or
  - (b) The receipt of an unsatisfactory report from the supervisor(s) under regulation 16 (d) Then the candidate shall be given a written warning by the Dean, to the effect that unless he shows signs of improvement within three months he would be considered for deregistration.
- A recommendation for de-registration shall be made to the Senate through the BPS only after receipt of two consecutive negative reports following the warning.

**Submission of the Thesis and Examination of the Candidate**

19. At least three months before a thesis is submitted, a candidate shall give notice in writing to the Director of the Board of postgraduate studies with copies to the Dean of the School and Chairman of the Department and an abstract outlining the general scope of work.
20.
  - (a) Every thesis submitted for examination shall be in quadruplicate and in loose form, and must include a declaration by the candidate confirming that the thesis has not been submitted for a degree in any other institution of higher learning and that the contents of the thesis are the original work of the candidate. Every thesis shall bear the signature of the supervisor(s) indicating that the thesis has been submitted with his/her knowledge.
  - (b) The final version of the thesis (6 copies) after examination and approval for the award of the degree must be in bound form. All six copies shall remain the property of the South Eastern Kenya University.
21. A thesis submitted for the degree of Doctor of Philosophy must make a distinct contribution to the knowledge and show an understanding of the subject and display originality of thought. It must also include a complete bibliography or references to the materials used in its preparation, whether published or otherwise; and it must also conform to the regulations for the submission of thesis of the South Eastern Kenya University.
22. The Senate shall, on the recommendation of the Board of the School concerned, appoint in respect of each candidate presenting a thesis, a Board of Examiners consisting of:-
  - (a) Dean of the School as Chairman
  - (b) An external examiner
  - (c) Two internal examiners one of whom must not have supervised the candidate.
  - (d) two other persons competent in the candidate's area of research, and at least one external to the Department and,
  - (e) A representative of the Board of post-graduate studies.

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23. The external examiner and the internal examiners shall each be required to submit to Board of postgraduate studies within two months, an independent written assessment of the thesis indicating:-
- (a) whether or not the thesis is adequate in form and content;
  - (b) whether or not the thesis reflect an adequate understanding of the subject and show display for original thought and significant contribution to knowledge and in consequence;
  - (c) whether or not the degree should be awarded;
  - (d) whether or not the thesis make significant contribution to the existing knowledge.
24. Within a month of the receipt of all examiner's report, the Board of postgraduates studies in consultation with the Dean of the School concerned shall convene a meeting of the Board of Examiners at which the Examiners; reports, other academic matters arising from the thesis, and the candidates defense shall be considered. A consolidated report and appropriate recommendation shall be prepared for submission to Senate through the BPS within two weeks. Provisional results shall be released to the candidate after the meeting only where the recommendation o the Board of Examiners is unanimous.
25. Candidates shall be required to present themselves for oral examinations and the Dean shall inform them of the time and place of the meeting of the Board of Examiners.
26. Where the recommendation of the Board of Examiners is unanimous for or against the award of the degree, and where such unanimous recommendation is consistent in all respects with the report of the external examiner and the results of an oral examination, the Director of Board of postgraduate studies shall forward such recommendation to the Vice-Chancellor for approval on behalf of the Senate.
27. Where the recommendation of the Board of Examiners is not unanimous, or the recommendation is not consistent in material respects with the matters referred to in regulation 22 it shall be referred to the full Board of Board of postgraduate studies or an appropriate recommendation to Senate.
28. The Senate may, on advice of the Board of Examiners and BPS permit a candidate to re-submit a thesis for re-examination in a revised form once only.

Provided that a candidate whose thesis referred under this sub-section shall be required to re-submit it within twelve months.

29. A thesis accepted by the South Eastern Kenya University and subsequently published in part of, in whole and in whatever form, shall be the inscription “work forming part of the requirements of the degree of Doctor of Philosophy of the South Eastern Kenya University”.

(c) Common Regulations for Higher Doctorates of the South Eastern Kenya University Other than Honorary Degrees

1. The following regulations shall apply to all Schools, Institutes and Schools of the South Eastern Kenya University and its constituent colleges (if any).
2. The following shall be eligible for the award of a higher Doctorate of the South Eastern Kenya University.
  - (a) a holder of the Doctor of Philosophy or Doctor of Medicine degree of the South Eastern Kenya University
  - (b) a holder of the Doctor of Philosophy degree from any other recognized University of at least five year’s standing, provided that at

the time of application, the candidate will have been either:

- (i) A full-time or part-time member of the academic staff, or
- (ii) In research association with the South Eastern Kenya University and provided further that in both case (a) and (b) specified above, the association with the South Eastern Kenya University shall have been for at least five years, such that a part of the work submitted shall have been contributed at the University during the said period.
- (iii) A holder of a degree of another University equivalent to the Ph.D. Degree of the South Eastern Kenya University, or a person whose attainment in qualification and scholarship is approved by the Senate as equivalent to the Ph.D. Degree of the South Eastern Kenya University; provided that in either case the applicant shall in addition fulfill the conditions specified in paragraph 2(ii) (a) or (b) above.

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3. The Higher Doctorate shall be awarded only for the original published works such as would give a candidate authoritative international standing in his/her particular field of research. The application must be based wholly or substantially on original work of distinction carried out by the candidate. The term “published” shall mean printed in a referred journal, book or monograph which shall have been made available to the public.
4. A candidate for a higher Doctorate shall apply to the Board of postgraduate studies, indicating the discipline in respect of which he/she wishes to be considered. However, the Senate, on the recommendation of the board, may approve the consideration of the application under a different discipline.
5. In his/her application the applicant shall include the following:
  - (a) his/her full curriculum vitae
  - (b) a concise statement (not exceeding 2,000 words) of the focus of the scholastic contribution of the work intended for submission.
6. Upon receiving the application, the Board shall make consultations with the School/ Institute wherein the discipline in question falls, and if satisfied with the merits of the intended application, shall invite the applicant to place together the published contributions which must strongly support the application and to submit copies of the same in three sets.
7. The sets of publication specified in paragraph 6 above, shall be accompanied by a thesis of not more than 50,000 words, typed or printed double-space on A4 paper. The thesis shall be a unifying account of the works submitted, indicating their significance to the advancement of knowledge. Where a part of the work submitted has been published jointly with other collaborators, the candidate shall specify in the thesis his/her contribution. The thesis shall include a declaration by the candidate confirming that it has been submitted for the degree in any other institution and that its content is the original work of the candidate. The thesis shall comply with the “Regulations for Submission of Thesis for a Higher Degree of the South Eastern Kenya University” all three sets of the published works and the thesis shall remain the property of the University.
8. The submission of the applicant’s works, as specified in paragraph 6 above, shall be accompanied by evidence of payment of a non-refundable fee.
9. Upon receipt of the documents specified in paragraphs 6 and 7 above, the Board of postgraduate studies shall, in consultation with

the relevant School/Institute, propose to the Senate the names of three examiners, at least two of whom shall be external examiners. The examiners will be requested to submit their signed confidential reports within two months from the date of their letters of invitation. The report shall include an evaluation of the importance and originality of the candidate's contribution to the advancement of knowledge and the scholarly distinction which would entitle him/her to be regarded as an authority in his/her field of knowledge. The reports shall state whether or not, in the examiner's opinion, the degree should be awarded.

10.

- (a) Upon receipt of the reports of the three examiners, the Board of postgraduate studies shall, within one month, arrange all the relevant documents in a discussible form and forward them to the Chairman of the Senate, who shall then convene a meeting of the evaluation panel to review the examiner's reports and determine the outcome.
- (b) The Evaluation panel shall comprise:
  - (i) Chairman of the Senate - Chairman
  - (ii) Deputy Vice –Chancellors - Member
  - (iii) Principal of the relevant College - Member

- (iv) Dean of the relevant School - Member
- (v) Three Senior University Scholar one of whom shall be from the relevant discipline and appointed by the Senate- Members
- (vi) Director, Board of Postgraduate Studies - Member
- (vii) Not more than three members may be co-opted by the Senate where appropriate - Members
- (viii) Registrar (ASA) - Secretary

11. A thesis for the Higher Doctorate degree shall be defended before a public audience provided that while members of the public shall be free to ask the candidate questions relevant to the subject of his/her thesis, only the panel examiners, shall participate in the final assessment of the thesis and the candidate's performance in defense of the same.
12. The decision of the Evaluation panel shall be subject to approval by Senate.
13. The examiners' reports and the report of the evaluation panel shall be held in strict confidence.
14. An unsuccessful candidate for the award of the Higher Doctorate would be permitted to re-apply only once after the expiration of a period of three years.

# **General Information**



## Short History of the University

South Eastern Kenya University (SEKU) is a successor to the South Eastern University College (SEUCO) which was established as a Constituent College of the University of Nairobi, through Legal Notice No. 102 of 18th July, 2008. Its main campus is located in Kitui County, Kwa-vonza about 155 km from Kenya's Capital City, Nairobi, and 40 km west of Kitui town in a serene environment conducive for learning. The main University campus lies on 10,000 acres of land in Kitui County. It also owns 4,919 acres in Emali along the Nairobi-Mombasa road, and two urban plots in Nairobi and Mombasa.

SEUCO was a successor of Ukamba Agricultural Institute (UKAI) which came into being in the 1970s as one of the, then, Kenya's Harambee Institutes of Technology to harness the country's skilled and semi-skilled human labour into productive development. The Institute was initially registered in 1976 as an unaided school under the Ministry of Education, with the objective of "promoting sound management, utilization and conservation of biotic and abiotic dry land resources for the well-being of the local people." The Institute carried out general agricultural training at certificate and diploma levels in basic sciences, agricultural engineering, economics and farm management, animal and crop production, extension and education.

The establishment of SEKU started with the recommendation from the Public University Inspection Board (PUIB). This arose from the 2005 UNDP Kenya Human Development Report on national education attainment index. The report indicated that Eastern province together with Coast and North Eastern ranked below the national average index, and required careful, deliberate and sustained planning and attention to foster equitable growth, national cohesion and solidarity. The PUIB Report proposed the establishment of new universities that would emphasize neglected sectors (marine science, sea transportation and dry land farming) in order to spur economic growth at the local, regional and national levels. Pursuant to this objective, the Board recommended the establishment of a

## General Information

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public university in the Eastern region focusing on dry land farming and environmental and water studies. This gave rise to the establishment of SEKU. SEKU has continued with the mandate formerly under SEUCO.

One of the main objectives and functions of SEKU is to play a leading role in the development and expansion of the opportunities for higher education and research in agriculture, forestry, mining, energy, water and environmental sciences on arid and semi-arid lands (ASALs) which constitute approximately 80 per cent of the country's total land mass.

The University also continues training middle level manpower through TVET and university certificate and diploma programmes.

**Institute of Mining  
and  
Mineral Resources**

### Institute of Mining and Mineral Resources

#### 1 Introduction

The Institute of Mining and Mineral Resources comprises of two departments, Department of Geological Sciences and Department of Meteorology. Currently it is offering two degree programmes; Bachelor of Science in Geology in the Department of Geological Sciences and Bachelor of Science in Meteorology in the Department of Meteorology. The aim of the Institute is to train geoscientists in these two fields who are globally competitive and will play a great role in optimum utilization and management of natural resources for sustainable national and international development.

The Millennium Development Goals (MDGs) and the National Vision 2030 emphasize on training and maximum utilization of natural resources. The MDGs anticipate the development of geological, hydrological and agricultural and other resources in a sustainable environment, particularly in the dry areas.

South Eastern Kenya University (SEKU) is situated within the Arid and Semi-Arid Lands (ASALs) of Kenya where there is potential of abundant untapped natural resources. The Institute aims to train personnel

with expertise to help with the exploitation of these resources while conserving the environment to bring a positive impact on wealth creation and poverty alleviation for the communities in these regions. The ASALs are known for their water stressed conditions and unreliable rain-fed agriculture. The Institute will produce manpower able to assist the local communities for better management of the scarce water resources.

#### 1.1 Vision

An Institute offering globally competitive academic programmes in Earth Sciences and a leader in innovative research that transforms lives in the Arid and Semi-Arid Lands (ASALs).

#### 1.2 Mission

To be an Institute that provides top quality and transformative education through teaching and learning, research and extension with emphasis in geological and meteorological sciences in a sustainable environment.

#### 1.3 Career opportunities for graduates

Graduates in B.Sc. Meteorology may be employed as forecasters at the Kenya Meteorological Department, the aviation industry and in the ministry of energy;

as agrometeorologists/ agroclimatologists in national agricultural research institutions; as hydrometeorologists in the ministry of water; and in local and international NGOs involved in food security, environmental management and conservation.

B.Sc. Geology graduates are employed as geologists in the Ministries of Environment and Mineral Resources (MEMR), Energy (ME), Water and irrigation (MW&I), Agriculture (MA), Public Works (MPW), Roads (MR) and Regional Development (MRD). They are also employed in parastatals like National Museum, KenGen, and Geothermal Development Corporation (GDC). Others are engaged by private mineral exploration companies e.g. those prospecting for water, gemstones, gold, rare earth elements, petroleum and coal.

## DEPARTMENT OF METEOROLOGY

### 1 Introduction

The Department of Meteorology in the Institute of Earth Sciences and is currently offering a professional undergraduate course leading to a B.Sc. degree in Meteorology from the South Eastern Kenya University. The South Eastern Kenya University is uniquely located in a dry environment where the local population derives

its livelihood on rain fed agriculture. Rainfall is unreliable and its frequent failure results in crop failure and death of animals due to lack of feed, with limited contingency for mitigation. When the rains come, large amount of water is lost to the ocean due to inadequate skills to harvest it. In addition, infrastructure is destroyed, leading to poor access to markets. This scenario is replicated in most parts of the country, making it necessary to train manpower with the necessary skills for early warning and timely intervention.

### 1.1 Vision

A department offering globally competitive academic programmes in atmospheric sciences and a leader in Innovative research that transforms lives in dry areas.

### 1.2 Mission

To provide top quality and transformative education through teaching and learning, research and extension with emphasis on agriculture, natural resources and environmental management.

### 1.3 Objectives

- (a) Develop undergraduate and postgraduate (PGD, Master's and Ph.D.) programmes that meet the needs of dry land agriculture, water sciences and environment technologies.

- (b) Conduct research that provides answers for environmental and atmospheric problems encountered in the dry lands and Kenya as a whole.
- (c) Develop interactive/real-time outreach systems which facilitate the transfer of knowledge, information and technology to key stakeholders for improved livelihoods.
- (d) Develop human capacity for research in atmospheric sciences.
- (e) Be proactive in the formulation of policies that mainstream the use of climatological information to foster national development.
- (f) Create partnership with institutions and organizations involved in atmospheric and environmental research in order to promote productivity of the dry lands.
- (g) Mobilize resources for developing the physical infrastructure for the department and its research programmes through formulation of proposals

### 1.4 Career opportunities for graduates

Graduates in B.Sc. Meteorology may be employed as forecasters at the Kenya Meteorological Department, the aviation industry and in the ministry of energy;

as agrometeorologists/ agroclimatologists in national agricultural research institutions; as hydrometeorologists in the ministry of water; and in local and international NGOs involved in food security, and environmental management and conservation.

## BACHELOR OF SCIENCE IN METEOROLOGY

Regulations and Syllabus for the Degree of Bachelor of Science in Meteorology

### 1 Entry Requirements

All students who wish to join the Department of Meteorology must fulfill the minimum entry requirements. In addition to meeting the minimum University general admission requirements, candidates for the Institute of Mining and Mineral Resources must-

- (a) The Kenya Certificate of Secondary Education (KCSE) or its equivalent qualification with passes in at least three subjects from either of the following two alternatives (A or B), with minimum grades shown:

#### Alternative A

Mathematics	-	C+
Physics	-	C+
Chemistry	-	C+
Geography	-	C+
Biology	-	C+

**Alternative B**

Mathematics	-	C+
Physical Sciences	-	C+
Biological Sciences	-	C+
Geography	-	C+

- (b) Hold the Kenya Advanced Certificate of Education (KACE) or equivalent qualification with at least two principal level passes in: Applied Mathematics, Physics, Chemistry, Geography, Geology, Mathematics, Pure Mathematics, Statistics and Zoology.
- (c) Hold Ordinary / Higher National Diploma or equivalent qualifications in the sciences or in computer science with at least pass.
- (d) Science/Technical Diploma from Teachers Training Colleges, or equivalent qualifications in the sciences or computer science with at least a pass.
- (e) A degree from a recognized University or equivalent qualifications.
- (f) A candidate for the Bachelor of Science degree in the School of Physical Sciences shall be required to take a combination of courses approved by the Dean of the School. An approved combination of courses may be modified only with the consent of the Dean normally within the first two weeks of the Semester.

**2 Course Outline**

**Year 1**

- SMR 101: Introduction to Meteorology I
- SMR 102: Introduction to Meteorology II
- SMR 103: Quantitative Methods and Computer Applications in Meteorology I

**Core Requisite**

Courses in Mathematics:

- SMA 101: Basic Mathematics
- SMA 103: Calculus I
- SMA 104: Calculus II

Core Requisite Courses in Physics:

- SPH 101: Mechanics I
- SPH 102: Electricity and Magnetism I
- SPH 103: Waves and optics

**Year 2**

- SMR 201: Meteorological Instruments and Methods of Observation
- SMR 202: Atmospheric Radiation and Optics
- SMR 203: Quantitative methods and Computer Applications in Meteorology II
- SMR 204: Weather Analysis

### Core Requisite Courses in Mathematics:

SMA 201:	Advanced Calculus
SMA 203:	Linear Algebra I
SMA 221:	Vector Analysis
SMA 240:	Probability and Statistics I

### Core Requisite Courses in Physics:

SPH 201:	Mechanics II
SPH 202:	Electricity and Magnetism II
SPH 203:	Structures and Properties of Materials
SPH 204:	Mathematical Physics

### Year 3

SMR 301:	Dynamic Meteorology I
SMR 302:	Tropical Meteorology I
SMR 303:	General Circulation and Climatology
SMR 304:	Synoptic Meteorology and Weather Analysis
SMR 305:	Applications of Statistical Methods in Meteorology I
SMR 306:	Quantitative Methods and Computer Applications in Meteorology III
SMR 307:	Thermodynamics and Cloud Physics I
SMR 308:	Principles and Applications of Remote Sensing in Meteorology
SMR 309:	Hydrometeorology I
SMR 310:	Agrometeorology I

### Year 4

SMR 401:	Dynamic Meteorology II
SMR 402:	Tropical Meteorology II
SMR 403:	Project Work
SMR 404:	Operational Training Course (OTC)
SMR 405:	Applications of Statistical Methods in Meteorology II
SMR 406:	Quantitative Methods and Computer Applications in Meteorology IV
SMR 407:	Micrometeorology and Atmospheric Pollution
SMR 408:	Principles of Renewable Energy Resources
SMR 409:	Hydrometeorology II
SMR 410:	Agrometeorology II

## DEPARTMENT OF GEOLOGICAL SCIENCES

### 1 Introduction

The Department of Geological Sciences is one of the two departments which constitute the Institute of Mining and Mineral Resources. The Department offers a B.Sc. degree programme in Geology and aims at training geologists who are of high international standing, capable of utilizing and managing geological resources for socioeconomic development of present and future generations in a sustainable manner.



Many developing countries in Africa and elsewhere have immense untapped geological resources which if exploited will alleviate poverty, create wealth and employment. In addition water resources and in particular groundwater can be explored, realized and exploited to benefit the communities in the water stressed ASAL through the training of high caliber geologists. It is the aim of the Department to equip students with modern knowledge while utilizing state of the art technology developed in the recent past decades so as to widen their scope and enable them keep in pace with these emerging technologies. Students will be introduced to Remote Sensing (RS), Geographical Information System (GIS) and Global Positioning Systems (GPS), modern Geophysical and Geochemical resource exploration techniques, among others.

The Department offers courses which are appealing and are also attractive to amateurs and non-geologists. The Department has a strong focus on developing communication and critical thinking skills in students through field trips, laboratory work, oral presentations and class discussions.

### 1.1 Vision

A leading Department offering internationally competitive academic programmes in Geological

Sciences and adopting of new scientific ideas and technologies for the optimum utilization of geological resources to transform lives.

### 1.2 Mission

To be a leading Department that offers quality education and training through teaching, research and development with emphasis on innovative methods that enable geological resource utilization in a sustainable manner.

### 1.3 Objectives

- (a) Develop undergraduate and postgraduate programmes that meet the needs of sustainable geological resources through exploration, exploitation and utilization in the country and beyond.
- (b) Conduct research that provides answers to integrated geological resource extraction and environmental conservation.
- (c) Develop interactive knowledge management systems which facilitate the transfer of knowledge, information and technical skills to key stakeholders for improved livelihood.
- (d) Be proactive in the formulation of policies that mainstream the use of geological resources to foster county and national development.

- (e) Create partnership with institutions and organizations involved in relevant sciences and technological research in order to promote proper utilization of geological resources.
- (f) Mobilize resources for developing the physical infrastructure of the Department, the Institute and the University and offering services to the Communities through formulation of research proposals and programmes.

### 1.4 Career opportunities for graduates

B.Sc. Geology graduates are employed in the following Ministries: Environment and Mineral Resources (MEMR), Energy (ME), Water and irrigation (MW&I), Agriculture (MA), Public Works (MPW), Roads (MR) and Regional Development (MRD, among others. They are also employed in Parastatals like Universities and other tertiary institutions, National Museum, KenGen, Geothermal Development Corporation (GDC) and Water Resources Management Authorities (WARMA). Others are engaged by private mineral exploration companies e.g. those prospecting for water, gemstones, gold, rare earth elements, petroleum and coal. Other potential employers include local and international corporations involved in geological resources exploration and exploitation while others joining the construction industry firms e.g. cement manufacturing companies and brick making industries, among others. Other graduates are engaged in self employment.

## BACHELOR OF SCIENCE IN GEOLOGY

Regulations and Syllabus for the Degree of Bachelor of Science in Geology

### 1. Entry Requirements

- (a) All students who wish to join the Department of Geology must fulfill the minimum University and School of Earth Sciences admission requirements.
- (b) In addition to meeting the minimum University general admission requirements, candidates seeking admission into the geology programme must meet one of the following entry requirements:
  - (i) Minimum grades of C+ in Mathematics, Physics and Chemistry or
  - (ii) Minimum grades of C+ in Mathematics and Physical Sciences

### 2. Course Outline

#### Year 1

- SGL101 Materials of the Earth
- SGL102 Earth Processes
- SGL103 Introduction to Paleontology

#### Year 2

- SGL 201 Principles of Mineralogy
- SGL 202 Systematic Mineralogy
- SGL 203 Structural Geology
- SGL 204 Geostatistics

**Year 3**

SGL 301	Igneous Petrology
SGL 302	Metamorphic Petrology
SGL 303	Sedimentary Petrology
SGL 304	Stratigraphy
SGL 305	Global Tectonics

**Electives**

SGL 306	Paleontology
SGL 307	Historical Geology
SGL 308	Introduction to Field Mapping
SGL 309	Introduction to Geophysics
SGL 310	Photo geology and Remote Sensing
SGL 311	Surveying for Geoscientists
SGL 312	Introduction to Geological Thermodynamics

**Year 4**

SGL 401	Field Geology (Field Work)
SGL 402	Ore Deposits
SGL 403	Exploration Geochemistry
SGL 404	Exploration Geophysics
SGL 405	Hydrogeology

**Electives**

SGL 406	Industrial Rocks and Minerals
SGL 407	Engineering Geology
SGL 408	Marine Geology
SGL 409	Environmental Geology
SGL 410	Geology and Mineral Resources in Kenya
SGL 411	Mineral Exploration and Mining
SGL 412	Seismology
SGL 413	Project in Geology

**School  
of Agriculture  
and  
Veterinary  
Sciences**

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## 1 Introduction

This is one of the cardinal schools in the South Eastern Kenya University (SEKU) in that in its inception; Dryland Agriculture and Veterinary Science form the thrust of this new constituent college with emphasis on the management of the Arid and Semi-Arid lands of the South Eastern Kenya to meet both educational requirements and food requirements of the ASAL communities. This is in emphasis of the sustainable management of the ASALS which form over 80% of Kenya's land. The emphasis on veterinary sciences augments the productive function of the drylands in that the ASALS harbor over 50% of the total livestock biomass of the country.

With over 30% of the population eking livelihood from the land as pastoralist where livestock is the primary source of food capital and numerous social function hence the need to emphasize animal health and disease management in both small, large and mega ruminant i.e. the camel. The school also features management and utilization of free range use by wildlife as a complement to domestic livestock under extensive livestock production for consumptive and consumptive products such as tourism.

### 1.1 Objectives

The objective and goal of this school is to train graduate in diverse areas of speculations ranging Dryland Agriculture, Dryland Animal Sciences, Agricultural Economics and Food Science Technology. The school emphasizes hand - on training to ensure that graduates have both the art and science of dryland management and production. In this case all the graduates are exposed to the dryland production environment through extensive tours and visit to the typical dryland regions of this country namely the Northern and Southern rangelands. The very early a climatization of the young graduates to their future environment endears them the so called hardship districts which were otherwise given less emphasis.

The ultimate thrust is to double the gains from the drylands through government investment through trained manpower and financial resources to ensure production and sustainable management.

### 1.2. Academic Programs

The school has a number of functional departments and programs that befit the school thrust. The following departments are now with running programs and proposed ones in the very near future.

## School of Agriculture and Veterinary Sciences

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### Department of Dryland Agriculture

- (a) Bachelor of Science in Agriculture
- (b) Bachelor of Science in Dryland Agriculture
- (c) Masters of Science in Agronomy

### Diploma Courses

- (a) Diploma in Crop Protection
- (b) Diploma in Apiculture

### TVET Programs

- (a) Diploma in General Agriculture.
- (b) Craft certificate in General Agriculture

### Department of Range and Wildlife Sciences

- (a) Bachelor of Science in Range Management
- (b) Bachelor of science in Dryland Animal Science
- (c) Master of Science Livestock Production System

### Diploma Courses

- (a) Diploma in Range Management
- (b) Diploma in Animal Health and Production

### Certificate Courses

- (a) Certificate in Animal Health and production

### Department of Horticultural Sciences

- (a) Bachelor of Science in Horticulture

### Department of Agricultural Economics and Agribusiness

- (a) Master of Science in Agricultural Resource Management

### Department of Food Science and Technology

- (a) Bachelor of Science in Food, Nutrition and Dietetics

### Diploma Courses

- (a) Diploma in Food Technology

### Department of Dry-Land Agriculture

The department of Dry-land Agriculture aims to contribute to the improvement of production of crops, other important plant species and animals to feed, clothe and fuel the burgeoning population. The Department focuses on teaching, research and outreach in crop and animal sciences, and therefore contributes to the University's core focus of becoming a centre of excellence in Dry-land Agriculture, Forestry and Environmental Conservation.

To achieve this objective, the department is currently offering following programmes namely:

- (a) B.Sc. Agriculture
- (b) B.Sc. Dry-land Agriculture
- (c) B.Sc. Horticulture
- (d) Diploma in Crop Protection
- (e) Diploma in Apiculture

All academic programs within the department emphasize the relationship between theory and practice. This is by providing a strong science-based foundation as well as technical and supporting courses on how to produce/protect crops and/or livestock using agricultural systems that are sustainable, humane, and beneficial to the rural environments. Courses are taught by experts in the different fields of Agriculture thus providing for the students' individual needs as well as developing a core understanding of their subjects.

### **Bachelor of Science in Dry-Land Agriculture**

Regulations and Syllabus for the Degree of Bachelor of Science in Dry-land Agriculture

#### **1 Introduction**

This programme is unique in the sense that it emphasizes a specialized capacity building by curriculum training

with deliberate focus on Arid and Semi-Arid Lands (ASALs) resource management and commercial studies while conserving the fragile ecology. The curriculum design overrides the business-as-usual versions of programmes offered by other institutions located away from the actual ecologies and therefore represents paradigm shift from training students in towns who are normally averse to being posted in remote areas on completion. It is in this premise that curriculum for B.Sc. Dryland Agriculture has been developed in order to generate a human resource base with capacity to address agricultural facets such as flora and fauna, water resources, physical environment and maximize the biological adaptability of biotic resources to ensure maximum output and sustainable use through holistic management.

#### **1.1 Justification**

The goal of the Bachelor of Science in Dryland Agriculture is to prepare graduates to meet the challenges faced by the expanding agricultural industry, both in the private and public sectors. Furthermore the graduates will be trained in situ ASALs learning environment so that they will be able to apply their knowledge to address issues of pursuit for sustainable livelihoods focusing on the development of knowledge base, technologies and utilization of the broad resources to ensure food security and incomes.

### 1.2 Programme Objectives

The objectives of the programme shall be:

- (a) To produce and/or develop holistic graduates for critically needed skilled manpower being not only knowledgeable in the theory but also in the practice and research of Dryland Agriculture.
- (b) To develop a cadre of technical workers who are well-versed with production systems knowledge applicable to planning and managing Dryland Agriculture as a business.
- (c) To produce and/or develop innovative and competent graduates with practical problem solving skills able to harness dryland resources for national development.

## 2 Entry Requirements

The candidate must satisfy the minimum university entry requirements.

### 2.1 KCSE Candidates

A minimum of a C+ in KCSE with at least C (Plain) in Biology or Biological Science and any one of the following subjects: Mathematics, Chemistry, Physics or Physical Science. Additionally, a fourth subject besides the above mentioned may come from any of the following

subjects; Geography, Home science, Agriculture, Woodwork, Metalwork, Building Construction, Power Mechanics, Electricity, Drawing and Design, Aviation Science, Computer and Business Studies.

### 2.2 Other Candidates

Admission to the degree course may be granted to the following categories of candidates:

- (a) Holders of KACE, or equivalent with a minimum of 2 Principal passes in Biology and Chemistry and at least a pass in Mathematics or a Mathematics credit at ordinary level where Mathematics was not offered at A-Level.
- (b) Holders of Diploma in Agricultural Sciences from a recognized Institution with credit or distinction, with KCSE mean grade of C or above.
- (c) Holders of a Higher National Diploma or equivalent in Biological or other related Agricultural Sciences from a recognized institution.
- (d) Holders of degree in Biological Sciences or related Sciences from a recognized institution.



### 3. Credit Transfers and Exemptions

#### 3.1 Credit Transfer

Candidates from other universities recognized by the Senate wishing to transfer to B.Sc. in Dryland Agriculture programme shall be allowed to transfer credits from his/her university if those credits are deemed relevant and meet minimum contact hours. The transfer of credits shall not be more than one third (1/3) of the total prescribed credits or course units required for the award for the B.Sc. in Dryland Agriculture degree.

#### 3.2 Exemptions

The Senate may exempt students from some courses on recommendation of the School board provided that such candidates:

- (a) Shall send a formal application of exemption to the Academic Registrar through the Dean justifying the candidate's request and attaching relevant supporting documents.
- (b) May be required to sit examination on the course he/she wishes to be exempted, set and administered by the representative Department on behalf of the School Board of Examiners.
- (c) Must have attained a minimum grade of C or equivalent in the course units for which exemption is applied.

### 4 Course Structure and Duration

The programme will be offered under two modules, full time (module I and II) and through Open Distance Education Learning (ODEL) (Module III) for students who cannot attend regular university programmes.

#### 4.1 Full time

- (b) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 13 teaching weeks and two (2) weeks for examination.
- (c) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.
- (d) A candidate for B.Sc. Dryland Agriculture shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (e) Each student shall be required to undertake satisfactory field/farm attachment of eight (8) weeks as stipulated in the course structure.

### 4.2. Open Distance Learning

The delivery mode of this programme will be by use of open distance education learning modes involving the use of various media (multi-media modes of learning) and largely home based.

### 5. Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (attachment) shall be deemed to be part of the fourth year.
- 5.3 All examination procedures shall be governed by the following:

Each course shall be examined out of a total of 100%.

- (a) The pass mark in each course examination shall be 40% and graded as follows:-

70	-	100%	A
61	-	69%	B
50	-	59%	C
40	-	49%	D
39% and below	-		FAIL

- (b) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical / field trip reports 10%.
- (c) Field Practice/Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the student's performance while in the field shall constitute; field assessment 30%, written reports 40% and oral presentations 30%.
- (d) The research project shall be examined through written reports and presentation, and shall be graded for use in the degree classification. The project proposal shall constitute 30%, the project report shall constitute 60% and the oral presentation shall constitute 10%.
- (e) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.

- (f) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
  - (g) A candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate who opts to attend classes in the failed courses shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.
  - (i) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
  - (j) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.
  - (k) A candidate who fails to attain the pass mark in supplementary examination shall on recommendation of the school Board and approval by the Senate be allowed to do a second supplementary, ONCE ONLY as long as the total of such examinations does not exceed four in number during any one sitting for that particular academic year.
  - (l) A candidate who fails a supplementary on a second attempt according to regulations 5.3 (l) shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
  - (m) No candidate shall be allowed to repeat any year of study more than once for academic reasons.
- 5.4 The Degree of Bachelor of Science in Dryland Agriculture shall be:
- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/ Industrial Attachment.
  - (b) Based on the average score of all examinations of courses taken in the entire course duration.
  - (c) Classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.

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5.5 In arriving at the decision as to the degree classification for each candidate, the School Board of Examiners shall consider, while observing regulation 5.4(c) above, the overall mean mark obtained by the candidate and shall apply the principle that a mean score of:

70	-	100%	-	First Class Honours
60	-	69%	-	Second Class Honours (Upper Division)
50	-	59%	-	Second Class Honours (Lower Division)
40	-	49%	-	Pass

### 6. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Dry-Land Agriculture of the South Eastern Kenya University.

### 7 Study Intermission

A student may intermit studies at any time for a maximum of two (2) years for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period

of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## 8 Course Outline

### Year 1

#### Semester 1

CCS 001	Communication Skills
CCS 010	Human Immuno-deficiency Virus / AIDS
DAS 101	Introduction to Dryland Environment
DAS 103	Agricultural Botany
BIT 108	General Mathematics
DAS 105	Introduction to Agriculture
DAS 107	Zoology for Agriculture

#### Semester 2

CCS 009	Elements of Economics
BIT 112	Introduction to ICT
DAS 102	Introductory Biochemistry for Agriculture
DAS 104	Principles of Genetics
DAS 106	Principles of Soil Chemistry
DAS 108	Principles of Soil Physics
DAS 109	Introductory to Microbiology
DAS 110	Introduction to Environmental Management

## Year 2

### Semester 1

DAS 201	Introduction to Rural Development
DAS 203	Basic Statistics
DAS 205	Introduction to Ecology and Dryland Natural Resources
DAS 207	Weather and Agro-climatology
DAS 209	Plant Physiology
DAS 211	Entomology
DAS 213	Plant Taxonomy
DAS 215	Animal Physiology

### Semester 2

DAS 202	Principles of Crop Production
DAS 204	Range Management and Forage Production
DAS 206	Introduction to Agricultural Economics
DAS 208	Farm Accounts and Planning
DAS 210	Integrated Natural Resource Management
DAS 212	Soil-Water-Plant Relations
DAS 214	Agro-Forestry Systems in the Drylands
DAS 216	Wild life Biology

## Year 3

### Semester 1

DAS 301	Principles of Horticulture
DAS 303	Population and Quantitative Genetics
DAS 305	Project Management
DAS 307	Dryland Animal Production
ANS 308	Agricultural Extension
DAS 311	Machinery and Power for Agriculture
DAS 313	Dryland Livelihoods
DAS 315	Annual Crops

### Semester 2

DAS 302	Irrigation and Water Management
DAS 304	Apiculture
DAS 306	Perennial Crops
DAS 308	Business Management in Agriculture
DAS 310	Animal Health and Hygiene
DAS 312	Ruminant Nutrition
DAS 314	Marketing of Dryland Resources
DAS 317	Agricultural Policy and Law
<b>DAS 316</b>	<b><i>Farm/Field Attachment (8 weeks)</i></b>

### Year 4

#### Semester 1

DAS 401	Crop Pests, Diseases and Management
DAS 403	Economic Range Plants
DAS 405	Wildlife Management and Conservation
DAS 407	Entrepreneurship
DAS 409	Crop and Animal Breeding Technology
DAS 411	Research Methods
DAS 413	Research Project I
DAS 414	Non-ruminant Production

#### Semester 2

DAS 402	Dry land Management and Improvement
DAS 404	Food Security, Economics and Policy
DAS 406	Environmental Impact Assessment
DAS 408	Postharvest Physiology and Technology
DAS 410	Principles of Human Nutrition
DAS 412	Irrigation and Drainage
DAS 413	Research Project II

### Bachelor of Science In Agriculture

Regulations and Syllabus for the Degree of Bachelor of Science in Agriculture

### 1 Introduction

The Bachelor of Science in Agriculture degree programme has been offered at the University has undergone a full cycle of implementation of 5 years since its review in 2003. The first two years of study are spent on core courses which ground students in the related basic sciences and the fundamentals of the professional agricultural disciplines (i.e. agricultural economics, animal science and soil science). In the third year of study, the students will opt and specialize in any of the following majors: crop science, Crop Protection, Land Resource Management, Animal Science and Agricultural Economics. The respective majors will appear on the student's transcripts and degree certificates. Experiential learning is emphasized in this curriculum including practicals and 12 weeks attachment.

### 2 Programme Objectives

Produce competent graduates in agricultural sciences and environmental management with adequate knowledge and skills to effectively exploit agricultural research and development opportunities. The objectives will be achieved through the majors mentioned below:

### 2.1 Agricultural Economics Major

The objective is produce graduates with the knowledge and skills for efficient and sustainable use of agricultural resources. The students will therefore:

- (a) Acquire knowledge of economic disciplines to have an integrated approach to understanding agricultural and environmental problems.
- (b) Apply the skills of the discipline in solving agricultural and environmental problems as managers in enterprises that use these resources or in research, extension and education.

### 2.2 Crop Science Major

The objective is produce graduates with the knowledge and skills to effectively address all aspects of crop management, crop improvement and post-harvest handling. On completion the graduates will therefore:

- (a) Contribute to improvement of crop production through research, extension and training.
- (b) Contribute to setting up and running of crop products enterprises.
- (c) Promote domestic, urban and institutional landscapes through design, development and maintenance.
- (d) Promote environmental conservation.

### 2.3 Crop Protection Major

The objective is to produce graduates with the knowledge and skills to effectively address all aspects of crop protection and integrated pest management. On completion the graduates will therefore:

- (a) Offer advisory services in the design and execution of crop protection strategies.
- (b) Address all aspects of safe use, handling, disposal and evaluation of pesticides.
- (c) Contribute to setting up and running of crop protection agencies

### 2.4 Animal Science Major

The objective is to produce graduates with the knowledge and skills to effectively address all aspects of livestock management, livestock improvement and value addition. On completion the graduates will therefore:

- (a) Effectively address all aspects of livestock development from multidisciplinary point of view.
- (b) Promote sustainable livestock production in all agro-ecological zones.
- (c) Contribute to setting up and running livestock products enterprises.
- (d) Promote environmental conservation in the livestock sector.

### 2.5 Land Resource Management Major

The objective is produce graduates with the knowledge and skills to effectively address manage land resources. On completion the graduates will have the competence to:

- (a) Promote sustainable land and water management for increased agricultural production and environmental protection.
- (b) Contribute to prevention and alleviation of land degradation.
- (c) Provide leadership in the implementation of the national policies relating to natural resource management.

### 3.0 Entry Requirements

The candidate must satisfy the minimum university entry requirements.

#### 3.1 KCSE Candidates

- (a) A minimum of a C+ in KCSE with at least C (Plain) in Biology, Chemistry, Mathematics or Physics or Geography and one of the following subjects:- English, Kiswahili, Physics (if not included above), History and Government (if not included above), CRE, Computer Studies, German, Music, Islamic Religious Education, Home Science, Art and Design, Agriculture, Aviation Technology, French, Arabic, Business Studies.

- (b) Holders of KACE or equivalent with a minimum of 2 Principal passes in Biology and Chemistry and at least a subsidiary pass in Mathematics or Physics. If Mathematics or Physics was not offered at KACE, then it is accepted at ordinary level but with a minimum Credit Pass.
- (c) Holders of Diploma in Biological Sciences or related sciences from an institution recognized by the Senate.
- (d) Holders of a Higher National Diploma in Biological or other related Sciences from an institution recognized by the senate.
- (e) Holders of degree in Biological Sciences or related Sciences from a University recognized by the Senate.

#### 3.2 Exemptions

Students may be exempted from some courses in the first year of study by senate on recommendation of the School Board provided that:

- (a) Such candidates had taken those courses in a recognized University or equivalent institution and had achieved a pass standard.
- (b) Candidates seeking such exemption submit duly completed senate approved form specifying the courses for which exemption is desired and attach evidence of 4.1 above, showing contents of what was studied.



- (c) Candidates requiring exemption from 2nd, 3rd and 4th year courses shall in absence of credit transfer be required to sit university examination and attain at least pass grade, which will then be used in the degree classification.
  - (d) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programmes.
  - (e) Students admitted in the 2nd year of study shall be deemed to have already been exempted from 25% of the total units in the degree programme.
  - (f) A non-refundable course exemption fee as determined by the University be paid with each application
- (c) The number of hours, content and grading of courses for which credit transfer is sought should be similar to the courses offered at the South Eastern Kenya University.
  - (d) Only grades of C and above will be transferred.
  - (e) Only a maximum of 1/3 or equivalent of the study programme at the South Eastern Kenya University can be transferred.
  - (f) Such courses are to satisfy the requirements of the first and second years of study.

### 3.3 Credit Transfer

- (a) Transfer of academic credits is accepted on individual basis for courses undertaken and successfully completed by students at accredited Universities/Institutions who request to transfer the same to the South Eastern Kenya University for incorporation into the degree course and final classification of the degree.
- (b) The relevant academic body as approved by the University Senate shall make official evaluation and transfer of Credits to the South Eastern Kenya University.

## 4. Course Structure and Duration

The programme will be offered under two modules, full time (module I and II) and through Open, Distance and e-learning (ODEL).

### 4.1.Full time

- (a) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 13 teaching weeks and two (2) weeks for examination.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.

## School of Agriculture and Veterinary Sciences

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- (c) A candidate for B.Sc. Agriculture shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (d) Each student shall be required to undertake satisfactory field practice (attachment) of twelve (12) weeks as stipulated in the Course structure after the completion of the third year of study. During the field attachment, students are expected to embark on a research project which they have to complete and present at a seminar during the fourth year of study.
- (e) In the third and fourth year of study, each student will be required to undertake two courses in any of the following five majors: Agricultural Economics, Animal Science, Crop Protection, Crop Science and Land Resource Management.

### 4.2. Open Distance Learning

- (a) The delivery mode of this programme will be by use of open distance learning modes involving the use of various media (multi-media modes of learning) and largely home based.
- (b) The Distance Learning programme will run for a minimum of 8 semesters of 15 weeks and a

maximum of 16 semesters of 15 weeks each. There will be two semesters per calendar year therefore the minimum calendar years for completion of the programme would be a minimum of 4 years and a maximum of 8 years.

- (c) The maximum course load per semester will be 8 course units and a minimum of 6 units studied through the 15 weeks. However, students may be allowed to take a minimum of 4 units per semester. Each course unit in the programme has a loading of minimum of 45 hours. Majors will be taken after completion of second year level courses.

### 5.0. Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (attachment) shall be deemed to be part of the fourth year.
- 5.3 All examination procedures shall be governed by the following:

- (a) Each course shall be examined out of a total of 100%.
- (b) The pass mark in each course examination shall be 40% and graded as follows:-
- |               |   |      |      |
|---------------|---|------|------|
| 70            | - | 100% | A    |
| 60            | - | 69%  | B    |
| 50            | - | 59%  | C    |
| 40            | - | 49%  | D    |
| 39% and below |   |      | FAIL |
- (c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical /field trip reports 10%.
- (d) Field Practice/Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the student's performance while in the field shall constitute; field assessment 30%, written reports 40% and oral presentations 30%.
- (e) The Special Projects and Seminars will be examined through written reports and presentation, and shall be graded for use in the degree classification. The seminars and project proposal shall constitute 30%, the project report shall constitute 40% and the oral presentation shall constitute 30%.
- (f) The courses ACP 401 (Diagnostic Studies of crops Pests) and ACP 402 (Diagnostics of Plants Diseases) shall be examined by laboratory practicals for both CATs and final examination, where CATs constitute 30% but as described under c above and final examination shall constitute 70%.
- (g) For purposes of regulations (a)-(f) above, all papers shall carry equal weight.
- (h) A candidate who fails to attain the pass mark in eight or more of the course units taken in any year shall on recommendation of the School Board and upon approval by the senate be discontinued.
- (i) A candidate who fails to attain the pass mark in five, six or seven course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes. A candidate who repeats the year externally shall be required to pay examination and any other fees that the

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University may deem applicable. A candidate who opts to attend classes in the failed courses shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.

- (j) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
- (k) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- (l) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.
- (m) A candidate shall be allowed to carry forward a maximum of four supplementary or resit supplementary course unit examinations in a year of study. Examinations in all courses carried forward shall be taken three months after

University Examinations. Failed courses may be carried forward for a maximum of one academic year. A candidate, who fails to sit examination(s) carried forward at the expiry of one academic year, shall on recommendation of the School Board and approval by Senate be discontinued from the degree course, unless failure to sit examination(s) was on medical grounds, based on medical reports from the University.

- (n) A candidate who fails to attain the pass mark in supplementary examination shall on recommendation of the school Board and approval by the Senate be allowed to do a second supplementary, ONCE ONLY as long as the total of such examinations does not exceed four in number during any one sitting for that particular academic year.
- (o) A candidate who fails a resit supplementary shall retake the course.
- (p) For the purposes of evaluation of all supplementary examinations, regulation (i) shall apply.
- (q) No candidate shall be allowed to repeat any year of study more than ONCE for academic reasons.

5.4	The Degree of Bachelor of Science in Agriculture shall be:-	70 - 60	-	100% - 69%	First Class Honours Second Class Honours (Upper Division)
	(a)	Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/ Industrial Attachment.	50	-	59% Second Class Honours (Lower Division)
	(b)	Based on the average score of all examinations of courses taken in the 2nd, 3rd, and 4th years of study.	40	-	49% Pass.
	(c)	Classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass, provided that in order to qualify for the award of First class and Upper Second class Honours Degrees, a candidate shall not have repeated any of the years of study on academic grounds.			

5.5 In arriving at the decision as to the degree classification for each candidate, the School Board of Examiners shall consider, while observing regulation 5.4(c) above, the overall mean mark obtained by the candidate and shall apply the principle that a mean score of:

### **6.0 Award of Degree**

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Agriculture of the South Eastern Kenya University.

### **7.0 Study Intermission**

A student may intermit studies at any time for a maximum of two (2) years for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## 8.0 Course Outline

### Core Courses (Year 1 and 2)

#### Year 1

##### Semester 1

ACS 106	Introduction to Agriculture
AEC 101	Communication Skills
ACS 103	Mathematics
ACH 101	Chemistry for Agricultural Sciences
ACS 101	Agricultural Botany
AVP 101	Animal Physiology
ASS 101	Landforms and Soil formation
CCS 010	HIV/AIDS

##### Semester 2

AEB 101	Introduction to Computers and Information Systems
AEC 102	Microeconomics
ACP 101	Microbiology
ABC 101	Biochemistry
ACS 104	Introduction to Plant/Crop Physiology
ACS 105	Principles of Genetics
ASS 102	Principles of Soil Science

#### Year 2

##### Semester 1

ACP 201	Principles of Plant Pathology and Disease Control
AEB 201	Power Systems and Machinery for Agriculture
AEC 201	Sociology and Development
ACS 206	Introduction to Statistics
ACP 202	Agricultural Entomology
ACS 201	Principles of Crop Production
ASS 201	Soil Microbiology and Biochemistry
AAS 201	Principles of Animal Production

##### Semester 2

ACS 204	Ecology and Climate Change
ACP 203	Principles of Weed Science
AEB 202	Structures and Materials
ACS 207	Forage Science and Pastures
AEC 202	Macroeconomics
AAS 202	Animal Genetic Resources
AAS 206	Principles of Animal Nutrition
ACS 202	Principles of Plant Propagation

### Majors (Year 3 and 4)

## Agricultural Economics Major

### Third Year Semester 1

ACS 301	Field Crops
ASS 301	Application of RS & GIS in Land Use Management
AEC 302	Production Economics
AEC 305	Principles of Resource Use Management
ARM301	Principles of Range Management
AEC 303	Development Economics
AEC 355	Seminars
AFN 311	Food Security, Livelihoods and Nutrition in Emergencies

### Semester 2

ASS 307	Soil Fertility and Fertilizer Use
AEB 302	Irrigation and Water Management
AEC 301	Farm Accounts and Firm Management
AEC 304	Agricultural Policy and Law
AEC 309	Intermediate Microeconomics
AEC 306	Analysis and Planning of Agricultural projects
ACP 304	Environmental Management
AEC 355	Seminars
AEC 308	Field Attachment

### Year 4 Semester 1

AEC 401	Environmental and Social Impact Assessment
AEC 403	Agricultural Extension and Technology Transfer
AEC 402	Intermediate Macroeconomics
AEC 415	Rural Development
AEC 409	Business Taxation
AEC 411	Quantitative Methods in Agricultural Economics
AEC 455	Special Projects and Oral Presentation

### Semester 2

AEC 408	Microenterprise development and Management
AEC 404	Environmental and Natural Resource Economics
AEC 406	Institutional Economics
ACS 410	Biotechnology
AEC 410	Agricultural Marketing
AEC 412	International Trade
AEC 445	Special Projects and Oral Presentations

## Crop Science Major

### Year 3

#### Semester 1

ACS 301	Field Crops
ACS 302	Plant Breeding
ASS 301	Application of RS and GIS in land Use Management
ACS 306	Principles of Statistics
ACS 305	Introduction to Population and Quantitative Genetics
AEC 301	Firm Accounts and Firm Management
ACS 303	Seed Science and Technology
AFN 311	Food Security, Livelihoods and Nutrition in Emergencies

#### Semester 2

ACS 310	Vegetable Production
ACS 309	Industrial, Biofuel and Medicinal Crops
ASS 307	Soil Fertility and Fertilizer Use
ACP 305	Crop Pests and their Management
AEC 302	Production Economics
AEC 304	Agriculture Policy and Law
AEB 302	Irrigation and Water Management
AEC 306	Analysis and Planning of Agricultural Projects
ACS 307	Field Attachment

### Year 4

#### Semester 1

ACS 406	Field and Laboratory Experimentation
ACS 408	Introduction to Molecular Genetics
AEC 403	Agric. Extension and Technology Transfer
ACS 407	Physiological Aspects of Crop Yield
ACS 401	Floriculture and Landscape Horticulture
ACS 402	Fruit Production
ACS 409	Special Projects and Seminars

#### Semester 2

ACS 410	Biotechnology
ACS 412	Genomics and Molecular Breeding
ACS 404	Post-harvest Physiology and Technology
ACP 408	Crop Diseases and their Management
AEC 408	Micro-enterprise Development and Management
AEC 410	Agricultural Marketing
ACS 409	Special Projects and Seminars



## Crop Protection Major

### Year 3

#### Semester 1

ACP 301	Breeding for Resistance to Insects and Diseases
ACP 302	Plant Disease Epidemiology and Seed Health
AEC 301	Firm Accounts and Firm Management
ACS 306	Principles of Statistics
ACS 302	Plant Breeding
ACS 301	Field Crops
ASS 301	Application of RS and GIS in Land Use Management
AFN 311	Food Security, Livelihoods and Nutrition

#### Semester 2

AEC 304	Agric. Policy and Law
ACS 308	Horticultural Crops
ACP 304	Environmental Management
AEC 302	Production Economics
ASS 307	Soil Fertility and Fertilizer Use
ACP 305	Crop Pests and their Management
AEB 302	Irrigation and Water Management
AEC 306	Analysis and Planning of Agric. Projects
<b>ACP 306</b>	<b>Field Attachment</b>

### Year 4

#### Semester 1

ACP 404	Plant Mycology and Bacteriology
ACP 405	Plant Virology and Nematology
ACP 401	Diagnostic Studies of Crop Pests
ACP 406	Weed Management Practices
AEC 403	Agric. Extension and Tech. Transfer
ACS 406	Field and Laboratory Experimentation
ACP 407	Special Projects and Oral Presentations

#### Semester 2

AEC 410	Agricultural Marketing
ACP 403	Postharvest Pests and Diseases
AEC 408	Micro enterprise development and Management
ACS 410	Biotechnology
ACP 402	Diagnostics of Crop Diseases
ACP 409	Pesticides and Phytosanitary Regulations
ACP 407	Special Projects and Oral Presentations

## Animal Science Major

### Year 3 Semester 1

AAS 301	Analytical Methods in Animal Science
ASS 301	Application of RS and GIS in Land Use Management
AEC 301	Firm Accounts and Firm Management
ACS 306	Principles of Statistics
AAS 307	Molecular Genetics
AAS 310	Feed Resources
AAS 306	Livestock Production Systems theory
AFN 311	Food Security, Livelihoods and Nutrition in Emergencies

### Semester 2

AEC 302	Production Economics
ACP 304	Environmental Management
AEB 302	Irrigation and Water Management
AAS 311	Research Methods in Communication Science
AAS 309	Aquaculture and Apiculture
AEC 306	Analysis and Planning of Agric. Projects
AEC 304	Agricultural Policy and Law
AAS 303	Population and Quantitative Genetics
<b>AAS 312</b>	<b>Field Attachment</b>

### Year 4 Semester 1

AAS 401	Dairy Production Systems
ARM405	Economics of Livestock Production
AEC 403	Agri. Extension and Tech. Transfer
AAS 408	Biotechnology in Animal Industries
AAS 405	Animal Breeding
AAS 413	Beef, Camel, Sheep and Goat Production Systems
AAS 406	Special Projects and Oral Presentations

### Semester 2

AEC 408	Micro enterprise Development and Management
AEC 410	Agricultural Marketing
AAS 414	Animal Health Management
AAS 407	Pig and Poultry Management
AAS 411	Processing of Animal Products
AAS 416	Ration Formulation and Feed Manufacturing Technology
AAS 406	Special Projects and Oral Presentations

## Land Resource Management Major

### Year 3 Semester 1

ACS 306	Principles of Statistics
ASS 305	Soil Survey and Classification
ASS 302	Environmental Soil Chemistry
AEC 301	Firm Accounts and Firm Management
ACS 301	Field Crops
ASS 301	Application of RS and GIS in Land Use Management
ASS 306	Utilization and Management of Wetland Ecosystems
AFN 311	Food Security, Livelihoods and Nutrition in Emergencies

### Semester 2

ASC 307	Soil Fertility and Fertilizer Use
ACS 308	Horticultural Crops
AEC 302	Prod. Econ. and Firm Management
AEC 304	Agric. Policy and Law
AEC 306	Analysis and Planning of Agric. Projects
ASS 304	Soil Biology and Biotechnology
AEB 302	Irrigation and Water Management
ASS 310	Soil Erosion Assessment and Impact on Land Productivity
ASS 309	Field Attachment

### Year 4 Semester 1

ACS 406	Field and Laboratory Experimentation
AEC 403	Agric. Extension and Tech. Transfer
ASS 403	Land Degradation and Management of Problematic Soils
AEC 401	Environmental and Social Impact Assessment
ASS 402	Watershed Management
ASS 408	Soil Testing and Plant Analysis
ASS 409	Special Projects and Oral Presentations

### Semester 2

AEC 408	Micro enterprise development and Management
ASS 406	Soil and Water Pollution
ASS 401	Land Evaluation for Agricultural Land Use Planning
ASS 405	Hydrology and Agro-meteorology
ASS 407	Recycling and Bioconversion of Organic Wastes
AEM 406	Ecosystem Sustainability and Climate Change
ASS 409	Special Projects and Oral Presentations

### Department of Horticultural Sciences

### Bachelor of Science in Horticulture

Regulations and syllabus for the Degree of Bachelor of Science in Horticulture

#### 1. Introduction

Horticulture is currently one of the fastest growing industries in Kenya and is the Country's highest foreign exchange earner. Among horticultural crops, vegetables, fruit crops, and cut flowers have the highest value: volume ration making them the export crops of choice. The horticultural sub sector offers an alternative for increased food self – sufficient, food security, improved nutrition and generation of increased incomes and employment. Despite this phenomenal growth, horticulture is a highly specialized field requiring well trained personnel to cover areas of production, handling, storage, value adding, marketing and distribution. The need for trained manpower for his industry is urgent especially in light of stiff competition in the international markets for good quality products.

#### 1.1 Justification

The major goal of a Bachelor of Science in Horticulture to prepare graduates to meet the challenges faced by the expanding horticultural industry.

#### 1.2 Programme objective

The broad objective of this programme is to effectively not only equip students with managerial and technical skills but also hands on ability to adequately serve the Horticulture industry in Kenya through propagation, husbandry, research, extension, marketing and entrepreneurship. On completion the horticultural program graduates will be able to:

- (a) Perceive and appreciate the importance of horticultural crops in the national economy.
- (b) Contribute to improvement of production and enhance marketing of horticultural products.
- (c) Contribute to public awareness of aesthetic value of ornamental plants.
- (d) Contribute to setting up and running of private horticultural enterprises.
- (e) Participate in scientific research on various facets of horticultural and other crops.

- (f) Promote domestic, urban and institutional landscapes through design, development and maintenance.
- (g) Promote environmental conservation.
- (c) Holders of a diploma in Biological Sciences or related sciences from a recognized institution with credit or distinction, with K.C.S.E mean grade of C or above.
- (d) Holders of a degree in Biological Sciences or related sciences from a recognized University.

## **2.0 Entry Requirements**

- (a) Holders of K.C.S.E with mean grade of C+ with passes at C or above in Biology, Chemistry, Mathematics or Physics or Geography, and one of the following: English, Kiswahili, Physics (if not included above), History and Government, Geography (if not included above), Christian Religious Education, Islamic Religious Education, Hindu Religious Education, Home Science, Art and Design, Agriculture, Aviation Technology, Computer Science, French, German, Arabic, Music, Business Studies.
- (b) Holders of K.A.C.E of equivalent with minimum 2 principal passes in Biology and Chemistry and at least a subsidiary pass in Mathematics. If Mathematics was not offered at K.A.C.E, then it is accepted at Ordinary level but with a minimum of a credit pass.

## **3. Credit Transfer and Exemptions**

### **3.1. Credit transfer**

- (a) candidate from a recognized university, or any other equivalent institution recognized by the Senate, wishing to transfer to B.Sc. Horticulture programme at the South Eastern Kenya University shall be allowed to transfer credits from his / her University if those credits are deemed relevant minimum contact hours. A South Eastern Kenya University student who obtains credit or credits from a recognized university shall also be allowed to transfer those credits to the South Eastern Kenya University. The transfer of credits shall not be more than a third (1/3) of the total prescribed credits and / or course units required for the award of B.Sc. Horticulture degree.

### 3.2 Exemptions

Senate may exempt students from some courses on recommendations of the faculty Board provided that:

- (a) Such candidates had taken those courses in a recognized University or equivalent institution and had achieved a pass grade.
- (b) Candidates seeking such exemption submit a duly completed senate approved form specifying the courses for which exemption contents of what was studied 3.1 above, showing contents of what was studied.
- (c) Courses specified in 3.2 are to satisfy the requirements of the first year of study only. Candidates requiring exemption from 2nd, 3rd and 4th year courses shall in the absence of credit transfer be required to sit university examination and attain at least pass grade, which will then be used in the degree classification.
- (d) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programme.
- (e) A non-refundable course exemption fee as determined by the University be paid with each application for exemption.

### 4. Course Structure and Duration

The programme will be offered under two modules; full time (module I) and through open distance learning (ODL) (Module III) for students who cannot attend regular university programme.

#### 4.1 Full-Time

- (a) The teaching period for the degree programme shall be not less than four academic years or their equivalents. Each academic year shall consist of two semesters of 15 teaching weeks and two weeks of examination.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.
- (c) A candidate enrolled for the programme shall participate and complete course work and practical assignments that may be applicable to horticulture. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (d) Each student shall be required to undertake industrial attachment after completion of the second semester of the third year of study. During

the field attachment, students are expected to embark on a research project, which they have to complete and present at a seminar during the fourth year of study.

## 4.2 Distance learning

- (a) The delivery mode of these programmes will be use of open and distance education learning modes involving the use of various media and largely home based.
- (b) The main medium of instruction shall be well-designed interactive written self- instructional study modules (study books) with the inclusion of interactive devices and self- tests, these book-lets will provide devices and self- tests, these booklets will provide students with great learning opportunities. Course lecturers will issue these booklets to students immediately after the registration followed by face- to –face introductory tutorials.
- (c) The modules will be supported with technology mediated learning materials, which include audiocassettes and e- learning materials.
- (d) In addition there will be limited face – o face sessions conducted on campus or other identifies study centers in the regions. These sessions will be used by the lecturers to introduce and provide

overviews of the courses at the beginning of the semester, and at mid- semester give explanations and clarifications on issues raised by the learners and finally the sessions are used for revisions before the examinations.

- (e) The students will be supported through the South Eastern Kenya University Regional and Study Centres where access to information through computers will be made available.
- (f) After registration in the programme, students will be given orientation in studying at a distance. Specifically, orientation in studying at a distance will provide students with study skills, reading skills, time management, techniques of handling assignments and general guidance and counseling.

## 4.3 Duration and the course load of the programme

- (a) The programme will run for a minimum of 8 semesters of 24 weeks each and a maximum of 24 semesters of 24 weeks each.
- (b) There will be two semesters per calendar year therefore the minimum calendar years for completion of the programme would be a minimum of 4 years and a maximum of 12 years.
- (c) The average course load per semester will be 6 course units of studies through the 24 weeks. However, students may be allowed to take a

minimum of 4 units per semester. Each course unit in the programme has a loading of a minimum of 45 hours.

### 5.0 Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two-thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the fourth year.
- 5.3 All examination procedures shall be governed by the following:

(a) All examination procedures shall be scored out of a total of 100%.

(b) The pass mark in each course examination shall be 40% and graded as follows:

70	-	100%	A
60	-	69%	B
50	-	59%	C
40	-	49%	D
39% and below			Fail

- (c) Written examination in each course shall be a 1x2 hour paper and shall constitute 70%. The continuous assessment Tests (CATS) shall constitute the remaining 30%, which shall be divided as follows: written CATs/ term papers 20% and practical / field trip reports 10%.
- (d) Field Practice / Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the student performance while in the field shall constitute 30% written report 40% and oral presentation 30%.
- (e) The special projects and seminars shall be examined by written reports and presentations and shall be graded for use in the degree classification. The seminars and project proposal shall constitute 30% and oral presentation shall constitute 10%.
- (f) The course ACP 402 (Diagnostic of crop disease) shall be examined by laboratory practical for both Cats and final examination, where CATs constitute 30 but as described under 5.3 (c) and final examination shall constitute 70%.



- (g) For purposes of regulations 5.3 (a) - (f) herein, all papers shall carry equal weight.
- (h) A candidate who fails to attain the pass mark in seven or more of the source unit take in any year shall on recommendation of the Faculty Board and approval by senate be discontinued from the degree programme.
- (i) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year extremely, whereby they sit CATS and final examinations fees and any other fees that the university may deem applicable. Candidates are required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the university.
- (j) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the Faculty Board and approval by Senate, be discontinued from the degree programme.
- (k) In any year, a candidate who fails to attain the pass mark in any of four course units or less may on recommendation of the Faculty Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- (l) Supplementary examinations shall be marked out of 100 but the pass grade shall be recorded 40%.
- (m) A candidate shall be allowed to carry forward a maximum of four supplementary or resist supplementary course unit examinations in all courses carried forward shall be taken three months after University Examinations. Failed courses may be carried for maximum of one year. A candidate who fails to sit examination (s) carried forward at the expiry of one academic year, shall on recommendation of the Faculty Board and approval by senate be discontinued from the degree course, unless failure to sit examinations (s) was on medical grounds, based on medical report (s) from South Eastern Kenya University.
- (n) A candidate who fails to attain the pass mark in a supplementary examination shall

on recommendation of the Faculty Board approval be Senate be allowed to re-sit the examination, ONCE ONLY as long as the total of such examinations does not exceed four in number during any one sitting for that particular academic year.

- (o) A candidate who fails a re-sit supplementary shall on recommendation of the Faculty Board and approval by senate be discontinued from the degree programme.
- (p) For purposes of evaluation all supplementary examinations, regulation 5.3 (i) shall apply.
- (q) No candidate shall be allowed to repeat and year of study more than ONCE, for academic reasons.

5.4 The final degree of Bachelor of Science in Horticulture shall:

- (a) Be awarded to candidates who have completed and passed examinations in all courses of study including filed Practice / Industrial Attachment.
- (b) Be based on the average score of examinations of courses taken in the 2nd, 3rd and 4th years of study.
- (c) Be classified into First Class Honours, Second Class Honours (Upper of Lower

Division and Pass, provided that in order to qualify for the award of Honours Degree, a candidates shall not have repeated the 2nd, 3rd or any 4th year(s) of study for academic reasons or had resist supplementary in any of the courses given in any year of study excluding the first year.

5.5 In arriving at the decision as to the degree classification for each candidate, the School Board of Examiners shall consider, while observing regulation 5.49(c) above, the overall mean mark obtained by the candidate and shall apply the principle that the mean score of:

70	- 100%	First Class Honours
60	- 69%	Second Class Honours (upper Division)
50	- 59%	Second Class Honours (Lower Division)
40	- 49%	Pass

## **6. Award of Degree**

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Horticulture of the South Eastern Kenya University.

## 7. Study Intermission

Student may intermit studies at any time, for good cause conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/ her registration current by paying the prescribed registration charges.

## 8. Course Structure

### Year 1 Semester 1

ACS 103	Mathematics
FAA 102	Communication skills
ACS 101	Agricultural Botany
AZH 101	Chemistry for Agri. Sciences
ABC 101	Biochemistry
ASS 101	Land forms & Soil Formation

### Semester 2

AEC 102	Microeconomic
ACS104	Plant and Crop Physiology
ACP 101	Microbiology
CCS 010	HIV/AIDS
AEB 101	ICT and Computers
ASS 102	Principles of Soil Chemistry

### Year 2 Semester I

ACS 206	Statistics I
ACP 201	Principle of Plant Pathology and disease control
ACS 201	Principles of Crop production
AEB 201	Structures and materials
AEC 201	Sociology & development
ASS 201	Soil microbiology and Biochemistry
AEB 201	Power systems and machinery for Agriculture
ACP 202	Agricultural Entomology

### Semester 2

ACH 201	Nursery management
ACP 203	Principles of Weed Science
ACH 202	Green House Production & Protected Environment
ACH 203	Beverages, Medicinal and nut crops
AEC 202	Macroeconomic
ACS 202	Plant propagation

### Year 3 Semester 1

ACS 302	Plant breeding I. Principles of Plant breeding
ACH 301	Vegetable Production I: Temperate Vegetables
ACS 306	Statistics II
ACH 302	Herbs and Spices
ACH 304	Floriculture I
ACH 303	Horticultural Seed Tech.
AEC301	Firm Accounts & Planning
ASS 301	Application of RS & GIS in Land Use & Management

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### Semester 2

ACP304	Environmental Management
ACP305	Crop Pests and their Management
AEB302	Irrigation & Water Management
AEC304	Agriculture Policy & Law
ASS307	Soil fertility & fertilizer use
ACH305	Landscape Design, constr. And maintenance
AEC302	Production economics & Firm Management
ACH306	Horticulture Field Attachment

### Year 4

#### Semester 1

ACS 406	Field and laboratory Experimentation
ACS410	Biotechnology
AEC403	Agri. Extension and Technology Transfer
ACS408	Intro. to Molecular Genetics
ACS 409	Special Projects & seminars

#### Students to choose Electricity A or B

ACH 401 A	Fruit production I. Temperate fruits
ACH 402 B	Plants , Flower arrangement and consumption

#### Semester 2

ACS 404	Postharvest Physiology and Technology
AEC 410	Agricultural marketing and international Agri.Trade
ACP 402	Diagnostic Studies For Plant Diseases
AEC 408	Micro Enterprise Development and Mgt
ACS 409	Special Projects & Seminars
ACS 409	Plant Breeding II. Plant Breeding methods and Applicants.

#### Students to choose either Elective A or B

ACH 404 A:	Fruit production 2 Tropical and Sub-Tropical fruits
ACH 405 A:	Vegetable Production 2. Indigenous and Unique
ACH 406 B:	Floriculture 2
ACH 407 B:	Turf Management

### Master of Science in Agronomy

Regulations and Syllabus for the Degree of Master of Science in Agronomy

#### 1.0 Introduction

The objectives of this programme are:

- (a) To produce graduates with ability to identify research problems, design and execute research projects aimed at solving the problems within a changing agricultural environment. At the same time, the training is to update the agronomists with the latest developments in the field of crop production and/or environmental agronomy.
- (b) To train highly skilled agronomists who will help optimize the country's ability to attain food security and better nutrition while improving agriculture-based incomes from surplus production.

## 2.0 Entry Requirements

- 2.1 The common regulations of the Master's degrees of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply.
- 2.2 The following shall be eligible for admission into the Master of Science degree in Agronomy.
- (a) Holders of Bachelor of Science in Agriculture degree with at least Upper Second Class Honours from the South Eastern Kenya University or an equivalent qualification from another institution recognized by the Senate.
  - (b) Holders of a Bachelor's degree with at least Upper Second Class Honours in Environmental Science, Botany and Zoology, Forestry and Education with Botany option from the South Eastern Kenya University or an equivalent qualification from another institution recognized by the Senate.
  - (c) Holders of a degree with at least lower Second class Honours in any of the degree specified in (a) and (b) with at least three years' relevant experience as evidenced by research publications, or relevant postgraduate diploma or an

equivalent qualification from the South Eastern Kenya University or any other institution recognized by the Senate may be considered for admission.

- (d) Holders of a pass Bachelor's degree in disciplines specified in (a) and (b) and a postgraduate diploma in the relevant areas.

## 3.0 Transfer of Credits

A candidate may be exempted from some course units and credit(s) transferred from institutions recognized by the senate, subject to the following conditions:-

- (a) Must have passed in similar courses units at Masters Level. Request for exemption should be made in writing, on admission, to the Director Board of Postgraduate studies through the dean of the Faculty of Agriculture and must be accompanied by officially endorsed supporting documents.
- (b) Candidates may be allowed to transfer up to one third ( $\frac{1}{3}$ ) of the total number of course units.
- (c) Payment of the prescribed exemption fees.

### 4.0 Course Structure and Duration

- (a) The degree programme shall consist of 7 core courses, 4 specialization courses and a research project.
- (b) The minimum duration of the course shall be four semesters and the maximum shall be 12 semesters (extended duration). Each semester shall consist of 15 weeks or equivalent. For extended duration, the minimum number of course units taken in semester shall be three.
- (c) A course shall be defined as consisting of 45 contact hours of lectures, tutorials, practicals or demonstrations and seminars, separately taken or in combination.
- (d) The core courses shall be taken in the first semester of equivalent while and specialization courses shall be taken during the second and third semester of study or equivalent. Each student shall be required to major in only one of the two specialty areas.
- (e) Candidates shall be required to take 11 level-600 courses, which must include all the six compulsory courses plus four specialization (option) courses. The project report shall be separate.
- (f) The minimum number of course units taken in a semester shall be 3 and the maximum 6.
- (g) The projects shall be regarded as equivalent to ten course units.
- (h) Candidates shall be required to participate in Research Methods and Graduate Seminars as an examinable course unit.

### 5.0 Course Outline

#### Core Courses

ACS 600	Biometry and Computing
ACS 601	Advanced Plant Physiology
ACS 603	Biotechnology
ACA 602	Fundamentals of Crop Improvement
ACA603	Soil Fertility and Fertilizer use
ACS 607	Research Methods and Graduate Seminars
ACS 604	Seed Science and technology

#### Specialization Courses

##### Environmental Agronomy

ACA 601	Agrometeorology and Modeling Crop Production
ACS 602	Biodiversity and Agro-Forestry Resources in Agricultural production
ACA 607	Remote Sensing and GIS in Environmental Agronomy
ACA 606	Forage Agronomy and range pastures

### Crop Production

ACS 605	Pest and Disease Management
ACS 606	Postharvest Physiology, Handling and Crop Quality
ACA 606	Forage Agronomy and Range Pastures

### Elective Courses

ACA 604	Agronomy of Annual Field and Vegetable Crops
ACA 605	Agronomy of Perennial Crops
ACS 609	Research Project

## 6.0 Examination Regulations

### 6.1. Written Examinations

- (a) Examinations shall be governed by common regulations for master's degrees in all Faculties and regulations in the Faculty of Agriculture.
- (b) All course units taken in a given semester shall normally be examined at the end of that semester.
- (c) A candidate for the Master of Science shall be required to complete satisfactorily all such coursework and assignments that may be required for the scheme of study.
- (d) Each taught course shall be examined by a three-hour written examination. The Research methods and graduate seminars course shall be examined by continuous assessment and a final written examination.
- (e) Each course unit shall be graded independently out of 100 marks.
- (f) The pass marks shall be 50%
- (g) The complete assessment of a taught course unit shall consist of continuous assessment tests, coursework or practical assignments and a written examination. The contribution towards the unit aggregate score shall be 30% continuous assessment and 70% for written examination.
- (h) A candidate who fails to obtain a pass mark in any course unit shall, on the recommendation of the Faculty Board of Examiners and approval by the senate, be allowed to re-sit (a failed unit re-examined) or re-take a course unit not more than twice.
  - (i) The pass mark obtained by re-sitting a course unit shall be recorded as 50% in the candidate's transcript while that obtained for the re-take shall be the mark obtained at that sitting
  - (j) A candidate who successfully completes and passes the prescribed coursework and opts or does not obtain the required pass in a project research shall be awarded a postgraduate diploma that shall specify the particular specialization option for the prescribed course-work.
  - (k) A candidate who fails in the second re-sit or re-take or fails to complete the course in the

prescribed time shall, on the recommendation of the Faculty Board of Examiners and approval by the Senate, be discontinued.

### 6.2. Research Project

- (a) The research project report shall be examined in accordance with the requirements for such examinations in the Faculty of Agriculture.
- (b) Each candidate will submit, with the approval of the supervisors, a duly completed project paper for examination by the main supervisor and two independent examiners.
- (c) A candidate who fails the research project may on the recommendation of the Faculty Board of Examiners be allowed to resubmit the project paper up to a maximum of two times.
- (d) A candidate who fails in the second resubmission of the project paper or fails to complete the project within the prescribed period shall, on the recommendation of the Faculty Board and approval of the Senate, be discontinued.

### 7.0 Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final degree award shall be Master of Science in Agronomy of the South Eastern Kenya University with a particular specialization option specified.

### Doctor of Philosophy in Dryland Resource Management

Regulations and Syllabus for the Degree of Doctor of Philosophy in Dryland

#### 1 Introduction

In this millennium, drylands all over the world are faced with problems that present tough management, research and policy challenges. These areas cover about 40% of the earth's land surface, and are home to more than 38% of the world's population. People living in drylands constitute a large fraction of the world's poorest. Of the world's most disadvantaged countries, according to United Nation Development Programme's Human Development Index, over 50% are in dryland Africa. In Africa, two thirds of which is desert or drylands, 73% of the agricultural drylands are moderately to severely degraded. With a rate of disappearance of forest cover



of 3.7 to 5 million ha per year bearing down on both surface and groundwater resources and with half the continent's farmland suffering from soil degradation and erosion, Africa is under the greatest desertification threat. Despite these, drylands make a significant contribution to the Gross Domestic Product (GDP) of many nations in the developing world, particularly in terms of livestock products and food grains, and from tourism and related activities. In Kenya, drylands occupy over 80% of the country, where about 36% of the human population is found and 50% of the national livestock herd is also found. In Ethiopia, the livestock sector contributes 16% to GDP, one third of agricultural GDP, and 8% of export earnings.

The sustainable development of drylands and improvement of livelihoods in the drylands characterized by intense poverty is a priority development agenda in eastern and southern Africa. This will involve interventions targeting, inter alia, increased production and livelihoods systems productivity, and water management options. As elsewhere in the world, the long-term driving force of modern economic growth will be science-based technological advances. The challenges associated with the drylands of eastern and southern Africa require an approach to science and innovation, which is entrepreneurial and oriented toward key development challenges.

Advances in various aspects of dryland science and community development practices in recent years suggest a common framework for managing drylands. This framework, the Dryland Development Paradigm, centres on the livelihoods of humans in drylands and their dependence on these ecosystems, through the study of highly interactive human-environment systems. The dryland paradigm responds to recent research and policy trends that link ecosystem management with human livelihoods. It is a convergence of insights and key advances drawn from a diverse array of research in desertification, vulnerability, poverty alleviation, and community development. Key lessons under the dryland development paradigm include, one, that ecological and social issues are interwoven, as well as the options for livelihood support and ecological management. Two, that drylands are not at equilibrium, but have multiple thresholds, and thus often exhibit multiple ecological and social states, and three, the practice of indigenous / local environmental knowledge is central to the management of most drylands, but is often ignored or undervalued.

Universities have a key role in this new paradigm, which will need them to be proactive within national innovation systems to generate relevant and timely interventions for improving livelihoods. Thus this doctorate programme will contribute to the goal of improving the livelihoods of communities in drylands

## School of Agriculture and Veterinary Sciences

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through sustainable resource management supported by focused research, graduate training and community based interventions.

The specific objectives of the programme are:-

- (a) To develop cadre of high level dryland specialists in academia, research and policy.
- (b) To enhance productivity of natural resources through improved management based on sound understanding of dryland system interactions and dynamics.
- (c) To develop site specific guidelines and information tools on suitable dryland resource use and management techniques for use by communities, extension agents and development specialists.
- (d) To formulate recommendations for supporting policy decisions and promoting investments in agricultural innovation in Africa's drylands.

Key outputs and outcomes expected from the programme include the following:-

- (a) The programme will produce specialists with a sound background who are specialized and competent in articulating cross cutting issues and equipped with the relevant tools for development and utilization of drylands to produce goods and services needed by society.

- (b) The programme strengthens linkages and partnerships among universities in the region, and between universities and national, regional and international institutions with mandates in dryland research and capacity development.
- (c) By bringing together experts with diverse backgrounds and experiences, the programme bring into sharp focus and addresses critical regional training and research gaps.
- (d) The programme will contribute on the cutting edge knowledge relevant for the management of the vast drylands in the region and beyond.

## 2 Admission requirements

Holders of a Master of Science degree in agricultural related disciplines, biological sciences, environmental sciences or in natural resource management or an equivalent qualification from an institution recognized by senate.

Holders of Masters degree in relevant social sciences recommended by the faculty board and approved by senate.

### 3 Credit transfer and exemptions

- (a) A candidate may be exempted from some courses and credit transferred from an approved institution subject to the following conditions:
- (b) Request for exemption shall be made in writing, on admission to the Academic Registrar, South Eastern Kenya University and must be accompanied by officially endorsed supporting documents, including the syllabi for the relevant course(s) done at the same level.
- (c) The South Eastern Kenya University reserves the right to administer an appropriate test, through respective departments in order to determine whether the exemption should be granted.
- (d) Application for exemption shall be considered only after the payment of an exemption fee, as may be prescribed.
- (e) The courses on which such exemptions are sought shall not exceed one third of the total units.

### 4 Course structure and duration

- (a) The degree programme shall consist of course work, examinations and thesis. The course work shall be taken in the first year of study, within a duration of 1 year.
- (b) The common regulations governing Doctor of Philosophy Degrees in the South Eastern Kenya University shall apply. Accordingly the following rules will apply.
- (c) The research proposal shall be developed during the first year of study. However; the candidate shall be required to pass coursework before embarking on field research.
- (d) Subject to the approval of senate, the faculty may require the candidate to attend such a course or courses as may be considered appropriate to remedy deficiencies in the candidates academic background, or to endow the candidate with specialized skills in order to assist in his or her study or research work. Course or courses undertaken by the candidate will be assessed.
- (e) The programme shall take a minimum of 3 years and a maximum of 5 years.
- (f) Students shall be required to take seven core courses and at least five elective courses to make a total of twelve courses.

### 5 Course Outline

The Ph.D. coursework shall consist of twelve examinable courses, among which seven are core and five electives. The five elective courses shall come from one of the thematic clusters. For successful completion of coursework, a candidate must pass all the core and elective courses.

#### Core courses

ADR 701	Dryland ecology
ADR 702	Remote sensing and Geographic Information Systems
ADR 703	Dryland livelihoods
ADR 704	Dryland resource economics
ADR 705	Philosophy of dryland resource management
ADR 706	Agricultural technology development
ADR 722	Dryland Resource Policy

#### Elective courses

##### Human ecology

ADR 707	Statistics for social sciences*
ADR 708	Human rights and Gender analysis
ADR709	Social and anthropological research methods
ADR 710	Marketing of dryland products
ADR 711	Project planning and analysis, monitoring & evaluation
ADR 718	Dryland Biodiversity
ADR 719	Environmental & social impact assessment

### Elective Courses

ADR 713	Statistics and research methods*
ADR 714	Integrated production systems in drylands
ADR 715	Animal feed resources in drylands
ADR 720	Watershed management
ADR 721	Agro-meteorology & modeling
ADR 718	Dryland biodiversity
ADR 719	Environmental & social impact assessment

*\*Compulsory elective cluster course*

### 6 Examination regulations

#### 6.1. Written Examinations

- (a) Each course shall be examined separately by a three-hour written paper at the end of the semester in which the course is offered.
- (b) The final examination shall account for 50% of the marks in each course, while continuous assessments shall account for the remaining 50%. The continuous assessments will involve seminars covering current issues in dryland resource management, international dryland development issues, and the rigors of proposal preparation. Apart from students giving seminars, and interacting with invited speakers, the course will involve a two-week prerequisite exposure to dryland conditions in Kenya whereby the students will give a seminar on topical issues based on the trip.

- (c) The pass mark for each course shall be 50%. A candidate failing six (6) or more papers shall be discontinued.
- (d) A candidate who fails in any paper may, on the recommendation of the Faculty Board of Examiners, and approval by the Senate, be allowed to sit supplementary examination for a maximum of two times. A candidate who fails in any second supplementary examination or fails to complete the programme within the prescribed period shall, on recommendation of the Faculty Board of Examiners and approval by Senate, be discontinued.
- (e) The pass mark obtained after a supplementary examination shall be recorded as 50%.
- (b) Candidates will be expected to submit at least two publishable paper to peer reviewed journals before graduating.
- (c) A candidate who fails in the thesis shall be allowed two re-submissions; and shall be discontinued after a fail in the final re-submission.
- (d) The thesis topic shall be agreed upon between the candidate and the approved academic supervisors.
- (e) Each candidate shall be required to present a minimum of two seminars in the course of their research work.

## 6.2. Thesis

- (a) The research project shall be examined by written thesis and oral presentation. Students' theses will be examined by two internal (within the University) examiners and one external examiner, followed by oral presentation/ examination at the Faculty where the student is registered.

## 7 Degree Award

The final degree award shall be Doctor of Philosophy in Dryland Resource Management of the South Eastern Kenya University, in the thematic area of study.

### University Diploma Programmes

#### University Diploma In Crop Protection

Regulations and Syllabus for the Diploma in Crop Protection

##### 1 Introduction

Crop losses due to pests and all diseases account for about one- third of agricultural production costs in terms of chemicals, equipment and manpower. However skills in identification of pests, diseases and available management strategies are largely lacking. There is, therefore an established need to train manpower in all aspects of crop protection. This diploma course is designed for staff in the private sector, government and non-governmental organizations in the agricultural industry: agricultural extension workers, farm managers and field technologists, staff in agricultural/education institutions, staff engaged in crop protection research, pesticide delivery service, and as a bridging course for high school graduates wishing to pursue degree programmes.

The overall objective of the course is to equip the trainees with tools and skills for identification and

enroll of crop pests and diseases. It is designed and control of crop pests and diseases. It is designed to impact knowledge and skill in characteristics of the causal agents diagnosis of causes of crop injury, development and use of methods of diseases, weeds and pest monitoring field surveys, crop loss assessment, estimating threshold levels as a guide for control, and designing IPM strategies for control. The programme theory and practical application to learners wishing to continue refresh and / or interested in sharpening their skilled in crop protection. The revised curriculum is designed to balance varying interest through flexibility in mode of delivery, increase in course duration from one to 2 years to match well known diploma programmes and introduction of basic courses that are prerequisite in understanding crop protection principles.

##### 2 Entry Requirements

The following shall be eligible for admission for the diploma course:

- (a) Holders of KCSE with mean grade of C plain and C- pass in any of the following subjects: Biology, Chemistry, Agriculture, or Physics.
- (b) KCE with division II and at least a pass in Biology or Chemistry, or Physics or Agriculture, or Physical science of Mathematics.

- (c) KACE with at least one principal level pass and one subsidiary pass in biology or chemistry or physics or mathematics.
- (d) Certificate in Crop Protection, Agriculture, Horticulture, Forestry, Environmental Sciences or related Plant or Biological Sciences.
- (e) Diploma, higher diploma or degree in any natural or biological sciences.
- (e) Each candidate shall be required to undertake industrial attachment lasting at least 12 weeks and submit a written report during the last semester of study.

### 3 Course Structure and Duration

The programme will be offered as full time, part time and through Open and Distance e-Learning (ODEL) for students who are not able to attend regular University programme.

#### 3.1. Full time and Part time

- (a) The diploma course shall consist of course work and examination.
- (b) The course shall be offered on a full- or part-time, or Open and Distance e-Learning (ODEL) basis and shall cover a minimum of 4 semesters and a maximum of 8, each semester consists of 15 weeks.
- (c) Each candidate shall be required to take all the courses offered.
- (d) Each candidate shall be required to undertake a special project and submit a written project report at the end of the course.

#### 3.2. Open and Distance learning

The delivery mode of the diploma program will be through open and distance education learning modes involving largely home and/or office-based media.

- (a) Written self instructional study modules issued at registration time.
  - (i) Study course materials
  - (ii) Relevant literature
  - (iii) Interactive devices and self-tests.
- (d) Face introductory tutorials
- (e) Mediated technical learning materials for example:-
  - (i) Audio visual
  - (ii) e-learning materials
- (f) Limited face-face sessions to provide overview of the course at commencement of semester, mid semester and revision period before examinations.
- (g) Support study centres at the South Eastern Kenya University
  - (i) Access to information through e-resource centres.
  - (ii) Study, reading and computer skills

- (iii) Time management and techniques of handling assignments.
  - (iv) Mentorship guidance and counseling.
- (h) Emphasis is on satellite centres that serve as a link between the University and the student in the following manner: registration, collecting reading materials, collecting results and programmes, examination information, posting timetable and holding meetings.

### 3.3. Duration and the course load of the programme

The open and Distance Learning programme will run for a minimum of 4 semesters of 15 weeks each and a maximum of 8 semesters of 15 weeks each. There will be two semesters per academic year; therefore, the minimum academic years for completion of the diploma programme would be 2 years and a maximum of 4 years. The average course load per semester will be 4 course units. However, students may be allowed to take a minimum of 2 units per semester. Each course unit in the programme has a loading of 45 hours. The special project and field/industrial attachment shall each be an equivalent of 3 course units.

### 4. Examination Regulations

- 4.1. Each course, except special projects and attachment, shall be examined by a written paper lasting two hours at the end of the semester in which it is taught.
- 4.2. Each candidate shall be required to cover at least two thirds of each of prescribed courses to qualify for registration for examinations.
- 4.3. Each examination shall be graded out of 100%.
- 4.4. The written examinations shall account for 50% and course work assessment for 50% of the final mark. However, candidates must attain at least 20% in course work and 20% in the written examination.
- 4.5. The pass mark for each paper shall be 40%.
- 4.6. A candidate who fails in any unit will be allowed to sit for supplementary examinations twice only in the failed paper(s). A candidate who fails a second supplementary shall be awarded a certificate of attendance.
- 4.7. The mark for a supplementary paper shall be recorded at 40% (pass) in the student record.
- 4.8. Special project and industrial attachment shall be examined by oral presentation (30%) and written report (70%).
- 4.9. Candidates who fail resubmission of the project report shall be awarded certificate in crop protection.



4.10. The classification of the diploma awarded shall be based on the average marks obtained in all course units and shall be graded as follows:

Score	Grade	Remark
70% and above	A	Distinction
55 - 69%	B	Credit
40% -54%	C	Pass
0% - 39%	D	Fail

## 5. Course Outline

The course shall consist of twelve taught units covering the main discipline of crop protection plus a special project and attachment.

ACP 010	Introduction to Microbiology
ACP 011	Maths, Biometry and Computer use
ACP 012	Introduction to Agriculture and Principles of Crop
ACP 13	Production
ACP 014	Introduction to Plant Pathology
ACP 015	Introduction to Agric. Entomology
ACP 016	Weeds and their Management
ACP 017	Pest and Disease Management
ACP 018	Application of Biotechnology in Crop Protection
ACP 019	Entrepreneurship in Agriculture
ACP 020	Diagnostics of crop diseases Arthropod pests and
ACP 021	Weeds
ACP 022	Environmental Health, Phytosanitary Regulations and
ACP 023	Standards.
	Communication skills and seminars
	Special project (2 course unit equivalent )
	Field/Industrial attachment (3 course unit equivalent)

## Technical and Vocational Education and Training (Tvet) Programmes

### Background

Technical and vocational education and training (TVET) is designed mainly to lead participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation, trade or group of occupations. At the department of Dry-land Agriculture, two TVET programmes i.e. Certificate and Diploma in general Agriculture are offered. The purpose is to transfer knowledge and skills and develop attitude that will enable trainee to venture in self-employment in agricultural sciences and other related courses. Students are equipped with the broad knowledge they require to work in middle management of farms and in other parts of the agricultural industry.

### Certificate in General Agriculture

Minimum Requirements

KCSE mean grade D (plain)

### Course Structure

#### Module I

#### Trimester 1

Entrepreneurship Education

Communication Skills

Mathematics

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Chemistry  
Physics  
Parasitology  
Technical Drawing  
Crop Production  
Soil Science I  
Animal Production I  
Agricultural Economics  
Agricultural Engineering  
Agricultural Extension

### Trimester 2

Entrepreneurship Education  
Communication Skills  
Mathematics  
Chemistry  
Genetics  
Biochemistry  
Zoology  
Entomology  
Technical Drawing  
Crop production  
Soil Science I  
Animal Production I  
Agricultural Engineering

### Trimester 3

Entrepreneurship education  
Communication skills  
Crop production  
Soil Science I  
Animal Production I  
Agricultural Engineering  
Agricultural Extension

### Module II

#### Trimester 1

Industrial attachment

### Trimester 2

#### Entrepreneurship Education II

Mathematics  
Botany  
Animal Physiology  
Microbiology  
Plant Physiology  
Environmental Science  
Crop Production  
Animal Production  
Agricultural Economics  
Agricultural Engineering  
Computer Applications  
Soil Science

### **Trimester 3**

#### **Entrepreneurship Education II**

Crop Production  
Animal Production  
Agricultural Economics  
Agricultural Engineering  
Agricultural Extension  
Home Economics  
Computer Applications  
Soil Science

### **Module III**

#### **Trimester 1**

Industrial Attachment

### **Trimester 2**

Crop Production III  
Animal Production III  
Animal Production Processing  
Agricultural Engineering  
Agricultural Extension and Planning  
Farm Management  
Farm Business Management  
Environmental Management  
Research Project  
Business Plan

### **Trimester 3**

Crop Production III  
Animal Production III  
Animal Production Processing  
Agricultural Engineering  
Agricultural Extension and Planning  
Farm Management  
Farm Business Management  
Environmental Management  
Research Project  
Business Plan

## **Department of Range and Wildlife Sciences**

### **1 introduction**

The Department of Range and Wildlife Sciences was conceived out of the realization that it is important for those who depend on rangelands for their livelihoods to use and conserve the natural resource for sustainable development. For the latter to be possible, it calls for adequate understanding of the resource by the direct user, the technician and the manager. The need for proper management and conservation of the flora and fauna in the arid and semi-arid lands, which form close to 80% of Kenya's land area, is becoming

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increasingly important. This is because of increased human population and the accompanying need for more resources to sustain it. The pressure has been on natural resources in these less advantaged areas for timber, fuel wood and dryland cultivation, leading to forest recession, soil erosion, degradation of water catchments and desertification. All these have worked to deprive the ASALs of their natural resources, in turn reducing the standards of living of those who depend wholly or in part on these resources.

### 1.1 Programs Offered

The following programs are currently on offer in the Department:

1. B.Sc. Range Management
2. B.Sc. Dryland Animal Science
3. Diploma in Rangeland Management
4. Diploma in Animal Health and Production

### 1.2 Career Goals and Employment Opportunities

Graduates of in the various programs offered in the Department of Range and Wildlife Sciences will have an opportunity to work as technical staff in the Agriculture, Livestock, forestry and wildlife sectors; Research Institutions (ICRAF, ICRISAT, ILRI); Non-

governmental organizations with community-based Agriculture-related activities (e.g. DANIDA, PLAN International, World Vision etc); to advance their career to post graduate levels; utilize the acquired knowledge and practical skills to engage in meaningful self-employment initiatives.

## Bachelor of Science in Range Management

### 1. Introduction

Rangeland resource science is the art and science of optimizing the returns from rangelands in those combinations desired by and suitable to the community through the management of range ecosystems. One of the most important considerations by those who depend on rangelands for their livelihoods is to use and conserve the natural resource for sustainable development. For this to be possible, it calls for adequate understanding of the resource by the rangelands communities [pastoralists, agro-pastoralists] the technicians and the managers. The need for proper management and conservation of the flora and fauna in the arid and semi-arid lands [ASALs], which form close to 80% of Kenya's land area, is becoming increasingly important. This is because of increased

human population and the accompanying need for sustainable resource use. The increased pressure on natural resources in these fragile ecosystems for timber, fuel wood and dryland cultivation has led to forest recession, soil erosion, degradation of water catchments and desertification. All these have worked either individually or in concert to deprive the arid and semi-arid lands of their natural resources, in turn reducing the standards of living of those who depend wholly or in part on these resources. This makes the introduction of B.Sc. Range Management course opportune.

Graduates of B.Sc. in Range Management will have opportunities to get employment relevant government ministries like Livestock Development, Agriculture, Wildlife & Tourism, Environment among others, and Livestock and Agricultural Research Centres including Non-governmental organizations such Kenya Agricultural Research Institute (KARI), International Livestock Research Institute (ILRI), Kenya Wildlife Services (KWS), Kenya Forestry Research Institute (KEFRI) among others. Graduates will also have opportunities to further their studies in numerous post-graduate programmes offered in universities both in Kenya and abroad.

### 1.1 Justification

The goal of the Bachelor of Science in Range Management is to prepare holistic graduates to effectively address the challenges facing the rangelands and pastoral and agro-pastoral communities inhabiting these rangelands.

### 1.2 Programme Objectives

- (a) To provide the graduates with knowledge and skills to conduct range science research and pursue postgraduate studies.
- (b) To interpret and apply natural resources (water; land, wildlife) policies and law for the management, conservation and utilization of rangelands and related natural resources for community development.
- (c) To enable graduate students to work in any other field where their diverse knowledge is applicable.

## 2. Entry Requirements

### 2.1 K.C.S.E Candidates

In addition to satisfying the minimum university entrance requirements, the candidate should also offer passes at C+ or above in Biology or Biological sciences, Physics and Chemistry or Physical Science and in mathematics.

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In order to satisfy the cluster of four subjects, for candidates offering Physical and Biological Sciences, the fourth subject may be selected from the following:

- (a) Geography Home Sciences Agriculture Wood work Metal Building Construction Power Mechanics Electricity Drawing and Design Aviation Technology;
- (b) Candidates who satisfy the minimum University entrance requirements, but have a C plain in Biology or Biological Sciences, Physics and Chemistry or Physical Sciences and Mathematics shall be eligible for admission after taking and passing bridging courses in these subjects offered by the South Eastern Kenya University.

### 2.2 Other Candidates

Admission to the degree may also be granted to the following candidates:

- (a) Holders of K.A.C.E or equivalent with minimum 2 principal passes in Biology and Chemistry and at least subsidiary pass in Mathematics. If mathematics was not offered at K.A.C.E, then it is accepted at Ordinary Level but with a minimum of a credit or above.
- (b) Holders of Diploma in Agriculture or related equivalent from a recognised institution with pass at credit or distinction. Candidates with a pass and two years or more relevant working

experience.

- (c) Holders of a Higher National Diploma or equivalent in biological sciences and other related sciences from a recognised institution.
- (d) Holders of a degree in biological sciences or related sciences from a recognised university.

### 3. Course Structure and Duration

- (a) The teaching period for the degree programme shall extend over less than four academic years or their equivalents. Each academic year shall consist of two equivalents. Each academic year shall consist of two semesters of 15 teaching weeks and two weeks of examination.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.
- (c) A candidate for B.Sc. Range Management shall participate and complete course work and practical assignments' that may be applicable to the programme. Admission to the examination at the end of the semester shall be based satisfactory completion of such requirements.
- (d) Each student shall be required to undertake a range field practice after completion of the second semester of the third year of study.

## 4. Course Outline

### Year 1

#### Semester 1

ACS 103	Mathematics
AVP 101	Animal Physiology
ASS 101	Land forms and soil formation
AEC 101	Communication skills
ARM 101	Introduction to range management
ACH 101	Chemistry for Agricultural Science

#### Semester 2

ARM 102	Range Ecology I
ACS 104	Introduction to Plant/Crop Physiology
ACP 101	Microbiology
ASS 102	Principles of Soil Chemistry
ABC 101	Biochemistry
AEC 102	Microeconomics
ACS 105	Principles of Genetics
AEB 101	Introduction to Computer and Information systems

### Year 2

#### Semester 1

ACS 206	Statistics I
ASS 202	Environmental soils physics
AEB 201	Power Systems and Machinery for Agriculture
ASS 201	Soil Microbiology and Biochemistry
ARM 201	Plant Taxonomy

ARM 203	Basic Wildlife Biology
AAS 201	Principles of Animal Production
AEC 201	Sociology and Development
ARM 205	Natural Resources and Man

#### Semester 2

ARM 202	Range Ecology II
ACP 201	Principles of Crop Production
AEC 202	Macroeconomics
ARM 204	Principles of Wildlife Management
AAS 206	Principles of Animal Nutrition
AAS 202	Animal Genetic Resources
ACS 207	Pasture and Fodder Production

### Year 3

#### Semester 1

ARM 305	Methods of Rangeland Analysis
ASS 301	Application of Remote Sensing and G.I.S in land use Management
AEC 301	Firm Accounts and Planning
ARM 301	Principles of Range Management
ARM 303	Pastoral production systems and dryland securities
ACS 306	Statistics II
ARM 307	Dryland Agroforestry

#### Semester 2

AEC 304	Agricultural Policy and Law
AAS 303	Population & Quantitative Genetics
AEB 302	Irrigation and Water Management

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ARM 302	Range Plants and their Values
AEC 302	Production Economics and Firm Management
ARM 304	Range Livestock Nutrition
ARM 306	Bees and Bee Keeping
ARM 308	Range Field Practice (8 weeks)

### Year 4

#### Semester 1

AAS 405	Animal Breeding
ARM 401	Human-wildlife interactions
ARM 405	Economics of Livestock Production
ARM 403	Range Problems, Projects and Seminars
ARM 407	Range Appraisal and Planning
AEC 403	Agricultural Extension and Technology Transfer
ARM 409	Range Livestock Production Systems

#### Semester 2

ACS 410	Biotechnology
AAS 414	Animal Health Management
AEC 412	Agricultural Marketing and International Trade
ARM 404	Range Improvement and Rehabilitation
ARM 408	Environmental and Social Impact Assessment
ARM 410	Range Research Methods
ARM 402	Global Development and Ecological Sustainability
ARM 406	Range Resource Economics and Policy

### Bachelor of Science In Dryland Animal Science

Regulations and Syllabus for the Degree of Bachelor of Science in Animal Science

#### 1 Introduction

The Kenyan Animal industry has a high potential to play a vital role in the development of the national economy of the country. This opportunity has not been fully exploited. Therefore, there is need for specialized training to enhance management, development and sustainable use of animal genetic resources for self-sufficiency and export. Furthermore, emerging emphasis on the sub-sector, such as the increased attention to livestock productivity in the Arid and Semi-Arid Lands (ASALs), makes the introduction of B.Sc. Dryland Animal Science course timely and appropriate. Graduates of B.Sc. in Dryland Animal Science will have opportunities to get employment in the Ministry of Livestock Development, Ministry of Agriculture, and Livestock and Agricultural Research Centres including Non-governmental organizations. Making use of the acquired knowledge and practical skills for further postgraduate studies, as well as finding teaching positions in tertiary and higher institutions of learning will be among other opportunities open for graduates of this programme. The graduates will also have the opportunity for self-employment by utilizing the necessary skills gained during their course of study.



### 1.1 Justification

The goal of the Bachelor of Science in Dryland Animal Science is to prepare graduates to meet the challenges faced by the expanding animal industry, both in the private and public sectors.

### 1.2 Programme Objectives

- (a) To train and equip personnel who would be involved in the effective delivery of livestock extension packages to the animal industry.
- (b) To equip the students and graduates to be able to initiate entrepreneurship in the animal industry for generation of employment.
- (c) To equip students with enough technical skills and hands-on experience as well as integrative mindset to be able to support research in animal agriculture and undertake research.

## 2 Entry Requirements

The candidate must satisfy the minimum university entry requirements.

### 2.1 KCSE Candidates

In addition to satisfying the above requirements, the candidates should also possess a grade of C or above in Biology or Biological Sciences, Chemistry and Physics/

Physical Sciences or Mathematics. Additionally, a fourth subject besides the above mentioned may come from any of the following subjects; Geography, Home Science, Agriculture, Wood Work, Metal Work, Building Construction, Power Mechanics, Electricity, Drawing and Design, Aviation Science, Computer and Business Studies.

### 2.2 Other Candidates

Admission to the degree course may be granted to the following categories of candidates:

- (a) Holders of KACE, or equivalent with a minimum of 2 Principal passes in Biology and Chemistry and at least a pass in Mathematics or a Mathematics credit at ordinary level where Mathematics was not offered at A-Level.
- (b) Holders of a Diploma in Agricultural Sciences or related sciences from a recognized Institution with credit or distinction, with KCSE mean grade of C or above.
- (c) Holders of a Higher National Diploma or equivalent in Biological or other related Agricultural Sciences from a recognized institution.
- (d) Holders of degree in Biological Sciences or related Sciences from a recognized institution.

### 3 Credit Transfer and Exemptions

#### 3.1 Credit Transfer

Candidates from other universities recognized by the South Eastern Kenya University Senate will be considered for credit transfer based on course unit content equivalence but not more than a third of the course units shall be transferred.

#### 3.2 Exemptions

South Eastern Kenya University senate may exempt students from some courses on recommendation of the School board provided that such candidates:

- (a) Shall send a formal application of exemption to the Academic Registrar through the Dean justifying the candidate's request and attaching relevant supporting documents.
- (b) May be required to sit examination on the course he/she wishes to be exempted, set and administered by the representative Department on behalf of the School Board of Examiners.
- (c) Must have attained a minimum grade of C or equivalent in the course units for which exemption is applied.

### 4 Course Structure and Duration

The programme will be offered through two modules; Full time (Module I and II) and through Open Distance Learning (ODL) (Module III) for students who cannot attend regular university programme.

#### 4.1 Full time

- (a) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 15 teaching weeks and two (2) weeks for examination.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not less twice the minimum period for which he/she was registered for the degree
- (c) A candidate for B.Sc. Dryland Animal Science shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (d) Each student shall be required to undertake satisfactory field/farm attachment of eight (8) weeks as stipulated in the course structure. During the field practice, students are expected to embark on a research project, which they have to complete and present at a seminar during the fourth year of study.

## 4.2 Open Distance Education Learning

The delivery mode of these programmes will be use of open distance education learning involving use of various media (multi-media modes of learning) and largely home based.

## 5. Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two-thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (attachment) shall be deemed to be part of the fourth year.
- 5.3 All examination procedures shall be governed by the following:
  - (a) Each course examination shall be examined out of a total of 100%.
  - (b) The pass mark in each course examination shall be 40% and graded as follows:-

70	-	100%	A
60	-	69%	B
50	-	59%	C
40	-	49%	D
39% and below			FAIL

- (c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical / field trip reports 10%.
- (d) Farm/Industrial Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the student's performance while in the field shall constitute field assessment 30%, written reports 40% and oral presentations 30%.
- (e) The Project and Seminars shall be examined through written reports and presentations, and shall be graded to use in the degree classification. The seminars and project proposal shall constitute 30%, the special project report shall constitute 60% and the oral presentation shall constitute 10%.
- (f) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations

in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.

- (g) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- (h) A candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate who opts to attend classes in the failed courses shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.
- (i) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
- (j) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- (k) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.
- (l) A candidate who fails to attain the pass mark in a supplementary examination shall on recommendation of the School Board and approval by the Senate be allowed to do a second supplementary examination, ONCE ONLY as long as the total of such examinations does not exceed four in number during any sitting for that particular academic year.
- (m) A candidate who fails a supplementary exam on a second attempt according to the regulation 5.3 (j) shall on recommendation of the School Board and approval by the Senate be discontinued from the degree programme.
- (n) No candidate shall be allowed to repeat any year of study more than once.

- 5.4 The Degree of Bachelor of Science in Dryland Animal Science shall be:-
- Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/Industrial Attachment.
  - Based on the average score of all examinations of courses taken in the entire course duration.
  - Classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.
- 5.5 In arriving at the decision as to the degree classification for each candidate, the School Board of Examiners shall consider, while observing regulation 5.4(c) above, the overall mean mark obtained by the candidate and shall apply the principle that a mean score of:-

70-100%	-	First Class Honours
60-69%	-	Second Class Honours (Upper Division)
50-59%		Second Class Honours (Lower Division)
40 -49%		Pass.

### 6. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Dry Land Animal Science of the South Eastern Kenya University.

### 7. Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

### 8. Course Outline

#### Year 1 Semester 1

CCS 001	Communication Skills
CCS 010	Human Immuno-deficiency Virus / AIDS
ANS 103	Principles of Animal Science
ANS 101	Agricultural Botany
ANS 102	Zoology for Agriculture
PAS 106	Chemistry for Agricultural Sciences
ANS 104	Veterinary Anatomy
PAS 108	General Mathematics

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### Semester 2

CCS 009	Elements of Economics
BIT 112	Introduction to ICT
ANS 105	Animal Physiology
ANS 106	Introductory Biochemistry for Agriculture
ANS 107	Principles of Genetics
ESM 101	Introduction to Environmental Management
ANS 108	Introduction to Livestock Economics and Farm Management
ANS 109	Introductory Microbiology

### Year 2

#### Semester I

ANS 201	Animal Growth & Development
ANS 202	Basic Statistics
ANS 203	Quantitative Genetics
ANS 204	Food Microbiology
ANS 205	Population Genetics
ANS 206	Principles of Animal Production
ANS 207	Animal Genetics Resource and Utilization
ANS 208	Feed Resources and Animal Nutrition

### Semester 2

ANS 209	Parasitology
ANS 210	Molecular Genetics
ANS 211	Principles of Rangeland Resources and Management
ANS 212	Food Processing and Postharvest Handling
ANS 213	Pasture and Fodder Production and Utilization
ANS 214	Biodiversity and Conservation
ANS 215	Hides/Skins and Wool Technology
ANS 216	Dryland Agro-Forestry

### Year 3

#### Semester I

ANS 301	Dryland Environmental Management
ANS 302	Principles of Animal Breeding
ANS 303	Project Planning and Development
ANS 304	Animal Housing, Farm Structure and Bioclimatology
ANS 305	Aquaculture
ANS 306	Apiculture
ANS 307	Dairy Production
ANS 308	Agricultural Extension

## Semester 2

ANS 309	Rabbit Production
ANS 310	Draught, Laboratory and Pet Animals
ANS 311	Agricultural Policy and Law
ANS 312	Dairy Science
ANS 313	Analytical Techniques in Animal Science
ANS 314	Environmental Physiology, Reproduction and Artificial Insemination (A.I.)
ANS 315	Irrigation and Water Management
ANS 316	Research Methods
ANS 317	Farm/Industrial Attachment (8 weeks)

## Year 4

### Semester 1

ANS 401	Beef Production
ANS 402	Sheep and Goat Production
ANS 403	Game Ranching
ANS 404	Dairy Technology
ANS 405	Meat Science
ANS 406	Agricultural Marketing
ANS 407	Camel Production
ANS 415	Research Project I

### Semester 2

ANS 408	Pig Production
ANS 409	Poultry Production
ANS 410	Meat Processing Technology
ANS 411	Animal Health Management

ANS 412	Ration Formulation and Feed Manufacturing Technology
ANS 413	Animal Diseases
ANS 414	Livestock Marketing, Microenterprise Development and Management
ANS 415	Research Project II
ANS 416	Animal Biotechnology

## Master of Science in Livestock Production Systems

Regulations and Syllabus for the Degree of Master of Science in Livestock Production Systems

### 1 Introduction

The objectives of the programme are to:-

- (a) Equip production system analysts with knowledge and skills in livestock systems for sustainable use of resources and improved livestock productivity.
- (b) Train personnel to undertake academic responsibility in research, consultancy and teaching in livestock production systems.
- (c) Equip the analysts with ability to document, evaluate and monitor production systems.

### 2 Entry Requirements

- (a) The common regulations for the Master's degrees in all faculties shall apply.
- (b) The following shall be eligible for admission: Holders of the following degree awards of the South Eastern Kenya University or equivalent qualifications from universities or institutions recognized by the Senate of the South Eastern Kenya University Bachelor of Veterinary Medicine; Bachelor of Science with at least Upper Second –Class Honours in Agriculture, Range Management, Wildlife, Zoology and Agricultural Economics; Holders of Lower Second-class Honours degree or with at least two years relevant experience; Holders of pass degree or equivalent qualifications as listed in (a) above with either a relevant post-graduate diploma or five years' experience.

### 3 Transfer of Credits

- (a) A Candidate may be allowed to transfer up to a maximum of one third ( $1/3$ ) of the taught units.
- (b) Applicants seeking transfer of credit shall send a formal application to the Director, Board of

Postgraduate Studies, through the Dean, Faculty of Veterinary Medicine/Agriculture as the case may be, giving justification for the request, and attaching supporting credentials.

- (c) Application for transfer of credit will be processed only after payment of the prescribed fees.
- (d) Applicants will only be allowed to transfer units that are equivalent to those offered by the South Eastern Kenya University

### 4 Course Structure and Duration

- (a) The programme shall run over a minimum four and maximum ten semesters of fifteen weeks each.
- (b) The programme shall be by coursework and thesis. The research work for thesis shall be undertaken only after successful completion of coursework.

### 5 Course Outline

JAP 601	Animal Psychology
JAP 602	Biochemistry
VPM 606	Instrumentation
CSC 600	Biometry and computer use
JAP 614	Application of statistics in animal production
VPM 607	Principles of Scientific Comm.



JAP 615	Principles of Livestock production Systems	(f)	A candidate who fails a maximum of five courses shall, on the recommendation of the Faculty Board of Examiners and approval by the Senate, be allowed to resit or retake the failed course not more than twice.
JAP 609	Animal Bioclimatology, Behaviour and Welfare		
JAP 616	Livestock Population Dynamics and modeling		
JAP 617	Dairy Cattle Prod. Systems	(g)	The pass mark obtained after a resit examination shall be recorded as 50% in the candidate's transcript while that for the retake shall be the mark obtained at the said sitting.
JAP 618	Beef cattle and Camel Production systems		
JAP 619	Sheep and Goat Production Systems		
JAP 620	Pig and Poultry Production Systems		
JAP 621	Integrated Resource Management	(h)	Candidates shall not be allowed to proceed to part II until they pass all coursework examinations.
JAP 622	Apiculture and Aquaculture		
JAP 650	Thesis		

## 6 Examination Regulations

### Part I: Written Examinations

- Common regulations for masters' degrees in all faculties shall apply.
- Candidates shall be required to take semester examinations and pass all courses.
- All courses shall be examined through a three-hour written examination.
- The final examination shall account for 70% of the marks in each course, while continuous assessment shall account for 30%.
- The pass mark for each course shall be 50%.

### Part II: Thesis

The common regulations for the examination of thesis in all faculties shall apply.

## 7. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final degree award shall be Master of Science in Livestock Production Systems of the South Eastern Kenya University.

## Master of Science in Comparative Animal Physiology

Regulations and Syllabus for the Degree of Master of Science in Comparative Animal Physiology

### 1 Introduction

The Master of Science degree in comparative animal physiology offered in the Department of Veterinary Anatomy and Physiology is intended to train professionals in comparative fields of vertebrate physiology. The study is also intended to provide an in-depth knowledge of specific options in physiology in order to prepare course recipients for academic work in Diploma Colleges, Universities and research institutions. Recipients of the degree should be able to initiate research projects in their field of specialization as well as carry out comparative and collaborative research with minimal supervision in physiological sciences and other related fields of study.

The objectives of the course shall be to:

- (a) Offer a comprehensive coverage in comparative physiology of vertebrates.

- (b) Provide an in-depth study through specific options in order to prepare course recipients for academic work in research and in institutions of higher learning.
- (c) Equip professionals working in biomedical sciences with cutting edge knowledge in physiology that will improve their working skills.

### 2 Admission Requirements

The common regulations for the Masters Degrees in all faculties shall apply. The regulations for the Degree of Master of Science by course work and thesis in the Faculty of Veterinary Medicine shall be applicable. The following shall be eligible for registration for the degree of Master of Science in Animal Physiology:

- (a) Holders of BVM or M.B.Ch.B. degrees of the South Eastern Kenya, or equivalent degrees from any other institution recognized by the senate.
- (b) Holders of B.Sc. (Biomedical Technology, Zoology, Biology, Animal Physiology or Anatomy, Wildlife Management and related options) of the South Eastern Kenya University or a recognized University with at least upper second-class honors or lower second-class honors with a minimum of one (1) year work experience in a relevant field.

- (c) A candidate who has obtained a Bachelor's degree or an equivalent qualification in zoological sciences in a relevant discipline from other institutions recognized by the senate of the South Eastern Kenya University as a comparable academic status.

### 3. Credit Transfer and Exemption

An applicant may seek credit transfer or exemption for similar course taken at Masters level from the South Eastern Kenya University or other institutions recognized by senate.

An applicant who wishes to apply for credit transfer in any course:

- (a) Shall be required to submit formal applications for credit transfers to the Director, Board of Postgraduate Studies through the dean justifying their request and attaching relevant support documents.
- (b) Will be allowed credit transfer of a maximum of one-third of the prescribed courses.
- (c) Can only be considered for the request after the applicant has paid the appropriate fee as may be decided by the Senate on recommendation by the Faculty Board.

### 4 Course Structure and Duration

The study is a full-time course extending for a minimum of four (4) and a maximum of eight (8) semesters leading to the award of a Master of Science degree in Comparative Animal Physiology.

The first year of study will be devoted to course-work. The second year will be devoted to research in a specific area and writing up of a Master's Thesis.

### 5 Course Outline

Candidates will be required to take 6 compulsory and 2 optional courses chosen from any one elective in the first year of study.

#### Semester 1

JVP 600	Homeostasis and Physiology of Excitable Tissues
JVP 601	Systemic Physiology
JVP 602	Energy Metabolism and Environmental Physiology
JVP 620	Molecular Biology
JPH 603	Biostatistics and Computer use
JPM 607	Principles of Scientific Communication

## Semester 2 Specialization Areas

### I Reproductive Physiology

- JVP 621 Anatomy and Physiology of Reproduction  
JVP 622 Control of Reproduction and Fertility Disorders

### II Digestive and Environmental Physiology

- JVP 606 Digestive Physiology and Energy Metabolism  
JVP 607 Environmental Physiology

### III: Cardiovascular and Respiratory Physiology

- JVP 608 Anatomy and physiology of cardiovascular system  
JVP 609 Anatomy and physiology of Respiratory system

### IV: Muscle Physiology

- JVP 610 Functional muscle anatomy and fibre metabolism  
JVP 611 Muscle mechanics and energetics

### V: Animal Neurophysiology

- JVP 612 Anatomy and physiology of the nervous system  
JVP 613 Behavioral and Applied Neurophysiology  
JVP 628 Thesis

### Second Year of Studies

The second year will be devoted to research, seminars and thesis preparation. The research proposal should be submitted and approved before the beginning of the second year.

### 6 Examination regulations

- (a) The written examination will be held at the end of the first year courses. The candidates shall be required to sit and pass a total of 8 courses.
- (b) The pass mark shall be fifty per cent (50%) in each paper.
- (c) Continuous assessment tests will contribute thirty per cent (30%) of the total marks while the final examination shall comprise seventy per cent (70%).
- (d) Continuous assessment marks will be computed from grades achieved within the semesters, laboratory assignments, and project and library research papers.
- (e) Candidates who fail in one or two papers with a mark between 40 and 50% may, on

- recommendation of the board of examiners and approval by senate, be allowed to sit a supplementary examination in the failed paper(s).
- (f) A candidate who fails in any paper with a mark of less than 40% or fails in three or more papers or fails a supplementary examination shall be discontinued.

## 7. Thesis Examination

The completed thesis will be examined and there will be an oral defence of the same according to the common regulations governing the examination of Masters' theses in all faculties.

## 8. Award of Degree

A candidate who successfully completes the course shall be awarded the degree of Master of Science (MSc) in Comparative Animal Physiology of the South Eastern Kenya University.

## Master of Science in Reproductive Biology

Regulations and Syllabus for the Degree of Master of Science in Reproductive Biology

### 1. Introduction

This M.Sc. course is intended to provide more knowledge and research training in reproductive

biology and reproductive health. The course recipients will be prepared for assignments in human or veterinary medicine in academic or research institutions. The course further intends to enhance basic research capability in reproduction. The course recipients would also be suitable for work in non-governmental organizations involved in family planning and in the management of reproductive health in general.

### 2 Entry Requirement

Those eligible for registration will be holders of the following degree awards of the South Eastern Kenya University.

- (a) Bachelor of Science degree with a minimum of an Upper Second Class Honours in Biochemistry, Zoology, Physiology, Biology or Anatomy, or a lower 2nd class but with a minimum of 2 years work experience in a relevant field.
- (b) Bachelor of Veterinary Medicine with at least a credit pass in one of the relevant subjects.
- (c) Bachelor of Medicine/Bachelor of Surgery or Bachelor of Pharmacy with at least a credit pass in one of the relevant subjects. Or:-
- (d) A degree from another recognized university which has been accepted by Senate as equivalent to one of the degrees above. The common regulations for the Masters' degrees in all Faculties shall be applicable.

### 3 Course Structure and Duration

The course is a full-time programme extending over two academic years. In the first year, the students will undertake studies by course-work and examination. The second year will be devoted to research in a specific area, writing up and submission of a Master's thesis.

### 4 Course Outline

#### First Year of Studies

Candidates will be required to take 9 compulsory courses. In addition, students who have not previously taken a course in systemic physiology or its equivalent will be required to take JVP 501.

Optional Courses:

#### Semester 1

JVP 501: Advanced Systemic Physiology

#### Compulsory Courses

JVP520: Molecular Biology

JVP 519: Reproductive Epidemiology and Biostatistics

JVP 514: Environmental Physiology (Factors in Reproduction)

JVP 504: Reproductive Anatomy

VPM 507: Principles of Scientific Communication

#### Semester 2

JVP 505: Reproductive Physiology

JVP 516: Reproductive Biochemistry, Pharmacology and Immunology

JVP 517: Selected Topics in Reproductive Health

JVP 518: Family Planning, Social Behaviour and Population

JVP 515: Laboratory Methods in Reproductive Biology and animal models

#### Proposed courses to alternate with JVP 517 and 518

JVP520: Selected Topics in comparative Animal reproductive Health

JVP505: Selected Topics in Comparative Animal Reproductive Health.

#### Second Year of Studies

The second year will be devoted to research, seminars and thesis preparation. The research proposal will be presented at a seminar organized by the department and approved before the beginning of the second year. Seminars related to the postgraduate research project will be held throughout the year.

### 5 Examination Regulations

Part I Examination to be held at the end of the first year courses.

(a) The candidates shall be required to pass in all the papers.

- (b) Each paper shall comprise of 1 × 3 hour written examination. Course JVP 504, 515 and 517 shall have a written and practical assessment of 1×3 hour each.
- (c) The pass mark shall be fifty per cent (50%) in each paper.
- (d) Continuous assessment will contribute thirty per cent (30%) of the total marks while the final examination shall comprise seventy per cent (70%).
- (e) Continuous assessment marks will be attained from grades achieved within the semesters' laboratory assignments, project and library research papers and other tests as may be given in each course.
- (f) Candidates who fail in not more than three papers with a mark between 40 and 49% may, on the recommendation of the board of examiners and approval by Senate will be allowed to sit a supplementary examination in the failed paper(s) within 3 months.
- (g) The following candidates will be discontinued.
  - i. Those who fail in three papers with marks below forty per cent (40%).
  - ii. Those who fail in more than three papers.
  - iii. Those who fail supplementary examination.

## Part II Examination

The completed thesis will be examined according to the common regulations governing the examination of Master's thesis in all faculties.

## University Diploma Programmes

### Diploma in Animal Health

Regulations and syllabus for Diploma in Animal Health

#### 1 Introduction

Animals both domesticated and wild have supported the life of people over the centuries by providing food and animal by-products. Livestock contribute 12% of the National GDP and 40% of the agricultural GDP and employs 50% of the agricultural workforce. Animal husbandry has steadily developed in the country and currently accounts for 5% of the national GDP. The growth of the livestock industry continues to be constrained by various factors including availability of feeds, animal diseases and poor reproductive efficiency. This is especially so in the arid and semi-arid regions that carries 60% of the national livestock herd.

Improvement of livestock industry will immensely contribute to the National Economic Development and achievement of the Vision 2030. This will also

improve the quality of life in the ASALs where livestock production is the major economic activity. There is therefore need to develop manpower with current and specialized knowledge skills and attitudes relevant to the production of healthy livestock. Poor nutritional status, animal diseases and parasites and low reproductive efficiency have greatly constrained the growth and development of the livestock industry in Kenya and sub-Saharan Africa. There is therefore need to improve nutrition, control and treat diseases and parasites and improve the reproductive efficiency of our livestock to ensure food security and spur economic growth of the farming communities.

The proposed Diploma course aims at training middle level practically oriented manpower to spearhead efficiency in animal feeding, disease control and improvement of reproductive abilities of our livestock.

### 1.1 Course Objective

The main aim of the proposed course is to produce graduates;

- (a) Equipped with adequate, theoretical and practical knowledge in disease management and control.
- (b) Conversant with extension and role of diseases in public health.

- (c) Equipped with skills in animal health extension services.

## 2 Admission requirements

The minimum entry requirements for the diploma course are:-

- (a) An aggregate score in KCSE of grade C and a grade of at least a C- in Chemistry, Biology and any other one science subject or Physical Science and Biology
- (b) KCE/EACE Division II with at least a credit in Chemistry, Biology and other one science subject or Physical Science and Biology
- (c) Holders of an "A" level certificate with a minimum of one principal pass and at least a subsidiary pass in Biology and Chemistry.
- (d) A certificate with at least a credit pass in Animal Health from a recognized middle level institute or equivalent.
- (e) Holders of a diploma in biomedical discipline recognized by the South Eastern Kenya University Senate.
- (f) Any other qualification recognized by SEKU.

## 3 Transfer of Credit

A student admitted to this course may apply for one or more course exemptions



Provided the following are fulfilled:

- (a) A student applies for a maximum exemption of one third or less.
- (b) A student must have done similar course content and passed prescribed examinations in an institution recognized by the South Eastern Kenya University Senate.
- (c) The applicant shall make a formal application to the Academic Registrar through Head of Department and Dean and attach detailed evidence of what was covered to warrant exemption.
- (d) The applying student must pay the prescribed exemption fee which will be determined by SEKU Administration.
- (e) There will be no exemptions for clinical subjects.

#### 4 Course Structure and Duration

- (a) The course will have 29 compulsory course units comprising of lectures, demonstrations, practicals, seminars, supervised field attachments and projects and theoretical and practical examinations.
- (b) A course unit will be 45 contact hours comprising of 60% theory and 40% practicals.
- (c) The course will take a minimum of 8 semesters of 15 weeks and a maximum of 12 semesters.
- (d) A student shall be allowed to take a minimum of 4 course units and a maximum of 8 course units per semester. A student must complete all the prescribed courses in a semester before proceeding to the next.

- (e) Topic for the project paper and area of student attachment shall be identified by the student in consultation with relevant supervisors and course coordinators. Project paper will be equivalent to 4 course units.

### 5 Course Outline

#### Year 1

##### Semester 1

LAS 0102	Gender & HIV /AIDS
LAS 0103	Communication skills
LAS 0104	Introduction to ICT and biostatistics
LAS 0105	General Mathematics
AVAH 0100	Gross Veterinary anatomy
AVAH 0105	Embryology and histology
AVAH 0104	Principles of Animal Physiology
AVAH 0102	Biochemistry

##### Semester 2

AVAH 0107	Veterinary Parasitology
AVAH 0108	Veterinary Microbiology
AVAH 0109	Veterinary Pathology
AVAH 0204	Pharmacology
AVAH 0206	Animal health I-diseases
AVAH 0207	Field Attachment=3 course units

*\*Field attachment for 8 weeks at the end of first year and before second year begins*

### Year 2 Semester 1

AVAH 0201	Clinical pathology
AVAH 0202	Principles of animal production
AVAH 0203	Toxicology
AVAH 0204	Immunology
AVAH 0205	Veterinary Public Health
AVAH 0206	Veterinary epidemiology
AVAH 0207	Animal health II- management of surgical conditions
AVAH 0208	Farm structures and equipment
AVAH 0209	Animal health III- Reproduction and Obstetrics

### Semester 2

AVAH 0210	Rural sociology and development
AVAH 0211	Livestock policy and law
AVAH 0212	Range management
AVAH 0213	Herd Health Management
AVAH 0214	Environmental science
AVAH 0215	Seminars and Project Report

## 6 Examination Regulations

The following will be the examination regulations:

- (a) Each course shall be examined by a written paper lasting two hours at the end of the semester in which it is offered.

- (b) Each candidate shall be required to attend all prescribed lectures and practicals to qualify for registration for examination.
- (c) Each examination shall be graded out of 100%.
- (d) The written examination shall account for 70% and continuous assessment for 30% of the final mark.
- (e) The pass mark for each paper shall be 40%.
- (f) A candidate who fails in any unit shall be allowed to sit for supplementary examinations twice only in the failed paper(s). A candidate who fails a re-sit shall be awarded a certificate of attendance.
- (g) The mark for a re-sit paper shall be recorded as 40% (pass).
- (h) The project shall be examined in two stages: Oral presentation that shall account for 50%, and written report that shall account for 50%.
- (i) Candidates who fail in the project examination shall be allowed to resubmit once only.
- (j) Candidates who fail in the resubmitted project examination shall be awarded a Certificate in Animal Health.
- (k) The grade to be awarded to the candidate shall be based on the aggregate score calculated from all the examinations, thus:

70% and above	-	Distinction
56- 69%	-	Credit
40-55%		Pass

## 7 Award of Diploma

The general rules and regulation governing award of diplomas of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final diploma awarded shall be Diploma in Animal Health of the South Eastern Kenya University.

## Diploma in Apiculture

Regulations and Syllabus for Diploma in Apiculture

### 1 Introduction

In Kenya beekeeping can be successfully carried out in about 80% of the country. It is especially suitable in the semi-arid areas where other modes of agriculture are not very possible. Beekeeping contributes to incomes through sales of hive products, improves food security and in some instances, hive products like honey and propolis are the only medicine available. The pollination of food crops by bees plays a significant role in seed and food production and also maintains the integrity of ecosystems. Beekeeping is a sustainable form of agriculture that also conserves the natural environment.

The country's potential for apiculture development is estimated at over 100,000 metric tons of honey and 10,000 metric tons of beeswax. At the moment only about one fifth of this potential is being exploited.

Though apiculture is a component of farming systems in Kenya, it has not received attention like other Agriculture enterprises and has been treated as a pastime activity. However, increasing pressure on conventional enterprises (cash crops and livestock) to meet incomes and livelihoods of an increasing human population under increasingly changing environmental conditions has necessitated search for alternative enterprises that can meet the shortfalls.

### 1.1 Justification

Apiculture requires low production inputs and presents an opportunity for diversifying the production systems to meet the income and livelihood challenges, especially for rural resource poor farmers. Moreover, despite the high potential for apiculture development, over 100,000 metric tons of honey and 10,000 metric tons of beeswax, only about 20% of this potential is realized. For apiculture to play a significant role in the production systems there is need to empower human capacity with requisite knowledge, skills and technology.

### 1.2 Programme Objectives

The objectives of this programme shall be:

- (a) To promote interest in Apiculture as an industry and create awareness of the opportunities existing in Apiculture.
- (b) To enhance skills needed in carrying out Apiculture practices.
- (c) To create awareness on the importance of Apiculture in industrial and technological development.
- (d) To promote Apiculture activities to enhance livelihoods and promote environmental conservation.

### 2 Entry Requirements

The following will be eligible for admission to the diploma course:

- (a) Holders of KCSE with at least a mean grade of C plain and at least C- in Biology and either Mathematics or Geography or Chemistry or Physics.
- (b) Holders of KCE or its equivalent with at least division II with passes in Biology and either Mathematics or Geography or Chemistry or Physics.

- (c) Holders of KACE or its equivalent with at least one principal and with at least a subsidiary pass in Biology and either Mathematics or Geography or Chemistry or Physics.
- (d) Holders of a Certificate in Range Management, Natural Resource Management, Agriculture, Animal Husbandry, Forestry and any other relevant Biological Sciences from recognized institutions.
- (e) Holders of diploma, higher diploma or degree in any of the specified fields in 2(d) above.

### 3 Course Structure and Duration

- (a) The diploma course shall consist of course work and examination.
- (b) The course shall be offered on full time basis, and shall cover a minimum of two (2) and maximum of four (4) semesters, each semester consisting of 15 weeks.
- (c) Each candidate shall be required to take all the course units offered.
- (d) Each candidate shall be required to undertake a special project and submit a written project report at the end of the course.
- (e) Each candidate shall be required to undertake field attachment lasting 8 weeks and submit a written field attachment report at the end of the course.

## 4 Examination Regulations

The South Eastern Kenya University common examination regulations shall apply and the following are the examination regulations:

- (a) Each course shall be examined by a written paper lasting two hours at the end of the semester in which it is offered.
- (b) Each candidate shall be required to attend at least two-thirds of the prescribed lectures and practicals to qualify for registration of examination.
- (c) Each examination shall be graded out of 100%.
- (d) The written examination shall account for 70% and continuous assessment for 30% of the final mark.
- (e) The pass mark for each paper shall be 40%.
- (f) A candidate who fails in any unit shall be allowed to sit for supplementary examinations twice only in the failed paper(s).
- (g) The mark for a resit paper shall be recorded as 40% (pass).
- (h) The project shall be examined in two stages: Oral presentation that shall account for 50%, and written report that shall account for 50%.
  - (i) Candidates who fail in the project examination shall be allowed to resubmit once only.
  - (j) Field attachment shall be examined through oral examination (50%) and written field attachment report (50%).
  - (k) The grade to be awarded to the candidate shall be based on the aggregate score calculated from all the examinations, thus: 70% and above shall constitute a Distinction; 56—69% a Credit; and 40—55% a Pass.
  - (l) After successful completion of the course, candidates shall be awarded a diploma in Apiculture.

## 5 Course Structure

### Year 1 Semester 1

LAS 001	Communication Skills
LAS 002	Introduction to ICT
LAS 003	Gender and HIV/AIDS
DAP 0101	Development of Agriculture and Agricultural Society
DAP 0103	General Mathematics
DAP 0105	Introduction to Ecology
DAP 0107	General Entomology
DAP 0109	Introduction to Bee-keeping

## School of Agriculture and Veterinary Sciences

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### Semester 2

FES 0102	Introduction to Environmental Management
DAP 0104	Bee Biology Colony Structure and Management
DAP 0106	Bee Ecology, Behavior and Colony Improvement
DAP 0108	Beekeeping Equipment
DAP 0110	Biochemistry
DAP 0112	Project Management
DAP 0114	Biostatistics

*\*DAP 0214 Field Attachment for 8 weeks between end of First year and beginning of second semester of second year*

### Year 2 Semester 1

DAP 0201	Hive Products and their Processing
DAP 0203	Entrepreneurship
DAP 0205	Honey Bee Pests, Diseases, and Toxicology
DAP 0207	Bee Botany and Apiary Management
DAP 0209	Principles of Dryland Crop Production
DAP 0211	Seminars and Special Project
DAP 0113	Agriculture Education and Extension

### Semester 2

DAP 0202	Food Chemistry
DAP 0204	Rural Sociology
DAP 0208	Forest Management
DAP 0210	Agro-forestry
DAP 0212	Principles of Food Processing and Packaging
DAP 0214	Field/Industrial Attachment

## 6. Award of Diploma

The general rules and regulation governing award of diplomas of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final diploma awarded shall be Diploma in Apiculture of the South Eastern Kenya University.

## Department of Agricultural Economics And Agribusiness

### 1. Introduction

The Department of Agricultural Economics and Agribusiness aims to give students ample opportunities to build their knowledge in agribusiness and applied economics and thereby contribute to effective performance in productivity, commercialization and competitiveness in agricultural production and rural development. The department's programs are

structured to augment the overall excellence of the South Eastern Kenya University in providing quality education through teaching, research, extension, innovation and entrepreneurship. Programs offered will provide learners with training and skills that will enhance agricultural productivity, promote investment and encourage participation in agricultural enterprises, thus facilitating the contribution of the agricultural sector in the achievement of vision 2030.

The department is currently offering the graduate level program, M.Sc. Agricultural Resource Management.

### **Master of Science in Agricultural Resource Management**

Regulations and Syllabus for the Degree of Master of Science in Agricultural Resource Management

#### **1 Introduction**

The objectives of the course are:

- (a) To use a holistic approach to provide skills needed in agricultural research and solving agricultural problems in the region.
- (b) To contribute to development of higher education in all areas of agricultural science and technology.

#### **2 Entry Requirements**

2.1 The common regulations for the Masters degrees in all faculties of the South Eastern Kenya University shall be applicable.

2.2 The following shall be eligible for admission to the Master of Science in Agricultural Resource Management:-

- (a) A holder of Bachelor of Science degree with at least Upper Second Class Honours or equivalent in Agricultural Science, Biological science, Environmental Science, Forestry and other relevant disciplines from the South Eastern Kenya University or any other equivalent institutions recognized by Senate.
- (b) A holder of a Bachelor's degree of Lower Second Class (2.1) above with a relevant postgraduate Diploma or other equivalent qualifications from the South Eastern Kenya University or any other equivalent institution recognized by Senate or with at least two years relevant experience, demonstrated through research and publications.
- (c) A holder of pass degree in any of the degree categories specified in (2.1) above with a relevant postgraduate Diploma or other equivalent qualifications from the South Eastern Kenya University or any other equivalent institution recognized by Senate, and at least two years of relevant work experience.

### 3 Transfer of Credit

A candidate may, on the recommendation of the Faculty Board and approval by Senate, be allowed to transfer up to a maximum of one third ( $\frac{1}{3}$ ) of the taught course units offered in the programme applicants seeking transfer of credits shall:

- (a) Send a formal application to the director, Board of Postgraduate studies through the Dean, Faculty of Agriculture seeking transfer of credits. Justification of request and evidence of credentials, which would support such a request, shall be attached to the application;
- (b) Application for transfer of credit shall be processed after payment of prescribed fees.
- (c) Applicants shall only be allowed to transfer units, which are equivalent to the same level offered in the South Eastern Kenya University.

### 4 Course Structure and Duration

- (a) The degree programme shall consist of six (6) core courses, four (4) major courses, two (2) elective courses and a project.
- (b) The programme shall be completed in a minimum of four (4) semesters and a maximum of twelve (12) semesters, each consisting of fifteen (15) teaching weeks.

- (c) The six core courses shall be taken in the first semester or equivalent before specializing in the major and elective courses. Each candidate shall be required to specialize in only one of the five major areas and take all the four courses in that major and two elective courses during the second and third semesters of study or equivalent. For each candidate, all the courses in the remaining four major areas shall constitute elective courses.
- (d) The minimum number of courses taken per semester shall be three and a maximum of six.
- (e) All the courses shall each be of 45 hours duration.
- (f) Each candidate shall be required to undertake a research project reading to writing of a project report.
- (g) The research theme shall be within the area of specialization and will be agreed upon between the candidate and the Faculty academic supervisors. The project research and report preparations shall be allowed a duration of two semester equivalent to ten course units.
- (h) Each candidate shall be required to present two seminars on the project research, one on completion of the research proposal and the other upon completion of the said research.



## 5 Course Outline

- ART 501 Biometrics, Computer use and Scientific communication
- ART 502 Project analysis
- ART 503 Remote sensing and global climate change
- ART 504 Agricultural Production Systems
- ART 505 Environmental management and postharvest technology
- ART 506 Development economics and marketing

### Major Areas

#### Plants, Ecosystems and Environment

- ART 511 Biodiversity and Biotechnology
- ART 512 Crop Production Systems
- ART 513 Agro-meteorology and Nutrient cycles
- ART 514 Crop protection

#### Animals, Ecosystems and Environment

- ART 521 Biodiversity and animal genetic resources
- ART 522 Animal nutrition and feed resources

- ART 523 Animal production system and animal health
- ART 524 Integrated management systems in animal production

#### Resource Economics

- ART 531 Agricultural Development Planning
- ART 532 Agricultural resource economics
- ART 533 Social economics and resource management
- ART 534 Resource policy and law

#### Soil, Water and Environment

- ART 541 Land use systems
- ART 542 Agricultural watershed management
- ART 543 Irrigation and Drainage Management
- ART 544 Biosystems Technology

#### Post harvest Technology and Management

- ART 551 Storage of Agricultural Products
- ART 552 Processing and preservation of Agricultural products

- ART 553 Agro-industrial Waste Management  
ART 554 Markets and Marketing of Agri.  
Products  
ART 600 Research Project

## 6 Examination Regulations

### 6.1 Written examination

- (a) Each course shall be examined separately by a written examination at the end of the semester in which it is offered.
- (b) Each written examination shall be allocated TWO hours.
- (c) Candidates shall be required to pass all examinations in the core courses and in the major areas of specification as well as the project before award of degree.
- (d) Written examinations in each course shall constitute 70% and the continuous assessment tests 30% of the final mark.
- (e) The performance in each course examination shall be graded as follows:-

70% – 100%	A
60% - 69%	B
50% – 59%	C
Below 50%	D

- (f) The pass mark in each examination shall be 50%.
- (g) A candidate who fails to obtain the pass mark in any course may, on the recommendation of the Faculty Board and approval of senate, be allowed to re-sit or re-take the failed papers in the next ordinary examination, up to a maximum of two times.
- (h) The mark for a re-sit shall be recorded as 50% in the candidate's academic record.
- (i) A candidate who fails in the second re-sit or re-take examination or fails to complete the course in the prescribed time shall on the recommendation of the faculty Board and approval by Senate be discontinued.

### 6.2 Research Project

- (a) The project shall be examined in accordance with the requirements for such examination in the faculty of agriculture.
- (b) Each candidate will submit, with the approval of the supervisors, a duly completed project report for examination by the main supervisors, and two independent examiners.
- (c) A candidate who fails the research project may on the recommendation of the Faculty Board of examiners be allowed to resubmit the project paper up to a maximum of TWO times.

- (d) A candidate who fails in the second resubmission of the project paper or fails to complete the project within the prescribed period shall on the recommendation of the Faculty Board and approval by Senate be discontinued.

### 7. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final degree award shall be Master of Science in Agricultural Resource Management of the South Eastern Kenya University.

## Department of Food Science and Technology

### 1 Introduction

The Department of Food Science and Technology is hosted at the School of Agriculture and Veterinary Sciences at the South Eastern Kenya University. The food industry is the largest industry in the world and needs highly trained professionals in food science and technology to ensure the supply, quality and safety of food. With the increasing requirement to add value to agricultural products, there is expressed need to produce qualified professionals who can work in

specific areas of food processing, preservation and value addition to meet the current industrial and nutritional challenges facing Kenya and Africa in general today. By equipping learners with highly developed practical skills, the department aims to contribute to the improvement of the quality of foods and to sustain the nutritional value of the food items for the increasing population.

The Department focuses on teaching, research, innovation and outreach in the latest developments in the production, handling, processing, packaging, nutrition, and safety of foods from the farm to the consumer's plate. This will contribute to the University's goal of producing graduates who can tackle the numerous challenges facing the society in achieving food security.

#### 1.1 Vision

A lead department in the development, production and processing of quality food products including the traditional and neglected food crops in the ASALs.

#### 1.2 Mission

To impart knowledge and skills that will contribute to the improvement of food production, handling and processing for maximum nutritional benefits to human health while achieving food security for the nation.

### 1.2 Objectives

- (a) To equip students with specialized knowledge and research skills on how to produce, handle, process and market agricultural products using the latest technologies that are sustainable, humane, and environmentally friendly.
- (b) To empower students to be self-employed in the food industry.
- (c) To produce professionals and middle level manpower, capable of spearheading the expanding food industry.

### Bachelor of Science in Food, Nutrition and Dietetics

Regulations and Syllabus for the Degree of Bachelor of Science in Food, Nutrition and Dietetics

### 1. Introduction

The Department of Food Science and Technology in the School of Agriculture and Veterinary Science offers a B.Sc. programme in Food, Nutrition and Dietetics. Since nutrition problems are multicausal, the course incorporates various courses: biological, physical, medical and social sciences to help the graduates of the programme address problems from a multidisciplinary point of view.

### 1.1 Career prospects

Graduates from the programme might go on for post graduate training in applied and basic nutrition, food science and technology, public health disciplines such as epidemiology, biostatistics, demography, maternal and child health etc. or alternatively, accept jobs with relevant ministries, non-governmental organizations (NGOs), schools and colleges.

## 2. Entry Requirements

### 2.2 KCSE Candidates

Candidates must in satisfying the minimum entrance requirements of grade of C+ for the University, offer passes at C or above in Biology or Biological Sciences, Chemistry and Physics/Mathematics or Physical Science and in Mathematics (or Geography, Home Science, Agriculture).

### 2.3 Other Candidates

Alternatively, admission may be granted to outstanding diploma holders from recognized Health, Agricultural or Veterinary Colleges with passes at credit or distinction.

### 3 Course Structure and Duration

- (a) The teaching for the degree shall extend over not less than four academic years each consisting of two teaching semesters.
- (b) Each student shall be required to take relevant attachment for a minimum period of eight weeks, after completion of third year of study and before entering the fourth year of study.
- (c) In the second semester of the fourth year, each student shall be required to carry out special research project relevant to the area of Food Nutrition and Dietetics.

### 4 Exemption from Courses

Students may be exempted from some courses on recommendation of the Faculty Board provided that:

- (a) Such candidates had taken these courses in a recognized University or equivalent institution.
- (b) Candidates seeking exemption apply in writing in the prescribed way specifying the courses for which exemption is desired and attaching evidence that these courses or their equivalents had been taken satisfactorily in recognized institutions.
- (c) A non refundable course exemption fee as may be determined by the university be paid with each application for exemption.
- (d) Such courses or their equivalents are to satisfy

the requirements of the professional training in the first year of study only as follows:

AZL 101	Agricultural Zoology
ACM 101	Chemistry
ABC 105	Biochemistry
AFN 101	Introduction to Sociology and Anthropology
ACR 101	Agricultural Botany
AFN 102	Human Anatomy and Physiology
ACR 104	Plant/Crop Physiology
ACR 116	Genetics
APH 101	Physics
AFT 101	General Microbiology
ACR 103	Mathematics

### 2. Course Outline

The students shall be required to take the courses listed:

#### Year 1

AFN 101	Intro. to Sociology and Anthropology
ACR 101	Agricultural Botany
AFN 102	Human Anatomy and Physiology
ABC 105	Biochemistry
ACR 103	Mathematics

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AZL 101	Agricultural Zoology	<b>Year 3</b>	
ACM 101	Chemistry	AFN 301	Analytical Methods in Nutrition & Food Sciences.
APH 101	Physics	AFN 302	Biostatistics
ACR 104	Plant/Crop Physiology	AFN 303	Nutritional Deficiencies and Related Diseases
AFT 101	General Microbiology	AFN 304	Food Microbiology and Parasitology
ACR 116	Genetics	AFN 305	Environmental Health
CCS 001	Communication skills	AFN 306	Food Processing, Preservation & Nutrition Quality
CCS 002	Fundamentals of Development	AFN 307	Applied Dietetics in Food Service Systems
CCS 008	HIV/AIDS	AFN 308	Maternal and Child Nutrition
<b>Year 2</b>		AFN 309	Nutritional Epidemiology
AFN 201	Introduction to Human Nutrition	AFN 310	Social Change and Development
ACR 201	Principles of crop production	AFN P400	Practical Attachment for 8 weeks
ACR 206	Introduction to Statistics	<b>Year 4</b>	
AAP 201	Principles of Animal production	AFN 401	Food & Nutrition Programmes at Community Level
AFN 202	Basics of Food Chemistry	AFN 402	Nutritional Assessment of Individuals / Communities
AFN 203	Human Nutrient Requirements	AFN 403	Nutrition Education
AEC 201	Macroeconomics	AFN 404	Health & Nutritional Sector Analysis
AEC 203	Rural Development	AFN405	Principles of Nutritional Problem Diagnosis
AEC 206	Microeconomic		
AFN 205	Food Toxicology		
AFN 206	Food Legislation		
AFN 207	Field Methods in Anthropology		
AFN 208	Demography		

AFN 406	Nutritional Planning, Mgt and Programme Evaluation
AEC 205	Principles of Resource Use and Management
AFN 410	Special Project

### 3. Examinations

#### First Year Semester 1

ACR103	Mathematics
AFN 101	Introduction to Sociology & Anthropology
AZL 101	Agricultural Zoology
ACM 101	Chemistry
CCS 001	Communication Skills
CCS 002	Fundamentals of Development and Applications to Kenya
ACR 116	Genetics

#### Semester 2

ACR 104	Plant/ Crop Physiology
APH 101	Physics
ABC 105	Biochemistry
AFN 102	Human Anat. and Physiol.
AFT 101	General Microbiology
ACR 101	Agric. Botany
CCS 010	HIV/AIDS

#### Year 2

##### Semester 1

AFN 201	Intro to Human Nutrition
ACR 206	Statistics I
ACR 201	Princ. of Crop Production.
AEC 206	Microeconomic
AFN 203	Food Toxicology
AFN 204	Food Legislation

##### Semester 2

AAP 201	Princ. Of Animal Prod.
AFN 202	Basics of Food Chemistry
AFN 203	Human Nutrient Req.
AEC 201	Macroeconomic
AFN 207	Field Methods in Anthropol.
AFN 208	Demography
AEC 203	Rural Development

#### Year 3

##### Semester 1

AFN 302	Biostatistics
AFN 304	Food Microbio. & Nutrit.
AFN 306	Food Proc. Preserv. & Nutrition Quality
AFN 308	Maternal & Child Nutrition

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### Semester 2

AFN 303	Nutri. Deficiencies & Related Diseases
AFN 305	Environmental Health
AFN 307	Applied Dietetics in Food Serv. System II
AFN 309	Nutritional Epidemiology
AFN 310	Social Change and Dev.
AFN 301	Anal. Meth. in Nutr. & Food Science

Student “attachment” by evaluation on sits written report and oral presentation during semester I of the Fourth Year.

### Year 4

#### Semester 1

AFN 403	Food & Nutr. Prog. at Community Level
AFN 402	Nutri Assess. Of Individuals /Comm.
AFN 403	Nutritional Education
AFN 400	Practicum(Attachment) special project Written report and Oral Presentation

#### Semester 2

AFN 404	Health /Nutri. Sector Analysis
AFN 405	Princ. of Nutri. Problem Diagnosis

AFN 406	Nutritional Plan Mgt. & Evaluation
AFN 410	Special Project
AEC 205	Principles of Resource Use and management

### 4. Examination Regulations

The conduct of the examinations shall be governed by the following regulations.

- 4.1 No candidate shall be permitted to an examination unless he/she has satisfactorily attended the prescribed course of study.
- 4.2 For purposes of these regulations, Farm Practice shall be defined to be part of the Fourth Year.
- 4.3 All examination procedures shall be governed by the following:
  - (a) Each course shall be examined out of total of 100%.
  - (b) The pass mark in each course examination shall be 40% and graded as follows:
 

70 – 100%	=	A
60 – 69%	=	B
50 – 59%	=	C
40 – 49%	=	D
39% and below	=	F



- (c) Written examination in each course shall constitute 70% and Coursework Assessment Tests (CATS) are the remaining 30% of the total marks.
- (d) The attachment shall be examined by written reports and oral presentation. The attachment score shall be graded as a pass (P) or fail (F) only and shall not be used in the degree classification.
- (e) The special Research Project shall be evaluated by written report only and oral presentation.
- (f) For purpose of regulation 6.3 (a) - (e), all papers shall carry equal weight.
- (g) A candidate who fails to attain the pass mark in seven or more papers in any year shall on recommendation of the Faculty Board and approval by Senate be discontinued from the course.
- (h) A candidate who fails to attain the pass mark in five to six papers may on recommendation of the Faculty Board and approval by Senate be allowed to repeat the year with the option of repeating externally. Candidates who repeat the year externally shall be required to pay examination fees and any other fees that the University may deem applicable. Candidates who repeat the year shall be required to sit examinations in the failed subjects only.
- (i) In any year a candidate who fails to attain the pass mark in four papers or less may on recommendation of the Faculty Board and approval by Senate be allowed to sit supplementary examinations in the papers failed, within a period of three months from the last date of the ordinary examinations.
- (j) A candidate who fails to attain a pass mark in a supplementary examination shall on recommendation of the Faculty Board and approval by Senate be allowed to resit the examination ONCE ONLY, as long as the total of such examinations do not exceed eight in number during any one sitting.
- (k) A candidate failing a resit supplementary shall on recommendation of the Faculty Board and approval by Senate be discontinued from the degree course.
- (l) Any supplementary examination shall be marked out of 100% but the pass score shall be reduced to 40% only.
- (m) For purposes of evaluation of all supplementary examinations, regulations 6.3 (g) – (i) shall apply.
- (n) No candidate shall be permitted to repeat any year more than once for academic reasons only.

4.4 The final award of the degree of Bachelor of Science (Food Nutrition and Dietetic) shall:-

- (a) Be made to candidates who have completed and passed examinations in all the courses of study including attachment.
- (b) Be based on the average score of all the examinations of the courses taken in the second, third and fourth years of study.
- (c) Be classified into First Class Honours, Second Class Honours (Upper or Lower Division) and Pass, provided that in order to qualify for award of honours degree, a candidate shall not have repeated either second, third or fourth year of study or have had resit supplementary from any of the courses in the same years.

4.5 In arriving at the decision as to the degree classification for each candidate, the Faculty Board of Examiners shall have regard to the overall marks obtained by the candidate and shall apply the principle that a mean score of:

70 – 100%	First Class Honours
60 – 69%	Second Class Honours (Upper Division)
50 – 59%	Second Class Honours (Lower Division)
40 – 49%	Pass

### 5. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Food, Nutrition and Dietetics of the South Eastern Kenya University.

### 6. Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## Diploma Programmes

### University Diploma in Food Technology

Regulations and Syllabus for the University Diploma in Food Technology

#### 1 Introduction

The food industry in Kenya is currently being manned by inadequately trained hands on processors (diploma and certificate) and frontline supervisors. Therefore maintenance of quality to cope with regional and

international trade is difficult. The traditional and existing food technology programs in local tertiary institutions do not emphasize processing of the traditional and neglected crops and products in their teaching. Such crops include cassava, sweet potato, sorghums, millets and pulses. The Diploma in Food Technology will emphasize on these crops and add value to other agricultural crops. Thus, food technologists will be trained on production, processing, packaging and marketing of food products to ensure quality standards and the nutritional needs of consumers are met. The course will also focus on entrepreneurship, and hence the graduates can be self-employed in addition to working in all food related factories. The diploma program will equip learners with the highly developed practical skills needed to work in the food industry or prepare them for further studies in a range of related disciplines.

### 1.1 Justification

The annual output of graduates in the field of Food Science in Kenya are less or closer to 200. With the increased demand for value addition to agricultural products, there is an urgent need to produce qualified professionals who can work in specific areas of food processing, preservation and value addition to meet the current industrial and nutritional challenges currently facing sub-Saharan Africa and Kenya in particular.

### 1.2 Career prospects

Students completing the Food Technology diploma program will be prepared for careers in a variety of areas:

- (a) Food industry: quality control, product development, food marketing, food processing, food microbiology, food engineering and food analysis
- (b) Food marketing: Sales, packaging and distribution of food products
- (c) Government agencies: concerned with food regulations such as Kenya Bureau of Standards and local health departments and other agencies
- (d) Further studies: join the undergraduate programs in related discipline.

### 1.3 Programme objectives

The objective of this course is to produce personnel who at the end of the course will be able to:-

- (a) Apply the acquired skills and knowledge to produce quality, nutritious wholesome food with acceptable shelf-lives.
- (b) Promote value addition and analyze the basics of the market-driven products.
- (c) Participate in the development and expansion of the food industry in Kenya through self-employment.
- (d) Enroll for further studies in the relevant Bachelor's degree program or other relevant disciplines.

### 2 Admission Requirements

- (a) Holders of KCSE with at least a mean grade of C plain and at least C- in Biology and either Mathematics or Geography or Chemistry or Physics.
  - (b) Holders of KCE or its equivalent with at least division II with passes in Biology and either Mathematics or Geography or Chemistry or Physics.
  - (c) Holders of KACE or its equivalent with at least one principal and with at least a subsidiary pass in Biology and either Mathematics or Geography or Chemistry or Physics.
  - (d) Holders of a certificate in Food Science and Technology and any other relevant biological sciences from recognized institutions.
  - (e) Holders of diploma, higher diploma or degree in any of the specified fields in 2(d).
- (e) Each candidate shall be required to undertake field attachment lasting 8 weeks and submit a written field attachment report at the end of the course.
  - (f) The course may also be offered through open distance learning and other multimedia learning modes.

### 4 Course Structure

#### Year 1

##### Semester 1

PAS 001	Communication Skills
PAS 003	Gender and HIV/ AIDS
PAS 008	General Mathematics
PAS 014	General Physics
PAS 015	General Chemistry
BE 016	General Economics
FST 009	Principles of Crop and Animal Production
PAS 002	Introduction to ICT

##### Semester 2

PAS 017	General Microbiology
FST 010	Introduction to Food Technology
FST 011	Food Chemistry and Biochemistry
FST 012	Microbiology I
FST 013	Sanitation & Safety in Food Handling
FST 014	Principles of Food Processing and Preservation
FST 015	Biostatistics
FST 016	Human Nutrition

### 3 Course Structure and Duration

- (a) The diploma course shall consist of course work, practicals and examination.
- (b) The course shall be offered on full time basis, and shall cover a minimum of two (2) and maximum of four (4) semesters, each semester consisting of 15 weeks.
- (c) All the course units shall be compulsory.
- (d) Each candidate shall be required to undertake a project and submit a written project report at the end of the course.

## Year 2 Semester 1

FES 020	Introduction to Environmental Management
FST 020	Food Engineering
FST 021	Fermentations and Enzyme Use in Food Technology
FST 022	Food Microbiology II
FST 023	Novel Foods
FST 024	Food Quality Assurance
BE 020	Entrepreneurship
FST 025	Food Analysis
FST 026	Field/Industrial Attachment* for 8weeks

## Semester 2

FST 027	Edible Fats and Oils Technology
FST 028	Dairy Technology
FST 029	Beverages Technology
FST 030	Fish and Meat Processing Technology
FST 031	Fruits , Vegetables, Sugar and Honey Processing Technology
FST 032	Processing of Cereals and Starchy Root Crops
FST 033	Food Production Management
FST 034	Research Project

## 5 Examination Regulations

The following are the examination regulations:

- (a) Each course shall be examined by a written paper lasting two hours at the end of the semester in which it is offered.
- (b) Each candidate shall be required to attend at least two thirds of all the prescribed lectures and practicals to qualify for registration for examination.
- (c) Each examination shall be graded out of 100%.
- (d) The written examination shall account for 70% and continuous assessment test for 30% of the final mark.
- (e) The pass mark for each paper shall be 40%.
- (f) A candidate who fails in any unit shall be allowed to sit for supplementary examinations only twice in the failed examination(s).
- (g) The mark for a supplementary paper shall be recorded as 40% (Pass).
- (h) The project shall be examined in two stages: Oral presentation that shall account for 50% and written report that shall account for 50%, with the total mark expressed out of 100%.
- (i) Candidates who fail in the project examination shall be allowed to resubmit only once.

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- (j) The grade to be awarded to the candidate shall be based on the aggregate score calculated from all the examinations. The grading will be awarded as follows:

70-100%	A	Distinction
55-69%	B	Credit
40-54%	C	Pass
0-39%	D	Fail

### 6. Award of Diploma

The general rules and regulation governing award of diplomas of the South Eastern Kenya University and School of Agriculture and Veterinary Sciences shall apply. The final diploma awarded shall be Diploma in Food Technology of the South Eastern Kenya University.

**School of Pure  
and  
Applied Sciences**

## School of Pure and Applied Sciences

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### 1 Introduction

The School of Pure and Applied Sciences is one of the Schools born from the restructuring School of Liberal Arts and Sciences which was one the pioneer schools at establishment of the University. The School consists of three (3) departments namely; Physical Sciences, Biological Sciences, and Mathematics and Actuarial Sciences. All the Departments are located at the main campus. All the Departments in the School of Pure and Applied Sciences enjoy adequate facilities for teaching and research within the University. The facilities include the computer laboratory and library. The school also houses the Atomic Absorption Spectroscopy. Education provided by the School is based on the latest knowledge in science and technology, including the results of its own research. Students are offered excellent conditions for study in wide spectrum of programmes. The graduates are well trained to represent not only high professional, but also personal and human qualities. As a part of University, the School guarantees freedom.

#### 1.1 Vision

A globally competitive centre of excellence in teaching, research and innovation in pure and applied sciences.

#### 1.2 Mission

To provide quality and transformative education through teaching, research, extension, innovation and entrepreneurship with emphasis on natural resources.

### 1.3 Objectives

The general objective of the school is to train professionals in pure and applied sciences who are competent to take up careers in relevant fields. The specific objectives are:

- (a) To provide students with a solid foundation of technical knowledge in pure and applied sciences.
- (b) To impart knowledge and skills on communication, leadership/management and ethics.
- (c) To provide convectional and novel teaching methodologies including computer tool and practical to provide the best opportunities for students to learn.
- (d) To offer programs attractive to outstanding students interested in the field of pure and applied sciences.
- (e) To attract qualified academic and technical staff.

The school has three departments, namely:

- (a) Department of Physical Sciences
- (b) Department of Biological Sciences
- (c) Department of Mathematics and Sciences



## DEPARTMENT OF PHYSICAL SCIENCES

### 1 Introduction

The department of Physical Sciences is a young and a fast growing department resident in the School of Pure and Applied Sciences in the South Eastern Kenya University (SEKU). The department's core mandate is to train personnel in the field of Natural Sciences and Technology so as to meet the market demands in Academics, Research and Industrial sectors. To meet these challenges, the department is prepared to offer a first class training and research through focussed programmes in Physics and Chemistry. Programmes envisaged to be offered in the department are attractive and provides opportunities that are market driven and able to meet today's socio-economic challenges.

#### 1.1 Vision

A centre of excellence in training, research and innovation in Natural Sciences & Technology

#### 1.2 Mission

To provide world class standard training and innovation for sustainable individual prosperity and development

### 1.3 Objectives

The main objective of the department is to meet the present and prospective market demands for the well-trained graduates in natural sciences. The specific objectives are:

- (a) To produce graduates with high quality training in natural sciences so as to make a significant contribution to the industry and the society.
- (b) To impart intellectual and professional skills to graduates irrespective of their career choice after graduation.
- (c) To enable graduates exercise sound judgment, personal responsibility, originality and initiative in making decisions related to natural sciences in complex and un-predictable environments.
- (d) To develop the ability to analyze, integrate, critically evaluate and apply new information and techniques.
- (e) To develop competence in both theory and practice in areas of natural sciences.
- (f) To offer a structured, coherent but flexible programmes including a range of learning and assessment methods relevant to the needs of employers and society.
- (g) To develop students into graduates able and motivated to continue learning throughout their careers to meet the challenges of the changing world.

### 1.4 Graduates job prospects

The programs to be offered by the department will lead to a wide and great scope of careers in private and public sectors including, public service, industries, research institutions and NGOs. Our graduates are envisaged to find ready opportunities in areas of academics, quality control and analysis, research, environment issues production & marketing among others. Such opportunities are available in Agro-Chemical, Health, Food, Paint and Manufacturing industries; Government Ministries and Parastatals as well as in Research Institutions. In academics, there are teaching opportunities in High Schools, Colleges, Polytechnics and Universities. A number of graduates will have the technical knowhow and entrepreneurship skills to establish and manage their own businesses, thereby creating employment for themselves and others. Above all, our graduates will be equipped with diverse skills, which allow them to adapt easily to other related career in the ever-changing world.

### 1.5 Academic Programmes

Currently, the department offers a four year Bachelor of Science in Chemistry (B.Sc. Chemistry), Bachelor of Science (Electronics) and Bachelor of Science in Physics (B.Sc. Physics) degree programmes.

## BACHELOR OF SCIENCE IN CHEMISTRY

Regulations and syllabus for the Bachelor of Science in Chemistry

### 1 Introduction

Bachelor of Science in chemistry is a foundation course in chemistry that has material covering the traditional branches of chemistry namely organic, inorganic and physical. It also has courses from other branches of chemistry such as analytical chemistry, environmental chemistry and industrial chemistry as well as other disciplines such as physics. It seeks to explain factors that cause reactions to occur; how they occur and their adverse and non-adverse effects on our well-being. It prepares one to pursue postgraduate studies in any of these fundamental branches.

The students in the final two years, in addition to the traditional core chemistry courses designed for chemistry majors, will choose specialist options in the field of analytical chemistry. They will also undertake a research project/or dissertation in their final fourth year.

Students who intend to specialize in chemistry will be expected to complete a total of 12 courses in each

of the first two academic years. The first two years comprise Eight (8) core chemistry courses covering the traditional areas of inorganic, organic and physical chemistry, as well as a basic grounding in mathematics and computer skills (including use of World Wide Web). In the final two years, they will take a minimum of ten courses in each year made up of core courses and requisite number of approved electives. Students, who wish to study chemistry but do not intend to specialize in it, will be advised as to which units to take.

### 1.1 Course objectives

At the end of the course the graduate will:

- (a) Have acquired a broad based knowledge of chemistry.
- (b) Be able to address chemistry related problems that confronts us in various fields and also to pursue further studies in chemistry related fields.

## 2 Admission Requirements

- (a) A candidate who wishes to register must have the minimum university general admissions requirements.
- (b) In addition to meeting (a) above, candidates wishing to register for Bachelor of Science in Environmental Chemistry must have any of the following:

- (i) Kenya certificate of secondary Education (KCSE) or equivalent qualifications, with passes in at least three subjects in either of the following two alternatives (A or B).

Alternative A		Alternative B	
Chemistry	C+	Physical Sciences	C+
Biology	C+	Biological Sciences	C+
Physics	C+	Geography	C+
Geography	C+	Mathematics	C+
Mathematics	C+		

- (ii) Kenya Advanced Certificate of Education (KACE), or equivalent qualification with at least two principal passes (of which one must be in chemistry).
- (iii) Ordinary diploma/ Higher National Diploma or Equivalent qualifications in the sciences with at least a pass.
- (iv) Science/Technical Diploma from teachers training colleges or equivalent qualifications in the sciences.
- (v) A Science/Technology based degree or a non science based degree with a minimum of C+ in chemistry or its equivalent from an institution recognized by the university.

- (vi) Candidates who may not have fulfilled conditions in (b) above may be considered for admission provided they present evidence of having undertaken and passed relevant bridging courses from an institution recognized by the university and MUST have scored at least grade C in the subject(s) for which bridging has been taken.

### 3 Courses Offered

#### Year 1

##### All Units Compulsory

SCH 101	General and Inorganic Chemistry
SCH 102	Introduction to Organic Chemistry, Chemistry of Alkanes and Cycloalkanes
SCH 103	General and Physical Chemistry
SCI 104	Foundations of computer Science
SCA 101	Safety Method in the laboratory
SMA 101	Basic Mathematics
SMA 103	Calculus I
SMA 104	Calculus 2
SCI 101	Elements of Physics I
CCS 001	Communication Skills
CCS 009	Element of Economics
CCS 010	HIV and AIDS

#### Year 2

##### All Units Compulsory

SCH 201	Chemistry of the Main Blocks Element
SCH 202	The Chemistry of Alkyl Halides, Alcohols, Ethers Alkenes, alkynes and Aromatic Compounds
SCH 203	Thermodynamics I and Thermochemistry
SCH 204	Introduction to Reaction Kinematics and Electrochemistry
SCH 205	Group Theory and Its Chemical Applications
SCH 206	Organic Acids, Amines, Esters and Phenols
SCE 201	Introduction to Environmental chemistry
SCI 202	Introduction to unit operations
SCI 203	Elements of Physics II
SCA 201	Quantitative Analysis
SMA 208	Ordinary Differential Equations
SMA 209	Elements of Algebra

#### Year 3

SCH 301	Theory of Spectroscopy
SCH 302	Stereochemistry and Synthesis of Organic Compounds
SCH 303	Thermodynamics II and Phase Equilibria

SCH 304	Coordination Chemistry
SCH 305	Amino acids, Peptides, Proteins, Carbohydrates and Nucleic Acid
SCH 306	Spectroscopy as applied to Organic Chemistry
SCA 301	Instrumental Methods of Analysis I

### Elective Units

SCH 307	Extractive Metallurgy
SCH 308	Chemistry of secondary Biomolecules
SCA 303	Separation Techniques and Chromatography
SCA 304	Computer Application in Chemistry
SCA 305	Statistics for Chemists

### Year 4

SCH 401	Chemistry of Transition Elements
SCH 402	Heterocyclic Chemistry
SCH 403	Surface and Colloid Chemistry
SCH 404	Organometallic Chemistry
SCH 405	Further Chemical Kinetics and Electrochemistry
SCH 406	Solid State Chemistry
SCH 407	Statistical Thermodynamics

### Elective Units

SCH 408	Nuclear and Radiation Chemistry
SCH 409	Applied Organic Chemistry
SCH 410	Introduction to Quantum Chemistry
SCH 411	Special Topics In Organic Chemistry
SCH 412	Research Project In chemistry
SCA 403	Nanochemistry: A Chemical Approach to Nanomaterials
SCE 406	Hazardous Waste Management

## 6. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Pure and Applied Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Chemistry of the South Eastern Kenya University.

## 7. Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

### **BACHELOR OF SCIENCE IN PHYSICS**

Regulations and syllabus for the Degree of Bachelor of Science in Physics

#### **1 Introduction**

The course units below are offered to B.Sc. degree programme. The unit combinations chosen by the students must be approved by the Dean, Faculty of science. There is opportunity to major in physics during the third and fourth years of studies.

#### **2. Entry Requirements**

Candidates must have attained the minimum University and the faculty of Science entry requirements. In addition the prospective candidates must have a minimum of C+ in Physics and C+ in physical Sciences.

#### **First and Second Years**

- (a) To continue with Physics in the 2nd Year a candidate must take the following units; SPH 101, 102 and 103 and to continue with physics in 3rd year the candidate must take and pass SPH 201, 202, 203 and 204.
- (b) To major in physics from 3rd year a candidate must take and pass all core units in the 1st and 2nd year.

#### **Third Year**

- (a) Majors in Physics must take all the FIVE Core units plus a minimum of FIVE units from the Electives according to area of specializations (see Table below). Anybody wishing to register for more than five elective units must seek approval from the Chairman of Department.
- (b) None-majors taking Physics (Physics with another subject) must take all the FIVE Core units.
- (c) None-majors taking mathematics are advised to choose units from courses: SMA 301, SMA 303, SMA 308, SMA 322, SMA323, SMA326, SMA341, AND SMA373.

#### **Fourth Year**

- (a) Majors in Physics must take the FIVE Core units plus a minimum of FIVE units from the Elective according to area of specialization (see table below). Anybody wishing to register for more than five elective units must seek approval from the chairman of the Department.
- (b) Non-majors in Physics (Physics with another subject) must take all the FIVE Core units.

### 3 Optional Groups for Specialization

GROUPS	THIRD YEAR	FOURTH YEAR
Theoretical	SPH 306, 308, 309, 313, 314	SPH 406,407,409,420,411, or 412 or 413 or 414
Earth/ Environmental Sciences	SPH 306, 309, 311, 307, or 314, 308 or 310 or 313	SPH 406,409,415,420,416 or 417
Condensed Matter	SPH 306, 308, 309, 307 or 314, 312 or 313	SPH 406, 407, 409, 408, 420 or 410 or 411 or 412 or 419
Electronics	SPH 307, 308, 309, 312, 313 or 314	SPH 406, 409, 410, 420, 418 or 419

### 4 Courses Offered

#### Year 1

SPH 101	Mechanics I
SPH 102	Electricity and Magnetism I
SPH 103	Waves and Optics

#### Elective

SPH 104	Man and the Physics World
1st Semester Courses: SPH 101, SPH 104	
2nd Semester Courses: SPH 102, SPH 103	

### Co-requisite Courses:

Student taking physics with Mathematics must register for SMA 103, SMA 104, and SMA 106.

### Year 2 Core Courses

SPH 201	Mechanics II
SPH 202	Electricity and Magnetism II
SPH 203	Structure and Properties of Matter
SPH 204	Mathematical Physics I
1st Semester Courses: SPH 201, SPH 204	
2nd Semester Courses: SPH 202, SPH 203	

### Co-requisites:

Student taking physics with mathematics must register for: SMA 201, SMA 203, SMA 221 AND SMA 204, and SMA 208

### Year 3

SPH 301	Practical Physics I
SPH 302	Thermodynamics
SPH 303	Solid State Physics
SPH 304	Electrodynamics
SPH 305	Classical Mechanics

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### Electives

SPH 306	Mathematical Physics II
SPH 307	Introductory Electronics
SPH 308	Physical Optics
SPH 309	Quantum Mechanics I
SPH 310	Environmental Physics
SPH 311	Introductory Geophysics
SPH 312	Digital Electronics
SPH 313	Computational Physics
SPH 314	Practical Physics II

### 1st Semester Courses:

SPH 301, SPH 305, SPH 306, SPH 307, SPH 308,  
SPH 309, SPH 311,

### 2nd Semester Courses:

SPH 302, SPH 303, SPH 304, SPH 310, SPH 312,  
SPH 313, SPH 314.

### Prerequisites:

SPH 307 for SPH 312

### Year 4

#### Core Courses:

SPH 401	Atomic Physics
SPH 402	Nuclear Physics
SPH 403	Solid State Physics II

SPH 404	Statistical Physics
SPH 405	Electrodynamics II

### Electives.

SPH 406	Practical Physics III
SPH 407	Mathematical Physics III
SPH 408	Physics of Materials
SPH 409	Quantum Mechanics II
SPH 410	Applied Electronics and Microprocessors
SPH 411	Surface Physics
SPH 412	Plasma Physics
SPH 413	Astrophysics
SPH 414	Elementary Geophysics
SPH 415	Applied Geo Physics
SPH 416	Rock Magnetism and Paleomagnetism
SPH 417	Aeronomy
SPH 418	Power Electronics
SPH 419	Quantum Electronics
SPH 420	Projects

### 1st Semester Courses:

SPH 401, SPH 404, SPH 406, SPH 407, SPH 409,  
SPH 410, SPH 412, SPH 414, SPH 415, SPH 417



## 2nd Semester Courses:

SPH 402, SPH 403, SPH 405, SPH 408, SPH 411, SPH 413, SPH 416, SPH 418, SPH 419, SPH 420

## Prerequisites.

SPH 312 for SPH 410

## 5. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Pure and Applied Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Physics of the South Eastern Kenya University.

## 6. Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## BACHELOR OF SCIENCE ELECTRONICS

Regulations and Syllabus for the Degree of Bachelor of Science in Electronics

## 1. Introduction

In the last few decades since the introduction of the semiconductor diode, very dramatic changes have occurred in the electronics industry. Advancements are noted every day and experts are now required not only to repair and service products but also (and mainly) in the design and development of new devices. Bachelor of Science in Electronics is an applications oriented program that includes studies in applied mathematics and physics, electronics principles, techniques, materials and devices. The program provides students with a management background that promotes advancement within their field. The course covers basic computer applications, electrical principles, analogue and digital circuits, electromechanical converters, electronic communication and microprocessor design and programming. To equip the graduates with the ability to best exploit their Electronics skills, it is evident that some expertise in enterprise formation will be invaluable to the graduate scientist who is interested in the technology start-up market.

### 1.2 Justification

Smart electronic systems are an ever-increasing part of daily life. They are encountered in the home and in the workplace, controlling the environment

within our buildings, safely regulating the automobiles and revolutionizing the way in which we spend our free time. The electronic systems of today are highly complex and miniaturized so that they can fit in our pockets, can be worn without discomfort (indeed they will be soon embedded in our clothing), or occupy as little desk space as possible. Examples of these systems include mobile phones, PCs, Energy meters, and other electronic instruments that are used today. It is clear that the extraordinary growth in the Electronics sector is set to continue far into the future and that the need for talented people and new companies to design, test, install and maintain these electronic systems has never been greater. Bachelor of Science in Electronics graduates will normally work as members of “engineering teams” in applied design, product development, installation, maintenance, manufacturing, production, or operations. They may also work in technical services including field engineering, customer support, marketing, sales and telecommunications. It is on this background that the Department of Physical Sciences is developing this degree programme in electronics.

### 1.3 Program Objectives

The general objective of this programme is to provide the student with thorough understanding of the fundamental principles of electronics and its applications.

The specific objectives of the program are:

- (a) To equip the graduate with skills to design and analyse electronic circuits.
- (b) To impart entrepreneurial skills to graduates to the area of applied electronics.
- (c) To enable graduates to build a career in areas of applied physics and electronics.

## 2. Admission Requirements

The candidate must satisfy the minimum university entry requirements, i.e., an aggregate of C + (Plus) in KCPE.

### 2.1. KCSE Candidates

In addition to satisfying the above University requirement, candidates should possess pass at C+ or above in Physics or Physical sciences and must have a C+ in Mathematics. Candidates who satisfy the minimum university entry requirements but have a C (minus) in Physics/Mathematics shall be eligible for admission after taking and passing bridging courses in Physics/Mathematics offered by the South Eastern Kenya University or any other institution recognized by Senate.

## 2.2. Other Candidates

Admission to the degree course may also be granted to the following candidates:

Holders of KACE or equivalent with minimum principal pass in Physics/Mathematics and at least a subsidiary pass in Chemistry.

- (a) Holders of Diploma in Electronics with at least credit pass or equivalent from an Institution recognized by the University Senate, and with two years or more relevant working experience.
- (b) Holders of Higher National Diploma or equivalent in Electronics or other related fields from an institution recognized by the University Senate.
- (c) Holders of a Degree in Physical Sciences or related fields from an institution recognized by the University Senate.

## 3. Credit Transfer and Exemptions

### 3.1. Credit Transfer

A candidate from a recognized university, or any other equivalent institution recognized by the South Eastern Kenya University Senate, wishing to transfer to B.Sc.

Electronics programme shall be allowed to transfer credits from his/her University if those credits are deemed relevant and meet the required minimum contact hours. The transfer of credits shall not be more than a third ( $1/3$ ) of the total prescribed credits and/or course units required for the award of B.Sc. Electronics.

### 3.2. Exemptions

Senate may exempt students from some courses on recommendation of the School Board provided that:

- (a) Such candidates had taken those courses in a recognized University or equivalent institution and had achieved a pass grade.
- (b) Candidates seeking such exemptions submit a duly completed senate approved form specifying the courses for which exemption is desired and attach evidence of 3.2 (a) above, showing contents of what was studied.
- (c) Courses specified in 3.2 (b) are to satisfy the requirements of the first year of study only. Candidates requiring exemptions from 2nd, 3rd and 4th year courses shall in the absence of credit transfer be required to sit University examination and attain at least a pass grade, which will subsequently be used in the degree classification.

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- (d) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programme.
- (e) A non-refundable course exemption fee as determined by the University shall be paid with each application for exemption.

### 4. Course Structure and Duration

The programme will be offered under three modules, full time (module I/II) and through Open Distance Education Learning (ODEL) (Module III) for students who cannot attend regular university programme.

#### 4.1. Full time

- (a) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 15 teaching weeks and two (2) weeks for examination.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree
- (c) A candidate shall participate and complete course work and practical assignments as

prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.

- (d) Each student shall be required to undertake satisfactory field attachment of eight (8) weeks as stipulated in the Course structure. During the field practice, students are expected to embark on a research project, which they have to complete and present at a seminar during the fourth year of study.

#### 4.2. Open Distance Learning

The delivery mode of these programmes will be use of open distance education learning modes involving the use of various media (multi-media modes of learning) and will be largely home based.

### 5. Examination Regulations

The conduct of examinations shall be governed by the following regulations:

No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study. For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the fourth year.

All examination procedures shall be governed by the following:

- (a) Each course examination shall be examined out of a total of 100%.
- (b) The pass mark in each course examination shall be 40% and graded as follows:-

70-100%	=	A
60-69%	=	B
50-59%	=	C
40-49%	=	D
39% and below	=	FAIL
- (c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs 20% and practical /field trip reports 10%.
- (d) Field Practice/Attachment shall be examined by oral examination and written reports. The grades shall be used for degree classification. Evaluation of the students' performance while in the field shall constitute field assessment 30%, written reports 40% and oral presentations 30%.
- (e) Research Projects shall be examined through written reports and presentations, and shall be graded to use in the degree classification. The research project proposal shall constitute 30%, and the report shall constitute 60% while oral presentation shall constitute 10%.
- (f) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.
- (g) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School academic Board and approval by Senate be discontinued from the degree programme.
- (h) A Candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate who opts to attend classes in the failed courses shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.

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- (i) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- (j) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
- (k) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.

### 6. Award

The final degree of B.Sc. Electronics shall be:

- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/Attachment.
- (b) Based on the average score of all examinations of courses taken in the entire course duration.
- (c) Classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass,

provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.

- (d) In arriving at the decision as to the degree classification for each candidate, the School Board of Examiners shall have to pay regard to the overall marks obtained by the candidate and shall apply the principle that a mean score of:

70 - 100%:	First Class Honours
60 - 69%:	Second Class Honours (Upper Division)
50 - 59%:	Second Class Honours (Lower Division)
40 - 49%:	Pass.

### 7. Study Intermission

A student may intermit studies at any time, for good cause conveyed in writing to the Academic Registrar, and may resume later after duly notifying the same office. During the entire period of intermission, the student shall be required to keep his/her registration active by paying the prescribed registration charges.

## 8. Course Outline

### Year 1

#### Semester 1

CCS 001	Communication skills
CCS 010	HIV/AIDS
MAT 100	Discrete Mathematics
MAT 101	Calculus I
PHY 110	Mechanics
BPS 103	Principles of Management
ELC 101	

#### Semester 2

CCS 009	Elements of Economics
MAT 103	Probability and Statistics I
MAT 102	Calculus II
PHY 121	Introduction to Quantum Physics
ELC 102	Introduction to Electronic devices
ELC 103	Introduction to Programming

### Year 2

#### Semester 1

MAT 201	Linear Algebra I
MAT 220	Vector Analysis
PHY 210	Waves and Oscillations
PHY 211	Electricity and Magnetism I
ELC 201	Digital Electronics I
ELC 203	Assembly Language Programming

### Semester 2

PHY 213	Geometrical Optics
PHY 220	Electricity and Magnetism II
PHY 221	Quantum Mechanics
ELC 202	Transducer theory
ELC 204	Digital Electronics II
ELC 205	Introduction to Engineering Drawing

### Year 3

#### Semester 1

MAT 303	Ordinary differential Equations I
MAT 305	Complex Analysis I
PHY 311	Properties of Matter
ELC 301	Alternating Circuit Theory
ELC 302	Transistors
ELC 304	Research methods

### Electives (student to choose one elective)

ELC 321	Communication Electronics I
ELC 331	Computer Electronics I

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### Semester 2

MAT 321	Numerical Analysis I
MAT 330	Ordinary Differential Equations II
PHY 324	Solid State Physics
ELC 300	Electromechanical & Control Systems
ELC 303	Amplifier Circuits
ELC 312	Optoelectronic

### Electives (student to choose one elective)

ELC 322	Communication Electronics I
ELC 332	Computer Electronic II
ELC 305	Industrial Attachment (8 weeks)

### Year 4: Semester 1

MAT 400	Partial Differential Equations
PHY 410	Semiconductor Physics
ELC 400	Electronic Projects I
ELC 402	Integrated Circuit Technology
ELC 403	Electromagnetic Communications

### Electives (student to choose one elective)

ELC 411	Microwave Devices
ELC 412	Digital Communications
ELC 431	Microprocessors I

### Semester 2

PHY 423	Electromagnetic theory
ELC 401	Electronic Project II
ELC404	Integrated Circuit Design
ELC 405	Analogue Computation & Simulation
BPS 407	Entrepreneurship skills

### Electives (student to choose two elective)

ELC 421	Power Electronic Devices
ELC 422	Fibre Optic Communications
ELC 432	Microprocessors II

## DEPARTMENT OF BIOLOGICAL SCIENCES

### 1 Introduction

The Department of Biological Sciences is domiciled in the School of Pure and Applied Sciences located at the main campus in Kitui. The Department's main mandate is to train personnel in various fields of biological science at both undergraduate and postgraduate levels. The programmes offered are designed to meet the job market demand in academic, research and industrial establishments.



### 1.1 Vision

A centre of excellence in training, Research and Development in Biological Sciences and related disciplines.

### 1.2 Mission

To provide quality and transformative education through teaching, research, extension, innovation and entrepreneurship in life sciences.

### 1.3 Objectives

The general objective of the Department is to train professionals in biological sciences who are competent to take up careers in relevant fields. The specific objectives are:

- (a) To impart knowledge and skills in the field of biological sciences and related fields.
- (b) To provide conducive learning environment through utilization of conventional and novel teaching skills.
- (c) To offer market-driven programs in the field of biological sciences.
- (d) To attract qualified academic and technical staff.

### 1.4 Career opportunities

Graduates from the Department of Biological Sciences secure employment in the following areas:

- (a) Local and international research institutions/ Organizations such as Kenya Medical Research Institute (KEMRI), Kenya Forest Research Institute (KEFRI), National Museums of Kenya (NMK), Kenya Marine and Fisheries Research Institute (KEMFRI), Centres for Disease Control and Prevention (CDC) and World Agroforestry Centre (ICRAF) among others.
- (b) Government of Kenya ministries and organizations such as Ministry of Agriculture, Ministry of Fisheries and Livestock Development, Ministry of Forestry and Natural Resources, National Environment management Authority (NEMA) and Kenya Bureau of Standards (KEBS).
- (c) Public and Private teaching institutions including high schools and middle level colleges.
- (d) Food, pharmaceutical and Agrochemical industries.
- (e) Public and private higher learning institutions to pursue postgraduate studies at Masters and PhD levels in various disciplines including Biotechnology and Molecular Biology, Immunology, Ecology, Medical and Agricultural Entomology, Parasitology, Medical Mycology, Plant

Taxonomy and Economic Botany, Plant Physiology, Biochemistry and Conservation Biology among others. On completion of their postgraduate studies, they can find employment in all the above mentioned organizations and as Lecturers or Research Fellows in Tertiary technical institutes and Universities.

### 1.5 Academic Programmes

Currently the department offers a four year South Eastern Kenya University Bachelor of Science in Biology (B.Sc. Biology) degree programme.

## BACHELOR OF SCIENCE IN BIOLOGY

Regulations and syllabus for the Bachelor of Science in Biology

### 1 Introduction

The B.Sc. Biology is a new programme in which the School of Biological Sciences (South Eastern Kenya University) participates in teaching and research (Research Project). In this programme, students have to take Botany and Zoology units (unlike B.Sc. where they may take either Botany or Zoology with other non-biology subjects of their choice). Appropriate non-biology units (1st and 2nd year) have also been selected

for them for better understanding of modern biology. It is expected that these students shall have a broad-based foundation in biology including molecular biology. The syllabus for the BSc. (Biology) course places emphasis on disciplines that relate to natural resource management, such as parasitology, entomology, microbiology and molecular biology, to provide graduates who will directly contribute to food production and poverty eradication. Furthermore, the course is designed to produce capability for food processing industries and development, environmental protection and parks development which require specialists in biology who are trained in statistics and computer-mathematical modelling in addition to taxonomists. Specialization will be offered on application to a few selected students whose academic performance in their 1st, 2nd and 3rd years of study have been outstanding.

Fourth year students undertaking the specialized programmes will be required to conduct a supervised individual research project and submit a dissertation thesis duly types and bound for examination.

### 2 Entry Requirements

- (a) Candidates must have obtained the minimum University and Faculty of Science admission requirements.

- (b) Must have passed in Biology/Biological Sciences with a minimum grade C+ in the Kenya Certificate of Secondary Education (KCSE) or its equivalent.

### 3. Regulations

- (a) In the first year of study a candidate is required to take a minimum of THREE course units from Botany and Zoology, TWO course units from the Department of Chemistry, ONE course unit from the Department of Mathematics, PLUS THREE other units from the Common Undergraduate Courses.
- (b) In the 2nd year of study, a candidate is required to take a minimum of FOUR course units from the department of Biochemistry, PLUS ONE course unit from EACH of the Departments of Chemistry and Geography.
- (c) In EACH of the third and fourth years of study, a candidate is required to take TEN course units distributed according to one of the following combinations.
- (i) FIVE course units from Botany and Zoology.
  - (ii) TEN course units in EITHER Botany or Zoology for students specializing in Botany or Zoology respectively from the 3rd year of study.

- (iii) FIVE course units from EACH Botany and Zoology during the 3rd year of study followed by a minimum of TEN course units in EITHER of the two departments during the 4th year of study for students specializing in Botany or Zoology from 4th year of study.
- (iv) Additional course units may be taken with the approval of the Dean School of Pure and Applied Sciences.

### 4. Courses Offered

#### Year 1

SBT 101	Survey of Plant Kingdom
SBT 102	Introductory Biochemistry and Genetics
SBT 103	Lower Plants
SZL 101	Invertebrate Zoology
SZL 102	Vertebrate Zoology
SZL 103	Fundamentals of Ecology
SBL 101	Mathematics for Biologists
SCH 102	Organic Chemistry I
SCH 103	Physical Chemistry I

### Common undergraduate courses

#### Year 2

SBT 201	Gymnosperm and Angiosperm Taxonomy
SBT 202	Principles of Bacteriology
SBT 203	Plant Ecology
SBT 204	Plant Structure and Function
SZL 201	Cell Biology
SZL 202	Histology
SZL 203	Fundamentals of Aquatic Ecology
SZL 204	Basic Immunology
SBL 201	Structure of Biomolecules
SBL 202	Laboratory Techniques
SCH 203	Physical Chemistry II
SGP 204	Environment and Development in Africa

#### Year 3

SBT 301	General Mycology
SBT 302	Plant Physiology
SBT 303	Biosystematics and Palynology
SBT 304	General Genetics
SBT 305	Plant population Ecology
SZL 303	Biostatistics
SZL 304	Developmental Biology
SZL 307	Molecular Biology I
SZL310	Theoretical Ecology

### Areas of Specialization

#### Year 3

#### Botany Major

SBT 301	General Mycology
SBT 302	Plant Physiology
SBT 303	Biosystematics and Palynology
SBT 304	General Genetics
SBT 305	Plant population Ecology

#### Elective Courses

SBT 306	Field Course
SBT 307	Ecophysiology
SBT 308	Phycology
SBT 309	Cytology and Cytogenetics
SBT 310	Microbial metabolism
SBT 311	Biostatistics
SBT 312	Plant Cell structure and function
SBT 313	Lichenology
SBT 314	Principles of Ethnobotany
SBT 315	Plant nematology
SBT 316	Plant virology

#### Year 4

SBT 401	Plant Biochemistry
SBT 402	Microbial Ecology
SBT 404	Population Genetics
SBT 405	Applied Mycology
SBT 415	Molecular Biology II

### Elective Courses

SBT 403	Plant Morphogenesis
SBT 406	Ecological Monitoring
SBT 407	Economic Botany
SBT 408	Evolution
SBT 409	Forest Botany
SBT 410	Molecular Genetics
SBT 411	Marine Botany
SBT 412	Freshwater Ecology
SBT 413	Applied Microbiology and Biotechnology
SBT 414	Research Project

### Zoology Major

SZL 301	Animal Physiology
SZL 302	Evolutionary Biology
SZL 303	Biostatistics
SZL 304	Developmental Biology
SZL 305	Applied Immunology

### Electives

SZL 306	Ethology
SZT 308	Physiology of Integration
SZL 309	Advanced vertebrate zoology
SZL310	Theoretical Ecology
SZL 311	Molecular Biology I

### Year 4

SZL 401	Environmental Biology and Conservation
SZL 402	Entomology
SZL 403	Parasitology
SZL 404	History and Philosophy of Biology
SZL 405	Limnology & Marine Biology

### Electives

SZL 406	Applied Entomology
SZL 407	Applied Parasitology
SZL 408	Environmental Physiology
SZL 409	Fish and Fisheries Biology
SZL 410	Research Project
SBT 415	Molecular Biology II

## 5. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Pure and Applied Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Biology of the South Eastern Kenya University.

### 6. Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## DEPARTMENT OF MATHEMATICS AND ACTUARIAL SCIENCE

### 1. Introduction

Mathematics is an important tool for communication and other operations not only in science but also in day to day activities. Mathematics also provides intrigues and mysteries in its various patterns, structures and theorems. Mathematics is a beauty in itself and can be captivating and addictive if properly grasped. At South Eastern Kenya University, the courses in Mathematics and Actuarial Science Department have been designed not only to give the student necessary skills to perform operations in various professional fields such as in the Academics, public, corporate sectors, etc. but also provide the students the opportunity to pursue their post graduate studies in this area. Recognizing the important role that Computer Science and Information

Technology plays in the modern world, this programs incorporates a significant number of courses in that area.

### 1.1 Objectives

Students pursuing courses offered in the department should be able to:

- (a) Demonstrate understanding of the theoretical concepts in Mathematics and Actuarial Science, recognize their historical background and where applicable apply them to real life situations.
- (b) Demonstrate logical thinking and to communicate their thoughts satisfactorily using Mathematical language.
- (c) Demonstrate a high level of proficiency in quantitative and computing skills sufficient to meet various demands of the society upon a modern man.
- (d) To operate with excellence in professions that requires Mathematics or Actuarial Science for example in banking, insurance, demography, technology, bio-statistics, quality control, engineering and business management etc.

Department of Mathematics and Actuarial Science offer the following programs

- (a) Bachelor of Science in Mathematics
- (b) Bachelor of Science in Statistics
- (c) Bachelor of Science in Actuarial Science

## **BACHELOR OF SCIENCE IN MATHEMATICS**

Regulations and Syllabus for the Degree of Bachelor of Science in Mathematics

### **1 Introduction**

The general B.Sc. Programme in Mathematics offers course units in Pure Mathematics, Applied Mathematics, Statistics, Operation Research and Actuarial Mathematics. In the first and second years a student is considered to have registered for double Mathematics if he registers in both Pure and Applied Mathematics and takes all the core units or for single Mathematics if he takes not more than 4 units. In the third and fourth years, a student is considered to be Mathematics major if he studies Mathematics only; and Mathematics minor if he combines Mathematics with another subject.

### **2 Entry Requirements**

Candidates must meet the minimum University and Department of Mathematics and Actuarial Science general admission criteria.

### **3 Regulations**

- (a) Each student must satisfy the requirements of the common undergraduate courses specified by the School of Mathematics.
- (b) During each year, a student must satisfy School of Mathematics and regulations regarding the minimum number of units to be taken.
- (c) A student who has a minimum of Grade C+ in Mathematics KCSE, or has an equivalent qualification may register for Mathematics in the first year.
- (d) A first year student who takes Double Mathematics must register for the six core units: SMA 101, SMA 103, SMA 104, SMA 105, SMA 106 and SMA 140. Double Mathematics must only be taken in combination with (a) subject area(s) or course program(s) which continue beyond the second year.
- (e) A student who takes single Mathematics must register for SMA 101, SMA 103 and SMA 104.

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- (f) A second year student who takes Double Mathematics must register for the eight core units: SMA 201, SMA 203, SMA 204, SMA 205, SMA 206, SMA 208, SMA 221 and SMA 240.
  - (g) A second year student who takes single Mathematics may register for a suitable combination of Mathematics units, as advised.
  - (h) A student who took Double Mathematics in the second year and has a minimum average of grade B in the Mathematics units taken during the second year may be admitted as a third year Mathematics major.
  - (i) In the third year, Mathematics majors must register for the core units: SMA 301, SMA 303, SMA 306, SMA 308, SMA 321, SMA 322, SMA 341 and SMA 371.
  - (j) In addition to regulation (i) above:
    - (i) Students, who major in Pure Mathematics, must register for SMA 302, and at least one unit from: SMA 304 and SMA 308.
    - (ii) Students who major in Applied Mathematics must register for at least two units from: SMA 342, SMA 344 and SMA 346.
- (iii) Students who major in statistics must register for at least two units from: SMA 342, SMA 344 and SMA 346.
  - (iv) Students who major in Operations Research must register for SMA 360 and SMA 372.
  - (v) Students who major in Actuarial Mathematics must register for at least two units from: SMA 342, SMA 382 and SMA 384.

### **NOTE**

***The remaining units may be chosen from any third year Mathematics units for which the student satisfies the prerequisites.***

***Third year Mathematics Minors and those who do not major in any particular area of Mathematics (in a, b, c, d and e above) may take suitable combinations of units as advised, provided they have the appropriate prerequisites.***

***Fourth year Mathematics majors must register for the three core units: SMA 401, SMA 403 and SMA 405.***



## 4 Course Outline

### Year 1

SMA 101	Basic Mathematics
SMA 103	Calculus I
SMA 104	Calculus II
SMA 105	Geometry
SMA 106	Calculus III
SMA 140	Introduction to Probability & Statistics

### Second 2

SMA 201	Advanced Calculus
SMA 203	Linear Algebra I
SMA 204	Linear Algebra II
SMA 205	Introduction to Algebra
SMA 206	Introduction to Analysis
SMA 208	Ordinary Differential Equations I
SMA 221	Vector Analysis
SMA 240	Probability and Statistics

### Year 3

SMA 301	Real Analysis I
SMA 302	Algebra I

### Electives

SMA 302	Real Analysis II
SMA 304	Linear Algebra III
SMA 310	Discrete Mathematics I

SMA 324	Dynamics II
SMA 326	Fluid Mechanics I
SMA 306	Complex Analysis ISMA 320 Methods I
SMA 322	Numerical Analysis I
SMA 323	Dynamics I
SMA 328	Continuum Mechanics
SMA 341	Probability & Statistics II
SMA 342	Theory of Estimation
SMA 344	Sample Surveys
SMA 346	Quality Control Methods
SMA 360	Programming Methodology for Mathematics
SMA 371	Linear Programming I
SMA 372	Linear Programming II
SMA 382	Introduction to Actuarial Science
SMA 384	Mathematics of Demography

### Fourth 4

SMA 401	Topology I
SMA 403	Measure Theory
SMA 405	Algebra

### Electives

SMA 400	Mathematical Logic
SMA 402	Topology II
SMA 406	Algebra III

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SMA 407	Discrete Mathematics II	SMA 462	Design and Analysis of Algorithms II
SMA 408	Complex Analysis II	SMA 471	Inter Programming & Non- Linear Programming
SMA 409	Ordinary Differential Equation II	SMA 472	Design Theory and Game Theory
SMA 410	Functional Analysis	SMA 473	Graphs, Network flows and Scheduling
SMA 411	Number Theory	SMA 474	Stochastic Models in Operation Research
SMA 412	Theory of Computation	SMA 481	Actuarial Mathematics I
SMA 420	Mathematical Modeling	SMA 482	Actuarial Mathematics II
SMA 422	Methods II	SMA 483	Survival Analysis
SMA 423	Numerical Analysis II	SMA 484	Risk and Credibility Theory
SMA 424	Numerical Analysis III		
SMA 425	First Order Partial Differential Equations		
SMA 426	Second Order Partial Differential Equations		
SMA 427	Differential Geometry		
SMA 428	Fluid Mechanics II		
SMA 429	Quantum Mechanics		
SMA 430	Electrodynamics		
SMA 431	Statistical Mechanics		
SMA 440	Probability Theory		
SMA 441	Tests of hypothesis		
SMA 442	Non-Parametric Methods		
SMA 443	Time Series Analysis		
SMA 444	Analysis of Experimental Designs		
SMA 445	Stochastic Processes		
SMA 446	Statistical Methods		
SMA 448	Multivariate Methods		
SMA 461	Design and Analysis of Algorithms I		

### 7. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Pure and Applied Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Mathematics of the South Eastern Kenya University.

### 8. Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## **BACHELOR OF SCIENCE IN STATISTICS**

Regulations and Syllabus for the Degree of Bachelor of Science in Statistics

### **1 Entry Requirements**

To be admitted into the degree of the Bachelor of Science in Statistics candidates must meet the minimum University and School of Mathematics general entry requirements.

In addition to meeting the minimum University and School of Mathematics general entry requirements, candidates for the degree of Bachelor of Science in Statistics must have passed mathematics with a minimum grade of B at KCSE or an equivalent qualification.

### **2 Regulations**

To be considered for the award of the degree of Bachelor of Science in Statistics, a candidate shall normally be enrolled for courses over a period of not less than four academic years.

Each candidate must satisfy the requirements of the common undergraduate courses specified by the School of Mathematics.

During each academic year, a candidate must satisfy the School of Mathematics regulations regarding the minimum number of units to be taken.

In the first year of study, a candidate is required to take all the five core units : STA 101, STA 102, STA 103, STA 121 and STA 122 , PLUS the following Mathematics course units: SMA 101, SMA 103, SMA 104 and SMA 106.

In the second year of study, a candidate is required to take all the six core units STA 201, STA 202, STA 221, STA 222, STA 223, and STA 224. PLUS the following mathematics courses : SMA 201, SMA 203, SMA 204, SMA 205, SMA 206 and SMA 208.

In the third year of study, a candidate is required to take all the ten core units: STA 301, STA 302, STA 303, STA 304, STA 305, STA 306, STA 307, STA 308, STA 321, and STA 322. Additional units can be taken with the approval of the School and consent of the Director of the School of Mathematics.

In the fourth year of study, a candidate is required to take all the five core units STA 401, STA 402, STA 403, STA 404 and STA 420.

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In addition to the regulations above:

- (a) A candidate who specializes in Mathematical Statistics is required to choose five units from STA 405, STA 406, STA 407, STA 408, STA 409 and STA 410.
- (b) A candidate who specializes in Economic Statistics is required to choose five units from: STA 405, STA 409, STA 410, STA 421, STA 422, STA 429, STA 430, STA 432 and STA 434.
- (c) A candidate who specializes in Demography and Social Statistics is required to choose five units from: STA405, STA421, STA 422, STA 425, STA426, STA 428, STA434 and STA 437.
- (d) A candidate who specializes in Biometry is required to choose five units from: STA 405, STA407, STA 423, STA 435, STA436 and STA 437.
- (e) Additional units may be taken with the approval of the School and the consent of the Director of the School of Mathematics.

### 3 Course Outline

#### Year 1

STA 101	Introduction to Probability and Statistics
STA 102	Exploratory Data Analysis

STA 103	Principles of Sample Surveys
STA 121	Programming Methodology
STA 122	Computational Methods & Data Analysis I

#### Mathematics Courses

SMA 101	Basic Mathematics
SMA 103	Calculus I
SMA 104	Calculus II
SMA 106	Calculus III

#### Common Courses

CCS 001	Communication Skills
CCS 004	Law in Society
CCS 009	Elements of Economics

#### Year 2

STA 201	Probability and Statistics I
STA 202	Principles of Statistical inference
STA 221	Economic and Social Statistics
STA 222	Introduction to Time Series Analysis
STA 223	Operations Research I
STA 224	Computational Methods and Data Analysis II

### Mathematics Courses

SMA 201	Advanced Calculus
SMA 203	Linear Algebra I
SMA 204	Linear Algebra II
SMA 205	Introduction to Algebra
SMA 206	Introduction to Analysis
SMA 208	Ordinary Differential Equations I

### Year 3

STA 301	Probability and Statistics II
STA 302	Linear Modeling I
STA 303	Theory of Estimation
STA 304	Testing Hypotheses
STA 305	Probability Modeling
STA 306	Applied Time Series Analysis I
STA 307	Analysis of Experimental Designs I
STA 308	Sample Survey Theory and Methods I
STA 321	Operations Research II
STA 322	Computational Methods & Data Analysis III

### Non Core Course

STA 318	Statistical Inference I
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### Fourth Year

STA 401	Measure, Probability and Integration
STA 402	Bayesian Inference and Decision Theory

STA 403	Non Parametric Methods
STA 404	Applied Multivariate Methods
STA 420	Project in Statistics

### Elective Courses

Statistical Theory and Methods	
STA 405	Linear Modeling II
STA 406	Applied Stochastic Processes
STA 407	Analysis of Experimental Designs II
STA 408	Robust Methods and Nonparametrics
STA 409	Applied Time Series Analysis II
STA 410	Sample Survey Theory and Methods II
STA 419	Statistical Inference II

### Applied Statistical Methods

STA 421	Operations Research III
STA 422	Stochastic Models for Social Processes
STA 423	Stochastic Models for Biological Processes
STA 424	Stochastic Models for Industrial Processes

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STA 425	Statistical Demography
STA 426	Applied Population Analysis
STA 428	Applied Demography
STA 429	Econometric Models I
STA 430	Econometric Models II
STA 432	Applied Econometrics
STA 434	Survey Research Methods
STA 435	Biometrics Methods I
STA 436	Biometrics Methods II
STA 437	Survival Analysis

### Options Structure

#### Mathematical Statistics

STA 405, STA 406, STA 407, STA 408, STA 409 and STA 410

#### Economic Statistics

STA 405, STA 410, STA 421, STA 429, STA 430, STA 432 and STA 434

#### Demography and Social Statistics

STA 405, STA 421, STA 422, STA 425, STA 426, STA 428, STA 434 and STA 437

#### Biometry

STA 405, STA 407, STA 423, STA 435, STA 436 and STA 437

### 5. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Pure and Applied Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Statistics of the South Eastern Kenya University.

### 6. Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## BACHELOR OF SCIENCE IN ACTUARIAL SCIENCE

Regulations and Syllabus for the Degree of Bachelor of Science in Actuarial Science

### 1 Entry Requirements

To be admitted into the degree of Bachelor of Science in Actuarial Science candidates must meet the minimum University and Department of Mathematics and Actuarial Science entry requirements. In addition to meeting the minimum University and Department of Mathematics and Actuarial Science general admissions requirements, candidates for the degree of Bachelor

of Science in actuarial sciences must have passed Mathematics with a minimum grade of B at KCSE or an equivalent qualification.

## 2. Regulations

- (a) To be considered for the award of the degree of Bachelor of Science in Actuarial Science, a candidate shall normally have enrolled for courses over a period of not less than four years.
- (b) Each candidate must satisfy the requirements of the common undergraduate courses specified by the school of Mathematics.
- (c) During each academic year, a candidate must satisfy the Department of Mathematics and Actuarial regulations regarding the minimum number of units to be taken. In the first year of study, a candidate is required to take the two core units: SAC 101 and SAC 102, plus the following Statistics and Mathematics course units: STA 101, STA 121, STA 122, SMA 101, SMA 103, SMA 104 and SMA 106.
- (d) In the second year of study, a candidate is required to take all the four core units: SAC 201, SAC 202, SAC 203 and SAC 204 plus the following Statistics and Mathematics course units STA 201, STA 202, STA 222, STA 224, SMA 201, SMA 206, SMA 208 and SMA 209.

- (e) In the third year of study, a candidate is required to take all the six core units: SAC 301, SAC 302, SAC 303, SAC 304, SAC 305 and SAC 306 plus the following Statistics units: STA 302, STA 305, STA 318 and STA 322.
- (f) In the fourth year of study, a candidate is required to take all eight core units: SAC 401, SAC 402, SAC 403, SAC 404, SAC 405, SAC 406, SAC 407 and SAC 420 plus the following two Statistics course units: STA 406 and STA 419.
- (g) Additional units may be taken with the approval of the Department of Mathematics and Actuarial Science.

## 3. Course Outline

### First Year

#### Actuarial Science Courses

- SAC 101: Introduction to Actuarial Science
- SAC 102: Fundamentals of Actuarial Mathematics I

#### Statistics Courses

- STA 101: Introduction to Probability and Statistics
- STA 121: Programming Methodology
- STA 122: Computational Methods and Data Analysis I

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### Mathematics Courses

- SMA 101: Basic Mathematics
- SMA 103: Calculus I
- SMA 104: Calculus II
- SMA 106: Calculus III

### Common Courses

- CCS 001: Communication skills
- CCS 004: Gender and HIV/AIDS
- CCS 008: Element of Philosophy

### Second Year

#### Actuarial Science Courses

- SAC 201: Financial Mathematics I
- SAC 202: Fundamentals of Actuarial Mathematics II
- SAC 203: Principles of Economics I
- SAC 204: Principles of Operations Research

#### Statistics Courses

- STA 201: Probability and Statistics I
- STA 202: Introduction to Statistical Inference
- STA 222: Introduction to time Series Analysis
- STA 224: Computational Methods and Data Analysis II

### Mathematics Courses

- SMA 201: Advanced Calculus
- SMA 206: Introduction to Analysis
- SMA 208: Ordinary Differential Equations I
- SMA 209: Elements of Linear Algebra

### Third Year

#### Actuarial Science Courses

- SAC 301: Actuarial Mathematics I
- SAC 302: Actuarial Mathematics II
- SAC 303: Principles of Economics II
- SAC 304: Financial Mathematics II
- SAC 305: Life Contingencies I
- SAC 306: Linear Models and Forecasting

#### Statistics Courses

- STA 301: Probability and Statistics II
- STA 305: Probability Modelling
- STA 318: Statistical Inference I
- STA 322: Computational Methods and Data Analysis III



## Fourth Year

### Actuarial Science Courses

- SAC 401: Mathematics of Demography and Graduation
- SAC 402: Survival Models
- SAC 403: Risk Mathematics
- SAC 404: Computational Finance
- SAC 405: Principles of Financial Management
- SAC 406: Actuarial Theory of Pensions Valuation
- SAC 407: Life Contingencies II
- SAC 420: Project in Actuarial Science

### Statistics Courses

- STA 406: Applied Stochastic Processes
- STA 419: Statistical Inference II

## 4. Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Pure and Applied Sciences shall apply. The final degree award shall be degree of Bachelor of Science in Actuarial Science of the South Eastern Kenya University.

## 5. Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

**School of  
Environment  
and  
Natural Resources  
Management**

## **SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES MANAGEMENT**

### **1 Introduction**

The establishment of the School of Environment and Natural Resources Management is part of the fulfillment of making the institution's major focus on natural resources and environmental management. The existing three departments in the School are mandated to prepare programmes of study geared towards the rational management and utilization of natural resources and the environment for sustainable development with emphasis on local, national, regional and global environmental issues like global warming, climate change, water, & air pollution, waste management, deforestation and soil degradation.

#### **1.1 Vision**

To be a leading Centre of Excellence in Teaching, Research and Innovativeness in Environmental Management, Community Outreach and Sustainable Development globally.

#### **1.2 Mission**

To research, train and impart necessary knowledge and skills towards stewardship and sound natural resources management for sustainable development.

#### **1.3 Objectives**

- (a) To generate the necessary technical knowledge on the impacts of development on the environment so as to encourage harmonious interactions between man and the natural environment.
- (b) To develop personnel with the necessary research and policy analysis competences so as to contribute to informed decision-making towards sustainable community livelihoods.
- (c) To produce professionals and technocrats capable of spearheading sustainable development agenda by focusing on sustainable technologies enhancing environmental conservation and management.

#### **1.4 Departments**

The School currently has three departments:

- (a) Department of Environmental Science and Technology (EST)

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- (b) Department of Environmental Conservation and Natural Resources Management
- (c) Department of Forestry Resources Management (FRM)
- (f) Diploma in Forestry
- (g) Certificate in Environmental Impact Assessment & Audit

### 1.5 Programmes Offered

The three departments offer certificate, diploma, undergraduate and postgraduate diploma and degree programmes. Postgraduate diploma and certificate programmes lasting one year and 1-3 months, respectively, are organized for people already engaged in environmental management activities. Short courses of 1-14 days have also taken off. The programmes are designed to produce professionals competent and marketable in conducting further in-depth research work and community extension at the same time appreciating the exigencies of life-supporting systems and anthropogenic influences. The following courses are offered in the three departments:

- (a) BSc. in Environmental Conservation and Natural Resources Management
- (b) BSc. in Management of Agro-Ecosystems & Environment
- (c) BSc. in Environmental Management
- (d) B.Sc. in Land Resource Management
- (e) B.Sc. in Forestry

### 1.6 Career Goals and Employment Opportunities

Graduates from the school will gain employment in an ever expanding range of areas including national parks and other protected areas, environmental impact assessment/ auditing and monitoring, environmental education, sustainable forestry, fisheries management, aquaculture, ecotourism and land/ river/ coastal conservation programmes. The School trains professional Environmental Managers with a multi-disciplinary foundation to work in the national environmental agencies like National Environment Management Authority (NEMA), Water Resources Management Authority (WARMA), Kenya Forest Service (KFS), and Kenya Wildlife Service (KWS), research institutions like the Kenya Forestry Research Institute (KEFRI), Kenya Agricultural Research Institute (KARI), the International Centre for Research in Agro-forestry (ICRAF), National Museums of Kenya (NMK) among others. They will also have capacity to work in international organisations like Nature Kenya, the World Wildlife Fund (WWF), World Agro-forestry Centre, United Nations Environment Programme

(UNEP), World Bank's Division of Environment, UN-Habitat, United Nations Development Programme (UNDP) World Health Organisation (WHO) and all other UN agencies engaged in environmental related programmes and activities. Graduates will also be absorbed in local corporate bodies involved in timber plantations e.g. Panpaper mills, Kenya Power and Lighting Company, KENGEN, Water Companies. They can also take up teaching jobs in many colleges offering environmental and natural resources management as a subject. Other career options available to the School graduates are still film making and environmental and wildlife journalism. Further, the graduates can also work in private consulting firms or run their own private consultancy in environmental impact assessment and audit of large development projects.

### **DEPARTMENT OF ENVIRONMENTAL CONSERVATION AND NATURAL RESOURCES MANAGEMENT**

#### **1. Introduction**

The establishment of the Department of Environmental Conservation and Management at the South Eastern Kenya University is part of the fulfillment of making the institution's major focus on natural resources and environmental management. The Department is

mandated to prepare programmes of study geared towards the rational management and exploitation of natural resources and the environment for sustainable development with emphasis on national, regional and global environmental issues like global warming, climate change, water & air pollution, waste management, deforestation, soil erosion, etc.

#### **1.1 Mission**

To train and impart necessary knowledge and skills towards stewardship and sound natural resources management for sustainable development.

#### **1.2 Objectives**

- (a) To equip students with the necessary research and policy analysis competences so as to contribute to informed decision-making towards sustainable community livelihoods.
- (b) To generate the necessary knowledge on the impacts of development on the environment so as to encourage harmonious interactions between human and their environment.
- (c) To produce professionals and technocrats capable of spearheading sustainable development agenda by focusing on communities and the environment as critical national resources.

### 1.3 Programmes Offered

The department has started off by focusing on certificate, diploma, undergraduate and postgraduate diploma and degree programmes. Postgraduate diploma and certificate programmes lasting one year and 1-3 months, respectively, will be organized for people already engaged in environmental management activities.

The undergraduate programme is designed to produce graduates who are both professionally competent and marketable and who should also be capable of conducting further in-depth studies and/or research work at the same time appreciating the exigencies of the interactive physical, chemical, and biological processes that regulate the total Earth System, the unique environment that it provides for life, the changes that are occurring in this system, and the manner in which the changes are influenced by human actions.

The course currently offered at the Department is B. Sc. Environmental Conservation and Natural Resources Management.

### BACHELOR OF SCIENCE IN ENVIRONMENTAL CONSERVATION AND NATURAL RESOURCES MANAGEMENT

Regulations and Syllabus for the Degree of Bachelor of Science in Environment Conservation and Natural Resources Management

#### 1 Introduction

This is science degree programme that will specialize in subject dealing with the environment, and natural resources conservation and management. Environmental issues and natural resources conservation and management are of major concern. Graduates of this degree programme will find themselves well placed to meet the challenge of the expanding field. The field of natural resources conservation and environment management is a complex and interdisciplinary in nature and, therefore, it is difficult to provide a thorough coverage of all nature resources management and environment science in one undergraduate curriculum. The course will composed of four core subject areas, namely biological science, physical science, environment science and policy. The Bachelor of science Degree in environment Conservation and natural Resources management is designed to produce natural

resources and environment professionals with a broad interdisciplinary background coupled with specific focus on identifying, understanding, protecting, enhancing and managing natural resources and their environment. It is a campus wide programme coordinated by the school of Environmental Studies and Resources Management. The student will learn how natural ecosystems function and how to maintain the function that are of important for the ecosystem. They will also deal with economic, social and political issues of natural resources use and environmental management decision making processes.

### 1.1 Course objectives

The objectives of the BSC degree programme in Environmental Conservation and Resources Management are to:

- (a) Encourage the integration of environment issues and themes into courses and student projects in the basic and natural sciences
- (b) Encourage sustainable and wise use of our natural resources using the ecosystem approach
- (c) Foster an understanding of foundation environmental issues, including biological diversity and the preservation of natural ecosystem integrity, both in the university community and the public at large and.

- (d) Foster an understanding of the interaction between people , natural resources and environmental system, with special emphasis on the political ,social and economic factor; that influence biological resources use

### 2 Entry Requirements

Candidates eligible for admission to the above degree programme must meet the following requirement:

- (a) Applicant must have obtained the minimum South Eastern Kenya University and school of Biological Sciences general admission requirement
- (b) Applicant must have passed with a minimum average of a C+ (plus) in KSCE with minimum of a C+ (plus) I in Biology or Biological sciences and a minimum of a C (plain) in other science subjects (mathematics ,chemistry, physics or physical sciences) in KSCE or equivalent student with a C+(Plus) in Geography will have added advantage.
- (c) Two principal passed at KACE, one of which must be in Biology and the other in any other sciences subjects from the following; Chemistry, Geography, Physics and Mathematics.
- (d) Holder of a degree, diploma or equivalent in a biological science or related subjects or institution recognized by senate.

### 3 Transfer of Credits

Maximum  $\frac{1}{3}$  of the course units will be allowed.

### 4 General Regulations

The general regulation of the University and School of Biological Sciences shall apply

### 5 Specialization

Fourth year students will be required to conduct a supervised individual project and submit a dissertation duly typed and bound for examination.

### 6 Examination Regulation

The general regulation governing examinations in the South Eastern Kenya University and school of Biological Sciences shall apply.

### 7 Award of Degrees

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Environment and Natural Resources Management shall apply. The final degree award shall be degree of Bachelor of Science in Environmental Conservation and Natural Resources Management of the South Eastern Kenya University.

### 8 Course Outline

#### Year 1

SBT 101	Survey of the Plant Kingdom
SBT 102	Introductory Biochemistry and Genetics
SCH 102	Organic Chemistry I
SCH 103	Physical Chemistry I
SGP 111	The Natural Environment
SGH 114	Fundamental of Natural Resources Management
SZL 101	Invertebrate Zoology
SZL 102	Vertebrates Zoology
SZL 103	Fundamentals of Ecology
CCS 001	Communication Skills
CCS 004	Law in Society
CCS 009	Elements of Economics

#### Elective

SBT 103	Lower Plants
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#### Year 2

SBE 201	Microbiology
SBE 202	Weather and Climate
SBE 203	Ecological Laboratory Technique
SBT 201	Gymnosperm and Angiosperm Taxonomy
SBT 203	Plant Ecology



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SCH 203	Physical Chemistry 2
SGP 233	Principles of Landscape Ecology
SZE 202	Introductory Biomathematical Development and Conservation
SZL 203	Fundamental of Aquatic Ecology

### Electives

SBT 204	Plant Structure and Function
SZE 203	Animal Ecology and animal Behaviour
SGP 215	Environment and Development in Africa

### Year 3

SBE 301	Vegetation Inventory and Analysis
SBE 302	East African Rangelands and Man
SBE 303	Soil Science for Conservation Biology
SBE 304	Population Ecology
SBE 305	Community Ecology
SZE 301	Principle and Practices of Bioconservation
SZE 302	Environmental Health and Excotoxicology
SZE 303	Modeling of Biological System.
SZE 304	Research Methodology and Statistics
SBE 306	Structure and Function of E. African Ecosystem

### Electives

SGP 328	Integrated Water Resources Management
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### Year 4

SBE 401	Agroecosystems and Agroecology
SBE 403	Field Research Project
SBT 413	Applied Microbiology and Biotechnology
SGP 421	Environmental pollution
SGP 424	GIS Application in Environmental mgt
SZE 401	Environmental impact Assessment and Monitoring
SZE 402	Environmental Law and Policy
SZE.404	Environmental Auditing and Economics
SZE.405	Ecosystem Approach to Natural Resources Management
SZE.406	Wildlife Management and Fisheries

### Elective Courses

SBE 402	Hydrology and Watershed Management
SBE 404	Forest Management
SZE 403	Conservation in international Trade and Development
SGP 431	Ecotourism and Environmental mgt
SGP 435	Transboundary Natural Resources Management (TBNRM)

### DEPARTMENT OF FORESTRY RESOURCES MANAGEMENT

#### 1. Introduction

The Department of Forestry Resources Management train students on forestry resources related discipline and carry out innovative forestry research and extension services. The department is also mandated to do beatification of SEKU compound and reforestation of the degraded SEKU land and its environment.

#### 1.1 Vision

A leading department of excellence in forestry teaching, research, innovation and extension.

#### 1.2 Mission

To train, research and impart necessary forestry knowledge and skills for sustainable forestry management and utilization.

#### 1.3 Objectives

- (a) To generate necessary technical knowledge in forestry that would impact on development of the environment so as to encourage harmonious interactions between man and the natural environment.

- (b) To develop personnel with necessary forestry research and policy analysis competence so as to contribute to informed forestry decision-making towards sustainable community livelihoods.
- (c) To produce professionals and technocrats capable of spearheading sustainable forestry development agenda by focusing on sustainable forestry technologies that enhances environmental conservation and management.
- (d) To carry out aforestation programmes for SEKU land and its environments with an aim to restore forests that have been destroyed through unsustainable harvesting of indigenous forests that existed in the area.

#### 1.4 Opportunities for Graduates Trained in Forestry

Graduates in the field of forestry can get jobs in:

- (a) Ministry Forestry and Wildlife
- (b) Government institutions
- (c) Non Governmental Organizations (NGOs)
- (d) Private sector, dealing with tree planting and timber processing
- (e) International organizations
- (f) Wildlife sanctuaries and National parks.
- (g) Colleges and Universities that offer forestry courses
- (h) Film making and wildlife journalism.
- (i) Private consulting firms

### 1.5 Courses offered in the department

- (a) B.Sc. in Forestry
- (b) B.Sc. in Land Resource Management
- (c) Diploma in Forestry

## BACHELOR OF SCIENCE IN FORESTRY

Regulations and Syllabus for the Degree of Bachelor of Science in Forestry

### 1 Introduction

Forests stabilize stream flow, reducing soil erosion, floods and avalanches and are important in the regulation of air temperature in urban and rural settings. Forests also play a critical role in maintaining a proper carbon dioxide balance in the earth's atmosphere and are valued for their aesthetic enrichment of our lives and for the widespread opportunities for outdoor recreation they provide. Latest estimates prove that there is a significant reduction in forest cover due to increasing human population and development pressure. In order to overcome the adverse forest situation, skilled manpower is required so that a proper action plan can be made based on research inputs and guiding principles. Thus, courses in forest resources

management are of immense importance, from policy and application point of view. The B.Sc. Forestry programme prepares professionals to work in complex situations where the goals of management must be determined by present society and the actions to reach these goals must be designed for implementation over time horizons of centuries, in order that future societies will have continued enjoyment of socio-economic, cultural, environmental and aesthetic values from forest landscapes.

### 1.1 Justification

The Society's consciousness for conservation of forest is growing, so also will career opportunities for B.Sc. Forestry graduates. The graduates can take up jobs in various government departments like the Forest Department. They can be employed in Non Governmental Organizations (NGOs)/Inter-Governmental Organizations e.g. United Nations Environmental Programme (UNEP), working in conservation of forests. Corporate bodies involved in timber plantations e.g. Panpaper mills, Raiply, Timsales, BAT, Mastermind Tobacco, Kenya Power and Lighting Company etc also need the services of Forestry graduates. The graduates can also take up research work in public sector research institutions like the Kenya Forestry Research Institute (KEFRI), Kenya

Agricultural Research Institute (KARI), the International Centre for Research in Agro-forestry (ICRAF), Africa Forest Research Network (AFORNET), Forest Action Network (FAN), Kenya Forest Working Group (KFWG) National Museums of Kenya (NMK) and organizations like the World Wildlife Fund (WWF), Nature Kenya etc. They can also be employed in Wildlife sanctuaries and National parks. They can also take up teaching jobs in many colleges offering Forestry as a subject. Other career options available to Forestry graduates are still film making and wildlife journalism. There may also be opportunities in television channels like National Geographic. Further, the graduates can also work in private consulting firms or run their own private consultancy in environmental impact assessment of large environmental projects.

### 1.3 Programme Objectives

- (a) To train to graduates who are able to plan, manage and develop forest resources for multiple benefits according to ecological and socio-economic demands.
- (b) To produce graduate who are able to maintain and improve the quality of the environment through forestry.
- (c) To train graduates able to carry out research and extension, and venture into entrepreneurship and self-employment.

## 2 Admission Requirements

The candidate must satisfy the minimum university entry requirements.

### 2.1 KCSE Candidates

In addition to satisfying the above University requirements, candidates should possess passes at C+ or above in Biology or Biological sciences and a minimum of a C (plain) in Chemistry and in either Mathematics or Geography or Physics/Physical sciences.

Candidates who satisfy the minimum university entry requirements but have a C- (minus) in Biology or in Biological Sciences shall be eligible for admission after taking and passing bridging courses in these subjects offered by the South Eastern Kenya University or any other institution recognized by Senate.

### 2.2 Other Candidates

Admission to the degree course may also be granted to the following candidates:

- (a) Holders of KACE or equivalent with minimum 2 principal passes in Biology and Chemistry and at least a subsidiary pass in Mathematics. If Mathematics was not offered at KACE, then it is accepted at Ordinary Level but with a minimum of a credit or above.

- (b) Holders of Diploma in Forestry or related equivalent from a recognized institution with passes at credit or distinction. Candidates with a pass with two years or more relevant working experience.
- (c) Holders of a Higher National Diploma or equivalent in Forestry or Biological Sciences and other related field from a recognized institution.
- (d) Holders of a Degree in Biological Sciences or related fields from a recognized university.

### **3 Credit Transfer and Exemptions**

#### **3.1 Credit Transfer**

A candidate from a recognized university, or any other equivalent institution recognized by the South Eastern Kenya University Senate, wishing to transfer to B.Sc. Forestry programme shall be allowed to transfer credits from his/her University if those credits are deemed relevant and meet the required minimum contact hours. The transfer of credits shall not be more than a third (1/3) of the total prescribed credits and/or course units required for the award of B.Sc. Forestry.

#### **3.2 Exemptions**

Senate may exempt students from some courses on recommendation of the School Board provided that:

- (a) Such candidates had taken those courses in a recognized University or equivalent institution and had achieved a pass grade.
- (b) Candidates seeking such exemptions submit a duly completed Senate approved form specifying the courses for which exemption is desired and attach evidence of 3.2 (a) above, showing contents of what was studied.
- (c) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programme.
- (d) A non-refundable course exemption fee as determined by the University be paid with each application for exemption.

#### **4 Course Structure and Duration**

The programme will be offered under three modules, full time (module I and II) and through Open Distance Education Learning (ODEL) (Module III) for students who cannot attend regular university programme.

- (a) Full time
- (a) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 15 weeks of teaching and examinations.

## School of Environment and Natural resources Management

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- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.
- (c) A candidate shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (d) Each student shall be required to undertake satisfactory field attachment of eight (8) weeks as stipulated in the Course structure. During the field practice, students are expected to embark on a research project, which they have to complete and present at a seminar during the fourth year of study.
- 5.1. No candidate shall be permitted to take an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study.
- 5.2. For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the fourth year.
- 5.3. All examination procedures shall be governed by the following:

- (a) Each course examination shall be graded out of a total of 100%.
- (b) The pass mark in each course examination shall be 40% and graded as follows:-

70 - 100%	A
60 - 69%	B
50 - 59%	C
40-49%	D
39% and below	FAIL

- (c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical / field trip reports 10%.

### (b) Open Distance Learning

The delivery mode of these programmes will be use of open distance education learning modes involving the use of various media (multi-media modes of learning) and will largely be home based.

### 5 Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- (d) Field Practice/Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the students' performance while in the field shall constitute field assessment 30%, written reports 40% and oral presentations 30%.
- (e) The Research Projects shall be examined through written reports and presentations, and shall be graded to use in the degree classification. The seminars and project proposal shall constitute 30%, the special project report shall constitute 60% and the oral presentation shall constitute 10%.
- (f) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.
- (g) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- (h) A Candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate is required to attend classes in the failed courses and shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.
- (i) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
- (j) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- (k) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.

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- (l) A candidate who fails to attain the pass mark in a supplementary examination shall on recommendation of the School Board and approval by Senate be allowed to do a second supplementary examination, ONCE ONLY as long as the total of such examinations does not exceed four in number during any one sitting for that particular year.
  - (m) A candidate who fails a supplementary on a second attempt according to regulation 5.3 (l) shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
  - (n) No candidate shall be allowed to repeat any year of study more than once.
  - (c) Classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.
- 5.5 In arriving at the decision as to the degree classification for each candidate, the Faculty Board of Examiners shall have to pay regard to the overall marks obtained by the candidate and shall apply the principle that a mean score of:

70 - 100%	-	First Class Honours
60 - 69%	-	Second Class Honours (Upper Division)
50 - 59%	-	Second Class Honours (Lower Division)
40- 49%	-	Pass.

### 5.4.The degree of B.Sc. Forestry shall be:

- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/ Attachment.
- (b) Based on the average score of all examinations of courses taken in the entire course duration.

### 6 Award of Degree

The general rules and regulation governing award of degree of the South Eastern Kenya University and School of Environment and Natural Resources Management shall apply. The final degree award shall be degree of Bachelor of Science in Forestry of the South Eastern Kenya University.



## 7. Study Intermission

A student may intermit studies at any time, for good cause conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## 8 Course Outline

### Year 1 Semester 1

CCS 001	Communication skills
CCS 010	HIV/AIDS
MAT 100	Discrete Mathematics
MAT 101	Calculus I
PHY 110	Mechanics
BPS 103	Principles of Management
ELC 101	

### Semester 2

CCS 009	Elements of Economics
MAT 103	Probability and Statistics I
MAT 102	Calculus II
PHY 121	Introduction to Quantum Physics
ELC 102	Introduction to Electronic devices
ELC 103	Introduction to Programming

### Year 2 Semester 1

MAT 201	Linear Algebra I
MAT 220	Vector Analysis
PHY 210	Waves and Oscillations
PHY 211	Electricity and Magnetism I
ELC 201	Digital Electronics I
ELC 203	Assembly Language Programming

### Semester 2

PHY 213	Geometrical Optics
PHY 220	Electricity and Magnetism II
PHY 221	Quantum Mechanics
ELC 202	Transducer theory
ELC 204	Digital Electronics II
ELC 205	Introduction to Engineering Drawing

### Year 3 Semester 1

MAT 303	Ordinary differential Equations I
MAT 305	Complex Analysis I
PHY 311	Properties of Matter
ELC 301	Alternating Circuit Theory
ELC 302	Transistors
ELC 304	Research methods

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### Electives (student to choose one elective)

ELC 321	Communication Electronics I
ELC 331	Computer Electronics I

### Semester 2

MAT 321	Numerical Analysis I
MAT 330	Ordinary Differential Equations II
PHY 324	Solid State Physics
ELC 300	Electromechanical & Control Systems
ELC 303	Amplifier Circuits
ELC 312	Optoelectronic

### Electives (student to choose one elective)

ELC 322	Communication Electronics I
ELC 332	Computer Electronic II
ELC 305	Industrial Attachment (8 weeks)

### Year 4:

#### Semester 1

MAT 400	Partial Differential Equations
PHY 410	Semiconductor Physics
ELC 400	Electronic Projects I
ELC 402	Integrated Circuit Technology
ELC 403	Electromagnetic Communications

### Electives (student to choose one elective)

ELC 411	Microwave Devices
ELC 412	Digital Communications
ELC 431	Microprocessors I

### Semester 2

PHY 423	Electromagnetic theory
ELC 401	Electronic Project II
ELC404	Integrated Circuit Design
ELC 405	Analogue Computation & Simulation
BPS 407	Entrepreneurship skills

### Electives (student to choose two elective)

ELC 421	Power Electronic Devices
ELC 422	Fibre Optic Communications
ELC 432	Microprocessors II

## BACHELOR OF SCIENCE IN LAND RESOURCES MANAGEMENT

Regulations and Syllabus for the Degree of Bachelor of Science in Land Resources Management

### 1 Introduction

Land is critical to the economic, social and cultural development of Kenya. The land issue has been a defining factor in Kenyan history. During the colonial

period, land was one of the key reasons for the struggle for independence. Moreover, land issues have remained critical, politically sensitive and culturally complex in post-independent Kenya. Land administration and management systems inherited from the colonial government lacked stable legal framework upon which historical land issues could be solved. Until recently, post-independent Kenya lacked a clearly defined or codified national land policy. The problems posed by the lack of a policy have been exacerbated by the existence of many land laws, some of which are inconsistent and incompatible. The result of this has been a very complex land administration system that has been unable to form a platform upon which to solve historical land injustices and current land problems.

The Kenya constitution that addresses many of the challenging land issues in the country was promulgated in 2010. It gives the legal direction on how the land policy will be implemented. Thus, for the first time in its history, Kenya has put in place the requisite policy and legal framework that addresses both the inherent historical injustices as well as the recent challenges of land administration and management.

The B.Sc. in Land Resources Management programme will prepare graduates who can pursue postgraduate studies in a variety of specializations. The graduates will

also be quite competitive to occupy job opportunities in various national Government Ministries, lead Agencies, County Governments, Local Authorities and Non-Governmental Organizations. They can also take up teaching jobs in the universities and colleges offering land resources management programmes. Finally, the graduates can also work as self-employed consultants or in private consulting firms.

### 1.2 Justification

The national land policy will not, on its own, bring about the envisaged land reforms. The implementation process will not only require goodwill and commitment from stakeholders, but also a large pool of professionals trained in land administration, conservation and management. Equipping current and future land managers with a B.Sc. in Land Resources Management is a milestone in the provision of the critically required human resource in the land policy implementation. The objective of the programme is to equip students with scientific knowledge and skills required to tackle technical issues in the management of land resources. The degree programme will offer a rigorous science-based curriculum that will adequately focus on sustainable management of land resources. In line with National Land Policy, the management of public, private and community lands will be adequately addressed by the programme.

### 1.3 Objectives

- (a) To equip the students with knowledge and skills in the art and science of land use.
- (b) To produce graduates who can champion leadership in land resources conservation and management for sustainable development.
- (c) To produce students with an understanding and appreciation of the multiple values of land resources for environmentally-friendly development.

## 2. Admission Requirements

### 2.1.KCSE Candidates

In addition to satisfying the minimum University entrance requirement, the candidate should also possess passes at C (Plain) or above in both in Biology or Biological sciences and Chemistry and in any one of the following: Mathematics/Geography/Physics/Physical sciences. Candidates who satisfy the minimum University entry requirements but have a C (minus) in Biology or in Biological Sciences shall be eligible for admission after taking and passing bridging courses in these subjects offered by the South Eastern Kenya University or any other institution recognized by Senate.

### 2.2. Other Candidates

Admission to the degree course may also be granted to the following candidates:

- (a) Holders of KACE or equivalent with minimum 2 principals passes, one in Biology and the other in either Chemistry, Geography, Physics or Mathematics.
- (b) Holders of Diploma in Environmental Science or related field from an institution recognized by Senate and with passes at credit or distinction. Candidates with a pass with two years or more relevant working experience.
- (c) Holders of a Higher National Diploma or equivalent in Environmental Science or Biological Sciences and other related field from an institution recognized by Senate.
- (d) Holders of a Degree in Biological Sciences or related fields from a University recognized by Senate.

### 3. Credit Transfer and Exemptions

The common regulations governing credit transfer and exemptions of courses of the South Eastern Kenya University shall apply.

### 3.1. Credit Transfer

Compulsory courses will automatically be transferred into the specialty load for the completion of the program, provided that they were taken, examined and passed. Students may transfer credits up to 1/3 of the total courses approved by the South Eastern Kenya University Senate on recommendation of the School of Environment and Natural Resources Management Academic Board, provided that:

- (a) Such candidates had taken those courses in a recognized University or equivalent institution and had achieved a pass of C grade and above
- (b) Candidates seeking such credit transfer shall apply in writing, to the School of Environment and Natural Resources Management Academic Board, specifying the courses for which the transfer is desired and attaching relevant certified evidence.
- (c) Such courses are to satisfy the requirements of the first and second year of study only
- (d) A non-refundable course credit transfer fee, as determined by the South Eastern Kenya University, shall be paid with each application. The Department in consultation with Senate shall make the final decision whether to accept or reject the application for the transfer of credits

### 3.2. Exemptions

- (a) Such candidates had taken those courses in a recognized University or equivalent institution and had achieved a pass grade.
- (b) Candidates seeking such exemptions submit a duly completed senate approved form specifying the courses for which exemption is desired and attach evidence of 3.1 (a) above, showing contents of what was studied.
- (c) Courses specified in 4.2 (b) are to satisfy the requirements of the first year of study only. Candidates requiring exemptions from 2nd, 3rd and 4th year courses shall in the absence of credit transfer be required to sit University examination and attain at least a pass grade, which will then be used in the degree classification.
- (d) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programme.
- (e) A candidate admitted into 2nd year of study shall be deemed to have already been exempted from 25% of the total courses in the degree programme.

Senate may exempt students from some courses on recommendation of the School Board provided that:

1.3.1 A non-refundable course exemption fee as determined by the South Eastern Kenya University shall be paid with each application for exemption.

### 4. Course Structure and Duration

The programme will be offered under two modules, full time (module I) and Open and Distance Learning (ODL) (Module III) for students who cannot attend regular university programme. Module II students will be integrated in Module I.

#### 4.1 Full time (Module I)

- (a) The teaching period for the degree programme shall extend over a period of not less than four and not more than eight academic years. Each academic year shall consist of two semesters of 15 weeks of teaching and examinations.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree
- (c) A candidate shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.

(d) Each student shall be required to undertake satisfactory field attachment of eight (8) weeks as stipulated in the Course structure. During the field practice, students are expected to embark on a research project, which they have to complete and present at a seminar during the fourth year of study.

#### 4.2. Open, Distance and e-Learning (Module II)

The delivery of these programmes will be through the use of open and distance education learning modes involving:

- (a) Written self-instructional study modules at the registration time
  - i) Course study materials
  - ii) Interactive devices and self-tests
- (b) Face to face introductory tutorial
- (c) Mediated technical learning materials
  - i) Audio cassettes
  - ii) E-learning materials
  - iii) Video clips
- (d) Limited face-to-face sessions to provide overview of the course at commencement of semester, mid semester and revision period before examinations.

- (e) Support study centers at the South Eastern Kenya University
- i) Access to information through computers at Computer Laboratory at main campus, South Eastern Kenya University and other campuses.
  - ii) Use of libraries at South Eastern Kenya University and other Agricultural research institutions.
- f) Orientation (immediately after registration):
- i) Orientation in ODL delivery
  - ii) Study, reading and computer skills
  - iii) Time management and techniques in handling assignments
  - iv) Mentorship, guidance and counseling
  - v) Emphasis is on satellite centers that serve as a link between the University and the student in the following manner:
    - Registration
    - Collecting reading materials
    - Collecting results and programs
    - Examination information
    - Posting timetable
    - Holding meetings

The ODeL programme will run for a minimum of 8 semesters of 15 weeks each and a maximum of 16 semesters of 15 weeks each.

## **5. Examination Regulations**

The conduct of examinations shall be governed by the following regulations:

- 5.1. No candidate shall be permitted to take an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study.
- 5.2. For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the fourth year.
- 5.3. All examination procedures shall be governed by the following:

- i. Each course examination shall be graded out of a total of 100%. The pass mark in each course examination shall be 40% and graded as follows:

70-100%	=		A
60-69%	=		B
50-59%	=		C
40-49%	=		D
39% and below	=		FAIL

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- 5.4. Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical /field trip reports 10%.
- 5.5. Field Practice/Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the students' performance while in the field shall constitute field assessment 30%, written reports 40% and oral presentations 30%.
- 5.6. The Special Projects and Seminars shall be examined through written reports and presentations, and shall be graded to use in the degree classification. The seminars and project proposal shall constitute 30%, the special project report shall constitute 60% and the oral presentation shall constitute 10%.
- 5.7. A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.
- 5.8. A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- 5.9. A Candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate is required to attend classes in the failed courses and shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.
- 5.10. A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
- 5.11. In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- 5.12. Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.



- 5.13. A candidate who fails a supplementary on a second attempt according to regulation 5.3 (I) shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- 5.14. No candidate shall be allowed to repeat any year of study more than once.

## **6. Award of Degree**

The final degree of B.Sc. Land Resources Management shall be:

- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/Attachment.
- (b) Based on the average score of all examinations of courses taken in the entire course duration.
- (c) Classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.

In arriving at the decision as to the degree classification for each candidate, the School

Board of Examiners shall have to pay regard to the overall marks obtained by the candidate and shall apply the principle that a mean score of:

- |           |   |  |
|-----------|---|--|
| 70 - 100% | - | First Class Honours                      |
| 60 - 69%  | - | Second Class Honours<br>(Upper Division) |
| 50 - 59%  | - | Second Class Honours<br>(Lower Division) |
| 40 - 49%  | - | Pass.                                    |

## **7 Study Intermission**

A student may intermit studies at any time, for good cause conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## **8. Course Structure**

### **Year 1 Semester 1**

ACS I03	Mathematics
FAA I02	Communication skills
ACS I01	Agricultural Botany
AZH I01	Chemistry for Agri. Sciences
ABC I01	Biochemistry
ASS I01	Land forms & Soil Formation

## School of Environment and Natural resources Management

### Year 1

#### Semester 2

AEC 102	Microeconomic
ACS104	Plant and Crop Physiology
ACP 101	Microbiology
CCS 010	HIV/AIDS
AEB 101	ICT and Computers
ASS 102	Principles of Soil Chemistry

### Year 2

#### Semester I

ACS 206	Statistics I
ACP 201	Principle of Plant Pathology and disease control
ACS 201	Principles of Crop production
AEB 201	Structures and materials
AEC 201	Sociology & development
ASS 201	Soil microbiology and Biochemistry
AEB 201	Power systems and machinery for Agriculture
ACP 202	Agricultural Entomology

### Year 2

#### Semester 2

ACH 201	Nursery management
ACP 203	Principles of Weed Science
ACH 202	Green House Production & Protected Environment
ACH 203	Beverages, Medicinal and nut crops
AEC 202	Macroeconomic
ACS 202	Plant propagation

### Year 3

#### Semester 1

ACS 302	Plant breeding I. Principles of Plant breeding
ACH 301	Vegetable Production I: Temperate Vegetables
ACS 306	Statistics II
ACH 302	Herbs and Spices
ACH 304	Floriculture I
ACH 303	Horticultural Seed Tech.
AEC301	Firm Accounts & Planning
ASS 301	Application of RS & GIS in Land Use & Management

### Year 3

#### Semester 2

ACP304	Environmental Management
ACP305	Crop Pests and their Management
AEB302	Irrigation & Water Management
AEC304	Agriculture Policy & Law
ASS307	Soil fertility & fertilizer use
ACH305	Landscape Design, constr. And maintenance
AEC302	Production economics & Firm Management
ACH306	Horticulture Field Attachment

### Year 4

#### Semester 1

##### Students to choose **Electricity A or B**

ACH 401 A	Fruit production I. Temperate fruits
ACH 402 B	Plants, Flower arrangement and consumption

**Year 4**  
**Semester 2**

ACS 404	Postharvest Physiology and Technology
AEC 410	Agricultural marketing and international Agri.Trade
ACP 402	Diagnostic Studies For Plant Diseases
AEC 408	Micro Enterprise Development and Mgt
ACS 409	Special Projects & Seminars
ACS 409	Plant Breeding II.Plant Breeding methods and Applicants.

*Students to choose either Elective A or B*

ACH 404 A:	Fruit production 2 Tropical and Sub- Tropical fruits
ACH 405 A:	Vegetable Production 2. Indigenous and Unique
ACH 406 B:	Floriculture 2
ACH 407 B:	Turf Management

**UNIVERSITY DIPLOMA IN FORESTRY**

**Regulations and Syllabus for the Diploma in Forestry**

**1. Introduction**

Forests and forestry issues are of global environmental significance. Forest biodiversity constitutes the major component of flora as one of the environmental life support systems. Forests stabilize stream flow, reducing soil erosion, floods, and avalanches, and are important

in the regulation of air temperature in urban and rural settings. Forests also play a critical role in maintaining a proper carbon dioxide balance in the earth's atmosphere and are valued for their aesthetic enrichment of our lives and for the widespread opportunities for outdoor recreation they provide. Forest issues have become a global environmental concern due to wanton deforestation. Latest estimates prove that there is a significant reduction in forest cover due to increasing human population and development pressure. Forests canopy cover in most countries in Africa is far below the UN recommendation of 10%. The current forest canopy cover in Kenya is 1.7%. In order to overcome the adverse forest situation, skilled manpower is required so that a proper action plan can be made based on research inputs and guiding principles. Thus, courses in forest resources management are of immense value from policy and application point of view. The Diploma Course in Forestry is designed to provide the proper practical and theoretical training at technical level in the general principles of Forestry Practice. During the course, theory is combined with thorough practical training acquired by demonstrations, project work, and field experiments and work. In addition, educational tours and visits are made to specific learning sites and forest areas.

### 1.1. Objectives of the programme

- (a) To develop understanding for the multiple values associated with forest resources conservation.
- (b) To develop the necessary forestry training at diploma level aimed at preparation of students in the art and science of multiple-land use management.
- (c) To provide knowledge and skills to the graduates to enable them generate self-employment opportunities to solve problems faced by forest resource management agencies.

### 1.2. Career goals and Employment opportunities

The Diploma in Forestry opens up a wide variety of career opportunities in forest work. Large areas of forests in Kenya still require management, albeit not exclusively for wood but for biodiversity conservation, catchment protection, fire management, carbon storage and other purposes. Kenya has a shortage of qualified foresters creating demand for forest professional across a wide variety of roles. Typically graduates may find employment in the following fields: Government forest services, management of forests, firefighting, land use management, management of national parks, mine site rehabilitation, plantation management, and

restoration forestry. The graduates can take up jobs in various government agencies like Kenya Forest Service (KFS), Nation Environment Management Authority (NEMA), and Water Resources Management Authority (WARMA). They can be employed in NGOs working in conservation of forests as well as corporate bodies involved in timber plantations such as Panpaper, Kenya Power and Lighting Company etc. They also assist in research work in research institutions like the Kenya Forestry Research Institute (KEFRI), International Centre for Research in Agro-forestry (ICRAF), National Museums of Kenya (NMK) among others.

### 3. Admission Requirements

The following will be eligible for admission to the diploma course:

- (a) Holders of KCSE with at least a mean grade of C plain and at least C- in Biology and Mathematics.
- (b) Holders of KCE or its equivalent with at least division III with passes in Biology and Mathematics.
- (c) Holders of KACE or its equivalent with at least one principal and with at least a subsidiary pass in Biology and Mathematics.
- (d) Candidates who have taken Agriculture at KCSE or KCE and passed with at least C- grade in addition to (a) and (b) above, will have an added advantage.

- (e) Holders of a certificate in range management, natural resource management, agriculture, animal husbandry, and any other relevant biological sciences from recognized institutions.
- (f) Holders of diploma, higher national diploma or degree in any of the specified fields in 3 (e).
- (d) The written examination shall account for 70% and continuous assessment for 30% of the final mark.
- (e) The pass mark for each paper shall be 40%.
- (f) A candidate who fails in any unit shall be allowed to sit for supplementary examinations twice only in the failed paper(s). A candidate who fails a supplementary examination shall be awarded a certificate of attendance.

#### **4. Course Structure and Duration**

- (a) The diploma course shall consist of course work and examination.
- (b) The course shall be offered on full time basis, and shall cover a minimum of two (4) and maximum of four (8) semesters, each semester consisting of 15 weeks.
- (c) Each candidate shall be required to take all the course units offered.
- (d) Each candidate shall be required to undertake a special project and submit a written project report at the end of the course.
- (g) The mark for a supplementary paper shall be recorded as 40% (pass) subject to (e) above.
- (h) The project shall be examined in two stages: Oral presentation that shall account for 50%, and written report that shall account for 50%.
- (i) Candidates who fail in the project examination shall be allowed to resubmit once only.
- (j) Candidates who fail in the resubmitted project examination shall be awarded a Certificate in Forestry.
- (k) The grade to be awarded to the candidate shall be based on the aggregate score calculated from all the examinations, thus: 70% and above shall constitute a Distinction; 56—69% a Credit; and 40—55% a Pass.

#### **5. Examination Regulations**

The following are the examination regulations:

- (a) Each course shall be examined by a written paper lasting two hours at the end of the semester in which it is offered.
- (b) Each candidate shall be required to attend at least two-thirds of the prescribed lectures and practical to qualify for registration for examination.
- (c) Each examination shall be graded out of 100%.

#### **6. Credit Transfer(s) and Exemptions**

An applicant who wishes to be exempted from any course shall be required to send a formal application of

exemption and/or transfer of credits to the Academic registrar through the dean justifying the candidate's request and attaching relevant supporting documents.

### 6.1. Credit Transfer(s)

- A candidate may be allowed to transfer up to a maximum of one third of the taught units.
- Application for transfer of credit will be processed only after payment of the prescribed fees.
- A candidate will only be allowed to transfer units that are equivalent to those offered by the South Eastern Kenya University.
- A candidate with certificate can apply for credit transfer in certain units provided that such units were passed at credit level and above.

### 6.2. Exemptions

- A candidate may be required to sit examination on the course he/she wishes to be exempted, set and administered by the respective department on behalf of the Faculty Board of Examiners.
- A candidate must have attained a minimum grade C (Credit) or equivalent in the course units for which exemption is applied.

## 7. Course Outline

The diploma course in forestry is organized into 23 units covering the main disciplines of forest resource management together with a project of 8 weeks. A summary of the course loads is as follows:

### Contact hours covered in years.

Year	1	2	Total
Semester I	315	315	630
Semester II	315	270	585
<b>Sub -total</b>	<b>630</b>	<b>585</b>	<b>1215</b>

### Year 1

LAS 001	Communication skills
ENF 001	Introduction to Botany
ENF 002	Introduction to Zoology
ENF 003	Chemistry for Foresters
ENF 004	Physics for Foresters
LAS 003	Gender and HIV/AIDS
ENF 005	Introductory Forestry
ENF 006	Introduction to Workshop Technology and Engineering
ENF 007	Forest Management and Planning
ENF 008	Mathematics for Forestry
ENF 009	Dendrology
ENF 010	Forest Ecology
ENF 011	Tree Breeding Techniques
LAS 002	Introduction to ICT

### Year 2

ENF 020	Silviculture
ENF 021	Forest Harvesting Technology
ENF 022	Forest Utilization and Timber Upgrading Technology
ENF 023	Agro forestry
ENF 024	Dryland Afforestation
ENF 025	Forest Mapping, Mensuration and Inventory
ENF 026	Natural Park Management
ENF 027	Forest Economics
ENF 028	Forest Policy, Law and Administration
ENF 029	Non Timber Forest Products
ENF 030	Watershed Management
ENF 031	Wildlife Conservation & Management
ENF 032	Forest Fire Control and Use
ENF 033	Special Project

## DEPARTMENT OF ENVIRONMENTAL SCIENCE AND TECHNOLOGY

### 1 Introduction

The establishment of the Department of Environmental Science and Technology at South Eastern Kenya University is part of the fulfillment of making the institution's major focus on natural resources and environmental management. The Department is mandated to offer programmes related to Science and Technology in management and exploitation of natural resources and the environment for sustainable

development with emphasis on national, regional and global environmental issues like global warming, climate change, water & air pollution, waste management, deforestation, soil erosion, etc. The Department employs multidisciplinary training to those concerned with the management of natural resources and the formulation and implementation of policies that create environmental improvements at local, national and international levels, and in community, corporate and government organizations.

### 1.1 Vision

A leading Centre of Excellence in Teaching, Research and Innovativeness in Environmental Science and Technology for Sustainable Development globally.

### 1.2 Mission

To train, research and impart necessary knowledge and skills in the area of Environmental Science and Technology towards stewardship and sound natural resources management for sustainable development.

### 1.3 Objectives

- (a) Train and produce graduates with firm academic knowledge in environmental science and technology;
  - (b) Create awareness of, and concern for the environment, natural resources and impact on livelihoods;
  - (c) Develop concepts and skills for assessing and resolving environmental issues, questions and problems;
  - (d) Promote participation in practical environmental activities with a view to enhancing local environmental quality and communities' quality of life.
- (a) B.Sc. Management of Agro-Ecosystems & Environment
  - (b) B.Sc. Environmental Management
  - (c) Short Course on Environmental Impact Assessment & Audit

### **BACHELOR OF SCIENCE IN MANAGEMENT OF AGRO-ECOSYSTEMS AND ENVIRONMENT**

Regulations and Syllabus for the Degree of Bachelor of Science in Management of Agro-Ecosystems and Environment

### 1.4 Programmes Offered

The department offers certificate, diploma, undergraduate and postgraduate diploma and degree programmes. Postgraduate diploma and certificate programmes lasting one year and 1-3 months, respectively, are organized for people already engaged in environmental management activities. Short course of 1-14 days have also taken off. The programmes are designed to produce professionals competent and marketable in conducting further in-depth research work and community extension at the same time appreciating the exigencies of life-supporting systems and anthropogenic influences. The following courses are offered at the Department:

#### 1 Introduction

As agricultural production shifts more towards intensively controlled systems and with stringent biosafety requirements, training that focus on environmentally friendly and sustainable technologies and practices take centre stage. There is need, therefore, for graduates with technological and managerial skills on environmental issues related to agriculture. The Bachelor of Science in Management of Agro-ecosystems and Environment (B.Sc. MAE) degree programme would enable graduates to assess and solve environmental



problems as managers in diverse fields dealing with or related to agroecosystems. The programme aims to equip students with the scientific knowledge and skills required to tackle technical issues on management of agriculture-related aspects in the environment such as reduction or control of degradation and pollution, and promotion of environmentally acceptable and sustainable production practices.

The degree programme offers a rigorous science-based curriculum that focuses on two major issues: (i) ecological management of agricultural land (ii) abatement of resources degradation or pollution of developed rural land. The focus of the programme is on principles and practices of agro-ecology, agricultural land degradation and understanding the fate and mitigation of pollution, including those processes that influence the impact of pollution in agro-ecosystems. It concentrates on sustainable management of resources in agriculture and focuses on water and soil quality management, such as monitoring transport and storage of agro-chemicals and other contaminants in soil, bioremediation and organic wastes recycling and bioconversion. The programme prepares graduates who would pursue postgraduate studies in a variety of disciplines or employment in training and research institutions, government, agro-industries, NGOs and consulting firms.

The following minor revisions have been carried out to strengthen the content and streamline its implementation alongside other programmes in the Faculty of Agriculture:

- (a) To avoid duplication in the teaching of the core common courses in the Faculty, students to take similar courses offered under BSc. Agriculture programme as detailed in Section 8.
- (b) Focus and put emphasis on principles and practices of agroecology instead of the general principles of ecology.
- (c) To address the current market needs and environmental challenges, include courses in organic farming, modeling of agroecosystems and climate change.

### 1.1 Programmes Objectives

The aim of the programme is to provide training on environmental management so as to enable graduates assess and solve environmental problems in diverse fields such as agriculture, natural resources management, civil and public health management and manufacturing industries among others. Through extension, teaching, research or consultancy, the professionals produced will:

- (a) Enhance sustainable natural resources management for increased agricultural production and environmental protection.
- (b) Assess the impact on the environment arising from natural resources utilization.
- (c) Combat pollution and degradation of rural and peri-urban land and water resources.
- (d) Contribute to research and technological innovations in agriculture and environment.
- (e) Contribute to the implementation of the national policies relating to sustainable agriculture and natural resources management.

## 2 Entry Requirements

### 2.1 KCSE Candidates

In addition to satisfying the minimum University entrance requirements, the candidate should also have passes at C or above in Biology or Biological sciences, Physics and Chemistry or Physical Science and in Mathematics. In order to satisfy the cluster of four subjects, for candidates offering Physical and Biological Sciences, the fourth subject may be selected from the following:-

Geography	Business Studies
Home Science	Power Mechanics
Agriculture	Computer Science
Wood work	Drawing and Design
Metal work	Aviation Technology

### 2.2 Other Candidates

Admission to the degree course may also be granted to the following candidates:

- (a) Holders of KACE or equivalent with minimum 2 principal passes in Biology and Chemistry and at least a subsidiary pass in Mathematics. If Mathematics was not offered at KACE, then it is accepted at Ordinary Level but with a minimum of a credit or above.
- (b) Holders of Diploma in Agriculture or related equivalent from a recognized institution with a pass at credit or distinction. Candidates with a pass with two years or more relevant working experience.
- (c) Holders of a Higher National Diploma or equivalent in Biological Sciences and other related sciences from a recognized institution.
- (d) Holders of a credit pass Ordinary Diploma in Biological Sciences or related sciences from a recognized institution.
- (e) Holders of a degree in Biological Sciences or related sciences from a recognized university.

## 3 Course Structure and Duration

The programme will be offered under two modules:

- (a) Full time (Module I) and through
- (b) Open and Distance Learning (ODL) (Module III) for students who cannot attend regular university programme.

### 3.1 Full time

- (a) The teaching period for the degree programme shall be not less than four academic years or their equivalents. Each academic year shall consist of two semesters of 15 teaching weeks.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.
- (c) A candidate enrolled for the programme shall participate and complete course work and practical assignments that may be applicable to agroecosystems management. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (d) Each student shall be required to undertake industrial attachment after completion of the second semester of the third year of study. During the field attachment, students are expected to embark on a research project, which they have to complete and present at a seminar during the fourth year of study.

### 3.2 Open, Distance and eLearning

The delivery mode of this program will be use of open and distance education learning modes involving:

#### 3.2.1 Largely home based media

#### 3.2.2 Other modes of delivery include:

- a) Written self-instructional study modules at the registration time
  - (i) Course study materials
  - (ii) Interactive devices and self-tests
- (b) Face to face introductory tutorial
- (c) Mediated technical learning materials
  - (i) Audio cassettes
  - (ii) E-learning materials
  - (iii) Video clips
- (e) Limited face-to-face sessions to provide overview of the course at commencement of semester, mid semester and revision period before examinations.
- (f) Orientation (immediately after registration):
  - (i) Orientation in ODL delivery
  - (ii) Study, reading and computer skills
  - (iii) Time management and techniques in handling assignments

### 3.2.3 Mentorship, guidance and counseling

Emphasis is on satellite centers that serve as a link between the university and the student in the following manner:

- (a) Registration
- (b) Collecting reading materials
- (c) Collecting results and programmes
- (d) Examination information
- (e) Posting timetable
- (f) Holding meetings

### 3.3 Duration and the Course Load of the Programmes

The Distance Learning programme will run for a minimum of 8 semesters of 15 weeks each and a maximum of 16 semesters of 15 weeks each. There will be two semesters per calendar year therefore the minimum calendar years for completion of the programme would be a minimum of 4 years and a maximum of 8 years. The average course load per semester will be 6 course units studied through the 15 weeks. However, students may be allowed to take a minimum of 4 units per semester. Each course unit in the programme has a loading of a minimum of 45 hours.

## 4 Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 4.1 No candidate shall be permitted to take an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study.
- 4.2 For purposes of these regulations, field practice (attachment) shall be deemed to be part of the fourth year.
- 4.3 All examination procedures shall be governed by the following:
  - (a) Each course examination shall be graded out of a total of 100%.

70-100%	A
60-69%	B
50-59%	C
40-49%	D
39% and below	FAIL
  - (a) The pass mark in each course examination shall be 40% and graded as follows:-
  - (b) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests

- (CATs) shall constitute the remaining 30%, which shall be divided as follows: - written CATs /term papers 20% and practical / field trip reports 10%.
- (c) Field Practice/Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the students' performance while in the field shall constitute field assessment 30%, written reports 40% and oral presentations 30%.
- (d) The Special Projects will be examined through written reports and seminar presentations and shall be graded to use in the degree classification. The seminars and project proposal shall constitute 30%, while the special project report, including oral presentation, shall constitute 70%.
- (e) For purposes of regulation 4.3 (a)-(e) herein, all papers shall carry equal weight.
- (f) A candidate who fails to attain the pass mark in half or more of the units taken in any year shall on recommendation of the Faculty Board and approval by Senate be discontinued from the degree course.
- (g) A candidate who fails to attain the pass mark in five or more course units taken in any year shall be required to repeat the academic year of study.
- (h) In any year, a candidate who fails to attain the pass mark in four papers or less may on recommendation of the Faculty Board and approval by Senate be allowed to sit supplementary examinations in the papers failed within three months after official release of results.
- (i) A candidate shall be allowed to carry forward up to an equivalent of four failed supplementary course examinations (units) in a year of study. Examinations in all courses carried forward shall be taken at the next ordinary University Examinations.
- (j) A candidate who fails to attain the pass mark in a supplementary examination shall on recommendation of the Faculty Board and approval by Senate be allowed to re-sit the examination, once only as long as the total of such examinations does not exceed four in number during any one sitting.
- (k) A candidate who fails a re-sit supplementary shall on recommendation of the Faculty Board and approval by Senate be discontinued from the degree course.

## School of Environment and Natural resources Management

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- (l) Supplementary examinations shall be marked out of 100% but the pass grade shall be reduced to 40%.
- (m) For purposes of evaluation of all supplementary examinations, regulations 4.3 (g)-(i) shall apply.
- (n) No candidate shall be permitted to repeat any year more than once for academic reasons only.
- 4.4. The degree of Bachelor of Science in Management of Agro-ecosystems and Environment shall:
- (a) Be to candidates who have completed and passed examinations in all courses of study including Field practice (attachment).
- (b) Be based on the average score of all examinations of courses taken in the 2nd, 3rd and 4th year of study.
- (c) Be classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated 2nd, 3rd, or 4th year(s) of study for academic reasons or had re-sit supplementary in any of the courses given in any year of study excluding the first year.
- 4.5 In arriving at the decision as to the degree classification for each candidate, the Faculty Board of Examiners shall consider, while observing regulation 4.4 (c) above, the overall mean mark obtained by the candidate and shall apply the principle that a mean score of:
- |           |   |                                       |
|-----------|---|---------------------------------------|
| 70 - 100% | - | First Class Honours                   |
| 60 - 69%  | - | Second Class Honours (Upper Division) |
| 50 - 59%  | - | Second Class Honours (Lower Division) |
| 40- 49%   | - | Pass                                  |

### 5 Credit Transfer(S)

Compulsory courses (specified below) will automatically be transferred into the specialty load for the completion of the programme provided that they were taken, examined and passed. Students may transfer credits and be exempted from some courses (up to 1/3 of the total courses) by the South Eastern Kenya University Senate on recommendation of the Faculty of Agriculture Academic Board, provided that:-

- (a) Such candidates had taken those courses in a recognized University or equivalent institution and had achieved a pass standard.

- (b) Candidates seeking such exemptions shall apply in writing, to the Faculty Academic Board, specifying the courses for which the exemption is desired and attaching relevant evidence (certified).
- (c) Such courses are to satisfy the requirements of the first year of study only. Candidates requiring exemption from 2nd 3rd and 4th year courses shall be required to sit relevant University examinations and attain a pass grade, which will then be used in the degree classification.
- (d) A non-refundable course exemption fee, as determined by the University, shall be paid with each application for exemption. The Department in consultation with Senate shall make the final decision whether to accept or reject the application for the transfer of credits.

## **6 Study Intermission**

A student may intermit studies at any time, for good cause conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## **7 Courses Outline**

### **Year 1**

#### **Semester 1**

AEM 101	Introduction to Environmental Science
AEM 103	Environmental Ethics
ASS 101	Landforms and Soil Formation
AEC 101	Communication Skills
CCS 010	HIV-AIDS
ACH 101	Chemistry for Agricultural Sciences
ACS 103	Mathematics

#### **Semester 2**

ABC 101	Biochemistry
AEC 102	Micro economics
AEM 104	Environmental Physics
AEM 102	Agro-ecology I
AEB 101	Introduction to Computers and Information systems
ACS 105	Principles of Generics
ASS 102	Principles of soil Chemistry

### **Year 2**

#### **Semester 1**

ACS 201	Principles of Crop Production
ACP 202	Agricultural Entomology
ASS 202	Environmental Soil Physics
AEC 201	Sociology and Development
ASS 201	Soil Microbiology & Biochemistry
AAS 201	Principles of Animal Production
ACS 206	Statistics I

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### Semester 2

AEM 201	Environmental Hydrology
AEM 202	Atmospheric Science
AEM 203	Agro ecology II
AEM 204	Organic Farming
AEM 205	Pollution Science
AEM 206	Environmental Policy and Law
AEM 207	Biodiversity Use and Conservation

### Year 3

#### Semester 1

ACS 306	Statistics II
ASS 302	Environmental Soil Chemistry
AEC 305	Principles of Resource Use and Management
ASS 301	Application of RS and GIS in Land Use Management
ARM 301	Principles of Rangeland Resources Management
ASS 305	Soil Survey, Classification and Land Evaluation

#### Semester 2

AEM 301	Research Methods and Communication
AEM 302	Principles of Environmental Project Planning and Management
AEC 304	Agricultural Policy and Law
ASS 304	Soil Biology and Biotechnology
ASS 306	Utilization and Management of Wetland Ecosystems
AEB 302	Irrigation and Water Management
ACP 303	Pesticides and Phytosanitary Regulations
AEM 303	Field/Industrial Attachment

### Year 4

#### Semester 1

AEC 403	Agricultural Extension and Technology Transfer
ASS 403	Land Degradation and Management of Problematic Soils
AEM 401	Modeling of Agro-ecosystems
AEM 403	Principles of Environmental and Industrial Toxicology
ASS 402	Watershed Management
AEM 405	Seminars and Special Project

#### Semester 2

AEM 402	Sanitary Engineering
AEM 404	Occupational and Environmental Health
AEM 406	Sustainable Development and Global Environmental Change
ARM 408	Environmental and Social Impact Assessment
ASS 406	Soil and Water Pollution
ASS 407	Recycling and Bioconversion of Organic Waste
AEM 405	Seminars and Special Project

## BACHELOR OF SCIENCE IN ENVIRONMENTAL MANAGEMENT

Regulations and Syllabus for the Degree of Bachelor of Science in Environmental Management

### 1 Introduction

The world is currently in a crisis in dealing with environmental problems like global warming and climate



change, deforestation, soil degradation, ozone depletion, waste disposal, air and water pollution. Design and implementation of solutions to current issues of global, regional and local environmental concern requires both specialists and well trained managers capable of working within, between and across disciplines. This programme provides the necessary multidisciplinary training and is relevant to those concerned with the management of natural resources and the formulation and implementation of technologies and policies that create environmental improvements at local, national and international levels, and in community, corporate and government organisations. The programme is also designed to produce graduates who are both professionally competent and marketable and who should be capable of conducting further in-depth studies and/or research work at the same time appreciating the exigencies of the interactive physical, chemical, and biological processes in the environment.

### 1.1 Justification

Graduates may gain employment in an ever expanding range of areas including national parks, protected areas management, environmental protection, environmental impact assessment and monitoring, environmental education and interpretation, sustainable forestry, fisheries management, aquaculture, ecotourism and

land/ river/ coast programmes. The private sector and all tiers of government employ graduates of this course as environmental managers. Specifically, this course will train professional environmental managers with a multi-disciplinary foundation to work in the national environmental agencies like National Environment Management Authority (NEMA), Water Resources Management Authority (WARMA), Kenya Forest Service (KFS), and Kenya Wildlife Service among others. They will also have capacity in working in international organisations like World Agro-forestry Centre, United Nations Environment Programme (UNEP), World Bank's Division of Environment, UN-Habitat, United Nations Development Programme (UNDP) World Health Organisation (WHO) and all other UN agencies engaged in environmental related programmes and activities. The graduates will also provide their services to local environmental NGOs.

### 1.2 Programme objectives

The general objective of the B.Sc. in Environmental Management degree is to produce specialized environmental graduates with strong foundations in the management of the environment, and are capable of employment in public and private sectors locally, regionally and internationally by focusing on building a scientific knowledge and practical skills in land, water;

## School of Environment and Natural resources Management

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flora and fauna management. The specific objectives are to:

- (a) Train and produce graduates with firm academic knowledge in environmental management.
- (b) Create awareness of, and concern for the environment, natural resources and impact on livelihoods;
- (c) Develop concepts and skills for assessing and resolving environmental issues, questions and problems;
- (d) Promote participation in practical environmental activities with a view to enhancing local environmental quality and communities' quality of life.

### 2 Admission Requirements

The candidate must satisfy the minimum university entry requirements.

#### 2.1 KCSE Candidates

In addition to satisfying the above University requirement candidates should possess passes at C+ or above in Biology or Biological sciences and a minimum of a C (plain) in Chemistry and in either Mathematics/ Geography/Physics/Physical sciences.

Candidates who satisfy the minimum university entry requirements but have a C (minus) in Biology or in Biological Sciences shall be eligible for admission after taking and passing bridging courses in these subjects offered by the South Eastern Kenya University.

#### 2.3 Other Candidates

Admission to the degree course may also be granted to the following candidates:

- (a) Holders of KACE or equivalent with minimum 2 principals passes, one in Biology and the other in either Chemistry, Geography, physics or Mathematics.
- (b) Holders of Diploma in Environmental Science or related equivalent from an institution recognized by senate and with passes at credit or distinction. Candidates with a pass with two years or more relevant working experience.
- (c) Holders of a Higher National Diploma or equivalent in Environmental Science or Biological Sciences and other related field from an institution recognized by senate.
- (d) Holders of a Degree in Biological Sciences or related fields from a University recognized by senate.

### 3 Credit Transfer and Exemptions

#### 3.1. Credit Transfer

Candidates from other universities recognized by the South Eastern Kenya University senate will be considered for credit transfer based on course unit content relevance and equivalence. The transfer of credits shall not be more than a third (1/3) of the total prescribed credits and/or course units required for the award of B.Sc. Environmental Management.

#### 3.2. Exemptions

Senate may exempt students from some courses on recommendation of the Faculty Board provided that:

- (a) Such candidates had taken those courses in a recognized University or equivalent institution and had achieved a pass grade.
- (b) Candidates seeking such exemptions submit a duly completed senate approved form specifying the courses for which exemption is desired and attach evidence of 3.2 (a) above, showing contents of what was studied.
- (c) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programme.
- (d) A non-refundable course exemption fee as determined by the South Eastern Kenya University be paid with each application for exemption.

### 4 Course Structure and Duration

The programme will be offered under two modules, full time (module I) and through Open Distance Learning (ODL) (Module III) for students who cannot attend regular university programme.

#### 4.1 Full time

- (a) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 15 weeks of teaching and examinations.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.
- (c) A candidate shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (d) Each student shall be required to undertake satisfactory field attachment of eight (8) weeks as stipulated in the Course structure. During the field practice, students are expected to embark on a research project, which they have to complete and present at a seminar during the fourth year of study.

### 4.2 Open Distance Learning

The delivery mode of these programmes will be use of open distance education learning modes involving the use of various media (multi-media modes of learning) and largely home based.

### 5 Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to take an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the fourth year.
- 5.3 All examination procedures shall be governed by the following:
  - (a) Each course examination shall be graded out of a total of 100%.
  - (b) The pass mark in each course examination shall be 40% and graded as follows:-

70-100%	A
60-69%	B
50-59%	C
40-49%	D
39% and below	FAIL

- (c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical / field trip reports 10%.
- (d) Field Practice/Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the students' performance while in the field shall constitute field assessment 30%, written reports 40% and oral presentations 30%.
- (e) The Research Projects shall be examined through written reports and presentations, and shall be graded to use in the degree classification. The seminars and project proposal shall constitute 30%, the special project report shall constitute 60% and the oral presentation shall constitute 10%.
- (f) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations

- in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.
- (g) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- (h) A Candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate is required to attend classes in the failed courses and shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.
- (i) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
- (j) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- (k) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.
- (l) A candidate who fails to attain the pass mark in a supplementary examination shall on recommendation of the School Board and approval by Senate be allowed to do a second supplementary examination, ONCE ONLY as long as the total of such examinations does not exceed four in number during any one sitting for that particular year.
- (m) A candidate who fails a supplementary on a second attempt according to regulation 5.3 (l) shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- (n) No candidate shall be allowed to repeat any year of study more than once.

## School of Environment and Natural resources Management

5.4. The final degree of B.Sc. Environmental Management shall be:

- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/ Attachment.
- (b) Based on the average score of all examinations of courses taken in the entire course duration.
- (c) Classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.

5.4 In arriving at the decision as to the degree classification for each candidate, the School Board of Examiners shall have to pay regard to the overall marks obtained by the candidate and shall apply the principle that a mean score of:

70 - 100%	-	First Class Honours
60 - 69%	-	Second Class Honours (Upper Division)
50 - 59%	-	Second Class Honours (Lower Division)
40 - 49%	-	Pass.

## 6 Study Intermission

A student may intermit studies at any time, for good cause conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## 7 Course Outline

### Year 1

#### Semester I

ESM 101	Introduction to Environmental Management
ESM 102	Ecosystem Structure and Functions
ESM 103	Physics of the Environment
ESM 104	Chemistry of the Environment
CCS 001	Communication Skills
CCS 010	HIV/AIDS

#### Semester 2

CCS 009	Elements of Economic
ESM 105	Renewable and Non-Renewable Resources
ESM 106	Management
ESM 107	Survey of Animal Kingdom
ESM 108	Plant Community, Ecology and Conservation
ESM 109	Arid and Semi-Arid Land Resources Management
BIT 112	Environmental Health and Safety
	Introduction to ICT

## Year 2

### Semester 1

ESM 201	Sustainable Settlements Planning and Management
ESM 202	Field Biology and Ecology
ESM 203	Properties, Ecology and Conservation of Soils
ESM 204	Introduction to Environmental Economics
ESM 205	Fresh Water Ecology and Conservation
ESM 206	Technology
ESM 207	Environmental Statistics I Culture, Religion and Environmental Conservation

### Semester 2

ESM 208	Technology and the Environmental Management
ESM 209	Sustainable Development and Environment
ESM 210	Wildlife Conservation and Management
ESM 211	Forest Resources Management
ESM 212	Hydrology and Water Resources Management
ESM 213	Environmental Statistics II
ESM 214	Gender, Environment and Development

## Year 3

### Semester I

ESM 301	Natural Resource Economics
ESM 302	Environmental Planning and Management
ESM 303	Techniques
ESM 304	Aquaculture and Fisheries Management
ESM 305	Wetlands Ecology and Management
ESM 306	Solid Waste Management
ESM 307	Tropical Meteorology Conservation and Management of Birds Habitat

## Semester 2

ESM 308	Research Methods in Environmental Sciences
ESM 309	Environmental Impact Assessment
ESM 310	Cleaner Production Technologies and Environment
ESM 311	Hazardous Waste Management
ESM 312	Agro-forestry Systems and Environmental
ESM 313	Management
ESM 314	Waste Reduction and Recycling Technology
<b>ESM 315</b>	Water Quality Monitoring and Pollution Control <i>Industrial Attachment/ Internship</i>

## Year 4

### Semester 1

ESM 401	Environmental Policy and Law I
ESM 402	Participatory Rural Appraisal Methods
ESM 403	Remote Sensing and Environmental Management
ESM 404	Environmental Restoration Technology
ESM 405	Wastewater and Sanitation Technology
ESM 406	Air Quality Monitoring and Pollution Control
ESM 407	Environmental Auditing and Reporting

### Semester 2

ESM 408	Climate Change Mitigation and Adaptation
ESM 409	Environmental Policy and Law II
ESM 410	Environmental Projects Planning and Management
ESM 411	Environmental Information Systems
ESM 412	Environmental Disaster Management
ESM 413	Noise Pollution Monitoring and Pollution Control
ESM 414	Design, Management and Rehabilitation of
ESM 415	Sanitary Landfills Research Project

### **MASTER OF SCIENCE IN ENVIRONMENTAL MANAGEMENT**

Regulations and Syllabus for the Degree of Master of Science in Environmental Management

#### **1 Introduction**

Environmental management involves the management of all components of the bio-physical environment, both living (biotic) and non-living (abiotic). This is due to the interconnected and network of relationships amongst all living species and their habitats. The environment also involves the relationships of the human environment, such as the social, cultural and economic environment with the bio-physical environment. This programme offers a unique opportunity to develop not just management skills but also an awareness of current environmental policy and an understanding of the science behind how the environment works. Graduates will be highly employable in the growing national, regional and international market for environmental managers, researchers and consultants. Using a multi-disciplinary approach, the modules offered allow students from diversified backgrounds of both science and arts to develop skills in the collection, processing and analysis of environmental data, the use of data in the development and evaluation of policy and a sound practical training in techniques of environmental management. This course will train professional environmental managers with a

multi-disciplinary foundation to work in the national environmental agencies and international organizations engaged in environmental related programmes and activities.

The objectives of the programme are to:

- (a) Train and produce postgraduates with competent academic and professional knowledge in rural and urban environmental management issues.
- (b) Develop multidisciplinary and interdisciplinary perspectives on environmental management.
- (c) Develop and apply concepts and skills for assessing, in-depth research and resolving environmental issues, questions and problems.

#### **2 Admission Requirements**

The common regulations governing Master's degrees of the South Eastern Kenya University shall apply.

- (a) Holders of a Bachelor of Science degree with at least an Upper Second Class Honours in basic and applied sciences, environmental studies/sciences, natural resources management, public health, resource economics, environmental engineering, law, environmental education, geography and relevant social sciences among other relevant disciplines or an equivalent qualification from an institution recognized by Senate.



- (b) Holders of a Bachelor of Science degree with Lower Second Class Honours in any of the areas specified in 2.1 above with at least two years relevant work experience or a postgraduate diploma in any of the areas listed in 2.1 above or equivalent qualification from an institution recognized by Senate.
- (c) Holders of a Pass degree in the disciplines specified above and at least five years working experience related to Environment and Natural Resources Management.
- (d) Holders of a Pass degree in the disciplines specified above plus a Postgraduate Diploma in any field related to Environment and Natural Resources Management.

### **3 Credit Transfer and Exemptions**

A candidate may be exempted to a maximum of one third ( $\frac{1}{3}$ ) of taught courses provided these are from institutions recognized by Senate of South Eastern Kenya University. The request for exemption should be made in writing to the Director, Board of Postgraduate Studies through the Dean, School of Environment and Natural Resources Management. The application must be accompanied by officially endorsed supporting documents. The candidate shall pay the appropriate exemption fee as determined by the University.

### **4 Course Structure And Duration**

The programme will be offered as full time, part time and through Open, Distance and Electronic Learning (ODEL) for students who cannot attend regular University programmes.

#### **4.1. Full-Time**

- (a) The degree program shall consist of coursework, examinations and thesis.
- (b) The course shall cover a minimum of 4 semesters and a maximum of 8 semesters and each semester will be 15 weeks.
- (c) Each candidate will be required to take and pass all courses.
- (d) Each candidate will be required to undertake a research project leading to an examinable thesis. The choice of the thesis research topic shall be made in consultation with the department and the academic supervisor.
- (e) Each course unit shall have 45 hours covered in one semester.

#### **4.2. Part time**

As in 4.1 above in addition to the following:

- (a) The course shall cover a minimum of 4 semesters and a maximum of 8 semesters and each semester will be 15 weeks.

- (b) A student shall be required to take a minimum of two and a maximum of four courses in one semester.

### 4.3. Open, Distance and e-Learning

The Open, Distance and e-Learning programme will run for a minimum of 4 and a maximum of 8 semesters of 15 weeks each. The minimum calendar years for completion of the programme shall be 2 years and a maximum of 4 years. The minimum course load per semester will be 2 course units. The mode of delivery will be through open and distance learning modes involving largely home and/ or office-based media:

- (a) Written self-instructional study modules issued at registration time:
- i. Study course materials like booklets
  - ii. Relevant literature
  - iii. Interactive devices and self-tests
  - iv. Face to face introductory tutorials
- (b) Mediated technical learning materials for example:-
- i. Audio visual
  - ii. e-learning materials
- (c) Limited face-to-face sessions to provide overview of the course at commencement of semester, mid semester and revision period before examinations.

- (d) Support study centers at the South Eastern Kenya University

- i. Access to information through computers at the South Eastern Kenya University and other resource centres.
- ii. Use of libraries at the South Eastern Kenya University and other institutions.

- (e) Orientation (immediately after registration):

- i. Orientation in ODL delivery.
- ii. Study, reading and computer skills.
- iii. Time management and techniques of handling assignments.
- iv. Mentorship, guidance and counseling.

- (f) Emphasis is on satellite centers that serve as a link between the University College and the student in the following manner: registration, collecting reading materials, collecting results and programmes, examination information, posting timetable and holding meetings.

## 5 Course Outline

The programme shall consist of 19 examinable courses. For successful completion of coursework, a candidate must pass all the 8 core courses, at least 2 elective courses listed below, and defense of research thesis.

## School of Environment and Natural resources Management

Core	
ESM 501	Advanced Principles and Practices in Environmental Management
ESM 502	Environmental Management Policy and Law
ESM 503	Environmental and Social Impact Assessment and Auditing
ESM 504	Advanced Environmental Statistics
ESM 505	Participatory Research Methods and Communication
ESM 506	Environmental Planning and Management Studio
ESM 507	Environmental Information Systems
ESM 508	Integrated Solid Waste Management

### Electives

ESM 509	Land Use and Settlements Planning
ESM 510	Conservation Agriculture
ESM 511	Water and Fisheries Resources Management
ESM 512	Forestry Resources Management
ESM 513	Wildlife and Eco-Tourism Management
ESM 514	Integrated Wastewater Management
ESM 515	Energy Resources Management
ESM 516	Environmental Pollution Management

ESM 517	Environmental Disaster and Risk Management
ESM 518	Climate Change Mitigation and Adaptation
ESM 519	Environmental Economics
ESM 599	Research and Thesis Development (equivalent to 8 units)

## 6 Examination Regulations

### 6.1. Written Examinations

- (a) Each course, except ESM 506, shall be examined by a written paper lasting three hours at the end of each semester in which the course is given. The studio based ESM 506 shall be examined through individual studio report, accounting for 60%, and one workshop presentation, accounting for 40%.
- (b) The coursework assessment shall account for 30% and written examinations for 70% of the final mark.
- (c) The pass mark for each course shall be 50 %.
- (d) The grading of the courses shall be as follows:

- A = 70% and above;  
 B = 60 – 69%;  
 C = 50 -59%;  
 D = 0 – 49% (fail)

- (e) A candidate who fails in any paper may, on the recommendation of the Board of Examiners, and approval by the Senate be allowed to take up to two supplementaries in failed papers after paying the appropriate fees.
- (f) A candidate who fails in the second supplementary or fails to complete the programme in the prescribed maximum duration of 8 semesters shall, on the recommendation of the Board of Examiners and approval by the Senate, be discontinued.
- (g) The mark for a supplementary paper shall be recorded as 50% in the candidate's academic record.

### 6.2.Thesis Examination

- (a) The research project shall be examined by written thesis and oral presentation.
- (b) Each student shall present a seminar on the thesis research proposal.
- (c) Each candidate shall submit for examination a thesis, with the approval of the academic supervisors, at the end of the final semester. The thesis shall be examined in accordance

with the common regulations of the Board of Postgraduate Studies of the South Eastern Kenya University.

- (d) A candidate who fails in the thesis examination may on the recommendation of the School Board of examiners be allowed to resubmit the thesis within six months up to a maximum of two times.
- (e) A candidate who fails after the second resubmission or fails to complete the course in the prescribed period shall, on the recommendation of the School Board and approval by Senate, be discontinued.

### 7 Award of Degree

Candidates who satisfy the examiners in all written and thesis examinations shall be awarded a Master of Science degree in Environmental Management of the South Eastern Kenya University.

### SHORT COURSE ON ENVIRONMENTAL IMPACT ASSESSMENT AND AUDITING

Regulations and Syllabus for the Short Course on Environmental Impact Assessment and Auditing

## 1. Introduction

Trainees are exposed to contents and methods of conducting EIA/ EA and also to the provisions of EMCA, 1999; Environmental (Impact Assessment and Audit) Regulations of 2003; Waste Management Regulations of 2006; Water Quality Regulations of 2006; Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing Regulations of 2006; Controlled Substances Regulations of 2007; Wetlands, River Banks, Lake Shores and Sea Shore Management Regulations of 2008; and Noise and Excessive Vibration Pollution Control Regulations of 2009. The training is suitable and recommended for persons in development projects and environmental management, for both private and public sectors. Improvements will be incorporated continually whenever necessary until such a time when there will be a standard training manual in Kenya.

## 2. Qualification Requirements

Candidates for the EIA and EA course shall have qualifications suitable for registration as lead or associate experts (as specified in fourth schedule of EIA and EA regulations, 2003), or any other person interested in becoming conversant with issues on EIA and EA.

## 3. Mode of Teaching

The curriculum is offered through intensive lectures, case studies, practicals and site visits. This ensures that the candidates gain comprehensive understanding of the concepts and principles, and the practical applications of EIA and EA.

## 4. Duration

This curriculum is offered over a minimum period of two weeks of intensive residential training. Each of the recommended topics and case studies are covered by a minimum six (6) contact hours. The site visits take at least two (2) days (48 hours)

## 3. Assessment Method

The EIA and EA course is examined by continuous course assessment. The assessments include site visits and case study reports (40%) and a three-hour (3) end-of-course examination (60%).

All the other University examination rules do apply.

#### 4. Course Outline

### **CERTIFICATE IN ENVIRONMENTAL IMPACT ASSESSMENT & AUDIT**

Introduction to EIA/ EA
Policy, Legal & Adm Framework for EIA/ EA in Kenya
Stakeholder and Public Participation in EIA/ EA
Environmental Economics
Environmental Management Systems Standards
Environmental Information Systems for EIA/ EA
EIA Methods
Environmental Audits

Strategic Environmental Assessment
Report writing
EIA/ EA Project Report
EIA/ EA Review and Decision Making Process
Environmental Management Plan
EIA/ EA Project Management
Social Impact Assessment
Industrial Ecology
Occupational Health & Safety
Mainstreaming EIA/ EA in Organizations
Multilateral Environmental Treaties, Protocols & Agreements
EIA Case Studies
EA Case Studies
Site Visits & Practicals

**School of  
Business  
and  
Economics**

### 1 Introduction

School of Business and Economics was established to offer Business, Management and Economics courses that will service to core University programmes and help in transforming them into business entities. The School will endeavor to collaborate with stakeholders and develop: models to improve managerial decisions establish and run small and medium enterprises help the community to acquire skills and knowledge in order to create wealth and, alleviate poverty.

#### 1.1 Mission

To produce business professionals and leaders with an understanding of the global context of business and economics by preparing students to achieve full potential through creation and dissemination of knowledge through learning and extensive research.

#### 1.2 Objectives of the School

- (a) To produce graduates who are capable of being high-impact business leaders, who are entrepreneurial and continuing to learn, and who can harness information and technology to produce sustainable economic growth.
- (b) To offer an experiential learning environment that combines theory and

practice in order to prepare the students to become fully engaged, productive and ethical members of the business community and society.

- (c) To provide students with the knowledge and technical skills necessary to understand and participate in the modern business and economic world, to prepare them for subsequent graduate studies and allow them to achieve the highest level of success in their professional careers.

The School has two departments:-

- (a) Department of Business and Entrepreneurship
- (b) Department of Management Science

## DEPARTMENT OF BUSINESS AND ENTREPRENEURSHIP

### 1 Introduction

The department of Business and Entrepreneurship is one of the departments in the school of business and Economics. It is charged with teaching and research responsibilities in line with the university core mandate of teaching and research.



## 1.1 Mission

To excel in the production of entrepreneurship and business management knowledge and skills through teaching and research in order to produce all round graduates and entrepreneurs who can succeed in enterprise Development and business management.

## 1.2 Objectives

To produce graduates who can:

- (a) Apply critical and analytical skills and methods to the identification, evaluation and resolution of complex business and entrepreneurial problems from the standpoint of specialized knowledge developed from the programs offered.
- (b) Contribute to issues of concern to society within the framework of disciplines studied both within and outside the core program.

The department offers specialized training in Bachelor of Commerce.

## BACHELOR OF COMMERCE

Regulations and Syllabus for the Degree of Bachelor of Commerce

## 1. Introduction

### 1.1 Preamble

The Bachelor of Commerce (B.Com) degree programme of the South Eastern Kenya University prepares undergraduate students for careers in business management both in the public and private sectors of the economy. Since its inception in 1964, the programme has offered management education to a broad spectrum of students from the Eastern Africa region and beyond.

To improve on its utility, the programme has been and will continue to be realigned to be consistent with the changing needs of society. It has developed from a programme of three options into the presently eight distinct options: accounting, Finance, Marketing, Insurance, Human Resources Management, Business Information Systems, Procurement and Supply Chain Management and Operations Management, each one addressing the unique needs of our society.

Flexible schedules make the program more accessible. The program is offered on full-time and distance learning modes. The part-time and distance learning programmes are designed to accommodate the special needs of those in full-time employment and other demands.

### 1.2 Objectives

- (a) To introduce students to the general issues and approaches to management.
- (b) To enhance self-confidence and ability to critically evaluate management issues from academic and practical perspectives.
- (c) To develop awareness of the changing local and international business environment.
- (d) To develop awareness of the changing local and specialization.
- (e) To instill problem-solving attitudes and business ethics in the practice of management.
- (f) To inculcate entrepreneurial and self-reliance attitudes and habits in students so that they may be active participants in the creation of new wealth.

### 1.3 Approach

The Bachelor of Commerce degree is both academic and practical in its orientation. The teaching methods applied include lectures, distance study materials, tutorials, assignments, class discussion, case analysis and research. Students are evaluated on the basis of class attendance and participations, performance in assignments, tests and in final examinations done

at the end of each semester. Links with the business community, industry and other business schools provide an important component.

### 2 Entry Requirements

Admission will be on the basis of academic qualifications and more specifically will be governed by any one of the following Senate approved regulations:

- (a) The common regulations of the bachelor's degree of the South Eastern Kenya University shall be applicable.
- (b) Holder of KSCE certificate with a minimum aggregate of C+ and a minimum of C in both Mathematics and English/Kiswahili or minimum grade of B in bridging course offered in the South Eastern Kenya University with at least C- in the subject at KCSE.
- (c) Holder of KCSE (mean grade C-) plus a Certificate and Diploma from a recognized institution.
- (d) Holder of KACE certificate with a minimum of two principal passes and a minimum of a credit pass in Mathematics at KCE.
- (e) Holder of a degree from a recognized university.

- (f) Holder of a Diploma from an institution recognized by the South Eastern Kenya University Senate and a minimum aggregate of C at KCSE or O-level Division III.
- (g) Holder of CPA/CPS part II or equivalent professional qualification with a minimum aggregate of C at KCSE or O-level Division III.
- (h) Holder of qualifications deemed to be equivalent to any of the above.

Year/Level	Semester	Level	Common	Core	Specialization	Electives	Total
1	I	I	2	4			6
	II	I		5			6
2	I	II		6			6
	II			6			6
	I	III		4	2		6
	II			2	3		1
	I	IV	I	2	2	1	5
	II			3			1
<b>TOTAL</b>			<b>3</b>	<b>30</b>	<b>10</b>	<b>3</b>	<b>46</b>

### **3 Programme Duration and Structure and Mode Of Study**

#### **3.1 Full-time and Part-time**

- (a) The B.Com programme will run for a minimum of eight semesters and a maximum of 24 semesters from the date of registration.
- (b) The minimum semester load shall be two course units and the maximum shall be six course units.
- (c) Each course unit in the programme has a loading of a minimum of 45 hours.
- (d) The course units are divided into common, core, specialization and elective course units that are organized as follows:

#### **3.2. Distance Mode of Study**

- (a) This programme is offered off-campus using multi-media approach in distance education.
- (b) The main media of instruction will be print and electronic study materials.
- (c) The study material shall be self-instructional.
- (d) There will be use of limited face to face during the residential session.
- (e) Face to face delivery mode shall not exceed one third of the instructional time.
- (f) Counselling and guidance shall be provided using multimedia approach.
- (g) The B.Com programme will run for a minimum of eight semesters of 24 weeks each and maximum of 16 semesters from the date of registration.

## School of Business and Economics

- (h) The minimum semester load shall be three course units and the maximum shall be six course units.
- (i) Each course unit in the programme has a loading of a minimum of 70 hours.
- (j) The programme is organized into two parts, part I consisting of Year/Level I and Year/Level; and part II consisting of Year/ Level III and Year/ Level IV.
- (k) The course units are divided into common, core, specialization and elective course units that are organized as follows:

### Year 1

CCS 001	Communications and Learning Skills	
CCS 002	Fundamentals of Dev. & their applications to Kenya.	
CCS 010	HIV Aids.	
DAC 101	Foundations of Accounting I	
DAC 102	Foundation of Accounting II	DAC 101
DBA 101	Introduction to Business	
DBA 102	Principles of Management.	DBA 101
DBA 103	Introduction to Micro-Economics	
DBA 104	Introduction to Macro-Economics	
DMS 111	Quantitative Methods for Business	
DOM 102	Principles of Operations M. t	
DIS 104	Fundamentals of Info, Systems	

### Year 2

#### Prerequisite

DAC 201	Accounting for Assets	DAC 102
DAC 202	Accounting for Equities	DAC 102
DAC 203	Intro.To Management Accounting	DAC 102
DBA 201	Micro-Economic Theory	DBA 103
DBA 202	Macro- Economic Theory	DBA 104
DBA 203	Organization Theory	DBA 102
DFI 202	Introduction to Finance.	DAC 102
DIN 201	Introduction to Risk and Insurance	
DIN 202	Risk Management	
DMA 202	Principles of Marketing	
DMS 201	Business Statistics I	DMS 111
DPS 202	Fundamentals of Supply Chain Mgt	

### Year 3

DBA 301	Business Law I	
DBA 302	Business Law II	DBA 301
DBA 303	Organizational Behavior	
DFI 303	Financial Institutions and Markets	
DIS 302	E- Business	
DMS 311	Operations Research for Mgt I	

#### Accounting Option

DAC 301	Advanced Financial Accounting Techniques
DAC 302	Advanced Financial Accounting Practice
DAC 301	
DAC 304	Advanced Management Accounting
DFI 305	Corporate Finance
DFI 306	Public Finance

*Plus at least one elective from any level III course units offered in the school.*

### Finance Option

DFI 301	Monetary Theory and Practice	
DFI 302	Management of Financial Institutions	DFI 303
DFI 304	International Finance	DFI 305
DFI 305	Corporate Finance	
DFI 306	Public Finance	

Plus at least one elective from any level III course units offered in the school.

### Marketing Option

DMA 301	Marketing Strategy and Plans	
DMA 302	Consumer Behaviour	
DMA 303	International Marketing	
DMA 304	Marketing Communication	
DMA 306	Marketing Services	

Plus at least one elective from any level III course units offered in the school.

### Insurance Option

DFI 305	Corporate Finance	
DIN 301	Pensions I	
DIN 302	Property Insurance I	
DIN 304	Introduction to Insurance Law	
DIN 306	Assurance of Persons I	
DIN 308	Demographic Statistics	

Plus at least one elective from any level III course units offered in the school.

### Human Resource Management Option

DHR 301	Management of Human Resources	
DHR 302	Industrial Relations Management	
DHR 303	Human Resource Training	
DHR 304	Maintenance of Human Resources	
DHR 306	Introduction to Public Relations	

Plus at least one elective from any level III course units offered in the school.

### Business Information systems option

DIS 301	Infor: Technology Hardware and System Software	
DIS 303	Information Systems Analysis and Design	
DIS 304	Business Applications Development	
DIS 306	Database Systems	
DIS 308	Networks and Telecommunications	

Plus at least one elective from any level III course units offered in the school.

### Procurement and Supply Chain Management option

DPS 301	Supply Chain Management	
DPS 302	Inventory Management	
DPS 304	Procurement Management	
DPS 306	Logistics and Transport Mgt.	DPS 301
DOM 301	Operations Management Practice	

Plus at least one elective from any level III course units offered in the school.

### Operations Management Option

DOM 301	Operations Management Practice	
DOM 304	Operations Systems Design	
DPS 301	Supply Chain Management	
DMS 308	Business Statistics II	DMS 201
DMS 312	Operations Research for Mgt. II	DMS 311

Plus at least one elective from any level III course units offered in the school.

## School of Business and Economics

### Additional Level III Electives

DBA 309	Advanced Micro Economic Theory	
DBA 310	Advanced Macro Economic Theory	
DBA 312	Agricultural Economics	
DBA 306	International Business Management	
DBA 308	Public Management	
DBA 304	Principles of Co-operative Management	
DIS 310	Knowledge management and Innovation	
DMS 307	Business Statistics II	
DMS 312	Operations Research for Mgt II	DMS 311
DPS 302	Inventory Management	DMS 301

### Year 4

DBA 401	Strategic Management	
DBA 403	Entrepreneurship	
DMS 411	Business Research Methods	

### Accounting Option

DAC 401	Principles of Auditing	
DAC 402	Financial Audit Practice and Invest.	
DAC 401		
DAC 403	Tax Law and Practice	DFI 306
DAC 404	Management Research paper	DMS 411
DAC 406	Contemporary Issues in Mgt. Accounting	DAC 304

*Plus at least one elective from any level III course units offered in the school.*

### Finance Option

DFI 401	Financial Statement Analysis	DFI 305
DFI 402	Financial Mgt. in the Public Sector	DIN 306
DFI 403	Invest. Analysis and Portfolio Mgt.	DFI 305
DFI 404	Management Research Paper	DMS 411
DFI 406	Corporate Financial Policy	DFI 305

*Plus at least one elective from any level III course units offered in the school.*

### Marketing Option

DMA 401	Marketing Research	
DMA 403	Industrial Marketing	
DMA 404	Management Research Paper	DMS 411
DMA 406	Sales Management	
DMA 410	Channels Management	

*Plus at least one elective from any level III course units offered in the school.*

### Insurance Option

DIN 401	Liability Insurance I	
DIN 402	Assurance of the person II	DIN 306
DIN 403	Actuarial Mathematics	DIN 306
DIN 404	Management Research Paper	DMS 411
DIN 406	Liability Insurance II	DIN 401

*Plus at least one elective from any level III course units offered in the school.*

### Human Resource Management Option

DHR 401	Compensation Management	DHR 301
DHR 402	Strategic Human Resources Mgt.	DHR 301
DHR 404	Management Research Paper	DMS 411
DHR 405	Issues in Mgt of Human Resources	DHR 301
DHR 406	Labour Law	

Plus at least one elective from any level III course units offered in the school.

### Business Information Systems Option

DIS 401	Information Systems Management	
DIS 402	Infor. Systems Security and Audit	
DIS 403	Advanced Buss.Applications Dev.	DIS 304
DIS 404	Management Research Paper	DMS 411
DIS 406	Business Analytics & Decision Support	

Plus at least one elective from any level III course units offered in the school.

### Procurement And Supply Chain Management Option

DPS 401	Contemp. Issues in Supply Chain Mgt.	DPS 301
DOM 402	Project Management	
DPS 404	Management Research Paper	DMS 411
DOM 406	Quality Management	DOM 301
DPS 407	Negotiation in Procurement and Supply	
DPS 304		

Plus at least one elective from any level III course units offered in the school.

### Operations Management Option

DOM 401	Manufacturing Operations Management	
DOM 301	DOM 304	
DOM 402	Project management	
DOM 403	Service Operations Management	DOM 301
		DOM 304
DOM 404	Management Research Paper	DMS 411
DOM 406	Quality Management	DOM 301

Plus at least one elective from any level III course units offered in the school.

### Additional Level IV Electives

DAC 405	Trust and Executorship Accounting	DAC 302
DAC 407	International Accounting	DAC 302
DAC 408	Tax Management	DAC 403
DAC 410	Publics Sector Accounting	DAC 302
DAC 412	Contemporary Issues in Auditing	DAC 402
DAC 414	Contempt. Issues in Financial Account	DAC 302
DBA 408	Small Business Management	DBA 302
DBA 409	Development Economics	
DBA 411	Banking practice	
DBA 412	Banking Law	
DBA 413	International Economics	
DBA 414	Company Law	DBA 302
DBA 115	Mercantile Law	DBA 302
DBA 416	Business and Society	
DFI 405	Development Finance	DFI 303
DFI 407	Real Estate Finance	DFI 302
DFI 408	Financial Operations of Insurance Companies	

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DFI 409	Financial Modeling and Forecasting	DFI 305
DFI 410	Bankruptcy and Reorganization	DFI 305, DAC 302
DFI 412	Regulations and Innov. in Financial Mkts	
DFI 414	Contemporary issues in Financial Mgt.	DFI 404
DFI 416	Investment Banking	DFI 404
DFI 418	Marketing of Financial Services	DFI 303
DHR 407	Occupational Health and Safety	
DHR 408	Performance Management	
DIN 405	Motor Insurance	
DIN 407	Insurance Markets	
DIN 408	Pensions II	DIN 301
DIN 410	Marine Insurance	
DIN 412	Reinsurance	
DIN 414	Property Insurance II	
DIN 416	Advanced Actuarial Science	DIN 403
DIN 418	Insurance Brokerage	
DMA 402	Application of Marketing Research	DMA 401
DMA 408	Agricultural Marketing	
DMA 412	Brand Management	
DMS 408	Managing Informatics	DMS 304
DMS 409	Materials Management	
DMS 410	Non-parametric Statistics	
DMS 412	Total Quality Management	
DIS 410	Distributed Information Systems	
DIS 411	Internet Technologies and Applications	
DIS 412	Information Technology Project Mgt	

DPS 406	Global Supply Chain Management	
DOM 405	Global Operations Management	
DMS 406	Advanced Business Statistics	DMS 307
DOM 407	Business Forecasting	
DMS 407	Heuristics and Simulation	DMS 311

- (a) Registration for Part II requires that the students will have attempted all Part I course units.
- (b) Students may take any course unit offered by any option as their elective as long as they meet the relevant prerequisites.
- (c) A student may take any course unit offered in other schools. Faculties and Institutes of the South Eastern Kenya University in addition to the required course units in the School of Business subject to approval by the Schools, Faculties and Institutes involved. Such course units will appear in the candidate's transcript but shall not contribute to the requirements of the degree of Bachelor of Commerce.

## 4. Examination Regulations

- 4.1 Final examinations for all the course units are University Examinations.
- 4.2 A student is required to sit a two-hour final examination in each of the course units registered for in each semester.



4.3 To be eligible for the award of a B.Com degree, a candidate will have passed in the minimum number of course units prescribed for each level of study.

4.4 All examinations shall be governed by the following rules:-

- (a) Each course units shall be graded out of 100% marks.
- (b) Final examinations shall constitute 70% and course work the remaining 30% of the marks in each course unit offered and taken in any semester except for the management research paper;

(c) The grading system in each course unit will be as follows:-

Marks	Grade
70-100%	A
60-69%	B
50-59%	C
40-49%	D
39% and below	Fail

- (d) The pass-mark in each course unit shall be 40%.
- (e) A candidate who fails as examination in any course unit shall re-sit or retake the failed course unit is examined. In any case such

a candidate must successfully complete the course unit(s) within 12 months from the first attempt.

- (f) A candidate who fails an examination in an elective course unit may opt to take a different elective course unit if the candidate is not inclined to re-sit or retake the failed in the course unit. In any case such a candidate must successfully complete the course unit(s) within 12 months from the first attempt.
- (g) A candidate may re-sit or retake the failed course unit for a maximum of two times provided that this is within two (2) calendar years from the first attempt.
- (h) A candidate who passes after re-sitting an examination in a failed course unit will be awarded a maximum of forty percent 40% while a candidate who passes after retaking a failed course unit will be awarded the actual mark scored.
- (i) On the recommendation of the school board, any candidate who takes the maximum number of course units (currently six for the full time and part-time and eight for the distance learning programmes) in any semester, sits University Examinations

and fails in a maximum of two course units for both the full-time and part-time programmes and three course units for distance learning programmes, may be eligible for compensation in the failed course unit(s) provided that:

- (i) His/her mean mark for that particular semester is 50% or above.
- (ii) The score on the failed course unit does not fall below 35%.
- (iii) Each mark in the failed course unit will be compensated by a loss of two marks in a passed course unit up to a maximum of 10 marks for fulltime and part-time and a maximum of 15 marks for distance learning programme.
- (iv) The course units involved in the compensation process are prescribed for the same part.
- (j) A candidate who, for acceptable cause, fails to sit for a final examination at the scheduled time may, on the recommendation of the school Board of Examiners to the University Senate, be allowed to sit for a special examination. A special examination is a University examination in accordance with Rule 3.4.

- (k) Course work for a special examination will be kept for a maximum of two semesters after which the candidate will be required to register for the course unit a fresh.
- (l) A candidate who fails to satisfy the school board of examiners may, on the recommendation of the board to the University Senate, be required to re-sit the examination twice in the course unit not more than two times.

### DEPARTMENT OF ECONOMICS

### BACHELOR OF ECONOMICS AND STATISTICS

Regulations and Syllabus for the Degree of Bachelor of Economic and Economics and Statistics

A candidate must satisfy the prescribed South Eastern Kenya University requirements.

- (a) KCSE with a C+
- (b) KCSE with a B plain in Mathematics
- (c) KCE Division II with credit pass in Mathematics
- (d) KACE or EAACE certificate with two principal passes; with credit pass in Mathematics at KCSE or equivalent.
- (e) A degree from a recognized University or its equivalent

## COURSE UNITS OFFERED

### BACHELOR OF ECONOMICS AND STATISTICS

#### Year 1 Semester 1

XET 101	Introduction to Microeconomics
SMA 101	Basic Mathematics
CHS 101	Economic History of Kenya
CSO 101	Introduction to Sociology
CPP 103	Introduction to Logic
GPR 109	Legal Systems and Methods
CPY 101	Introduction to Psychology
CCS 001	Communication Skills

#### Semester 2

XET 102	Introduction to Macroeconomics
XEQ 102	Economic Statistics I
SMA 103	Calculus I
CGV 102	Introduction to Political Economy
CPP 104	Introduction to Ethics
XEA 104	Introduction to Computers
CLC 102	Aspects of Language Skills
CCS 010	HIV/AIDS

#### Year 2 Semester 1

XET 201	Microeconomics
SMA 203	Linear Algebra
SMA 201	Calculus II
XEQ 203	Mathematics for Economists I
XEQ 205	Economic Statistics II
XEA 201	Introduction to Financial Accounting
SMA 210	Introduction to Real Analysis & Topology
CCS 003	Human Health

#### Semester 2

XEA 202	Macroeconomics
XEQ 202	Introduction to Ordinary Differential Equations
SMA 322	Introduction to Numerical Methods
SMA272	Introduction to Optimization
XET 202	Introduction to Management Accounting
GPR 204	Property Law
CCS 007	Science & Technology

#### Year 3 Semester 1

XEQ 301	Mathematics for Economics II
XEA 301	Development Economics
STA 301	Probability and Statics II
STA 305	Probability Modeling

### Electives

STA 221	Economic and Social Statistics
STA 303	Theory of Estimation
XET 301	Intermediate Microeconomics
XEA 311	Entrepreneurship Development and Technology
XEA 307	Introduction to Labour Economics

### Year 4

#### Semester 1

XEA 401	Public Economics
XET 401	Introduction to Research Methods
STA 405	Linear Modeling II
STA 410	Sample Survey Theory
STA 422	Stochastic Models for Social Processes
XET 402	Institutional Economics
XEA 406	Poverty and Development
STA 402	Research Paper
STA 432	Applied Econometrics
STA 434	Survey Research Methods

### Electives

XEA 401	Environmental Economics
XEA 407	Monetary Economics
XEA 409	Economics of Industry
STA 403	Non-Parametric Methods
STA 404	Applied Multivariate
STA 406	Applied Stochastic Process

## BACHELOR OF ECONOMICS

### Year 1

#### Semester 1

XET 101	Introduction to Microeconomics
SMA 101	Basic Mathematics
CHS 101	Economic History of Kenya
CSO 101	Introduction to Sociology
CPP 103	Introduction to Logic
GPR 109	Legal Systems and Methods
CPY 101	Introduction to Psychology
CCS 001	Communication Skills

#### Semester 2

XET 102	Introduction to Macroeconomics
XEQ 102	Economic Statistics I
SMA 103	Calculus I
CGV 102	Introduction to Political Economy
CPP 104	Introduction to Ethics
XEA 104	Introduction to Computers
CLC 102	Aspects of Language Skills
CCS 010	HIV/AIDS

## Year 2

### Semester 1

XET 201	Microeconomics
SMA 203	Linear Algebra
SMA 201	Calculus II
XEQ 203	Mathematics for Economists I
XEQ 205	Economic Statistics II
XEA 201	Introduction to Financial Accounting
SMA 210	Introduction to Real Analysis & Topology
CCS 003	Human Health

### Semester 2

XEA 202	Macroeconomics
XEQ 202	Introduction to Ordinary Differential Equations
SMA 322	Introduction to Numerical Methods
SMA272	Introduction to Optimization
XET 202	Introduction to Management Accounting
GPR 204	Property Law
CCS 007	Science & Technology

## Year 3

### Semester 1

XET 301	Intermediate Macroeconomics
XEQ 301	Mathematics for Economist II
XET 303	Economic History
XEA 301	Development Economics

## Electives

XEA 303	Corporate Finance I
XEA 305	Agricultural Production and Marketing Analysis
XEA 307	Introduction to Labour Economics
XEA 309	International Economics
XEA 311	Entrepreneurship and Technology

## Semester 2

XET 302	Intermediate Macroeconomics
XET 306	Welfare Economics
XET 304	History of Economic Thought
XEA 302	Development Planning

## Electives

XEA 306	Agricultural Development & Policy
XEA 308	Financial Markets & Institutional
XEA 304	Corporate Finance II
XEA 310	Asset Pricing
XEA 312	Resource Economics

## Year 4

### Semester 1

XEQ 401	Introductory Econometrics I
XET 401	Public Economics
ZET 403	Introduction to Research Methods

### Electives

XEA 401	Environmental Economics
XEA 405	Transport Economics
XEA 407	Monetary Economics
XEA 403	Health Economics I
XEA 409	Economics of Industry

### Semester 2

XEQ 402: Introductory Econometrics II
XET 402: Institutional Economics
XEA 402: Research Paper

### Electives

XEA 404: Health Economics II
XEA 402: Economics of Water Resources
XEA 408: Public Finance & Fiscal Policy
XEA 410: World Food Policy
XEA 406: Poverty and development

## DEPARTMENT OF MANAGEMENT SCIENCE

### 1. Introduction

Applications of management science are abundant in industry as airlines, manufacturing companies, service organizations, military branches, and in government. Management science uses rational, systematic, science-

based techniques to inform and improve decisions of all kinds. Management science is also concerned with so-called "soft-operational analysis", which concerns methods for strategic planning, strategic decision support, and Problem Structuring Methods (PSM). As the world develops and embraces information technology, the need for managerial decisions and information becomes more critical.

### 1.1 Mission

To produce professionals in management science through teaching and extensive research in practical management and management support systems.

### 1.2 Objectives

The department will prepare students so that they will be able to:

- (a) Use scientific research-based principles, strategies, and analytical methods to improve an organizational ability to enact rational and meaningful management decisions to complex problems.
- (b) Develop and apply models and concepts that are useful in helping to illuminate management issues and solve managerial problems.
- (c) Help businesses to achieve their goals using the scientific methods of operational research.

## **BACHELOR OF PROCUREMENT AND SUPPLY CHAIN MANAGEMENT**

Regulations and Syllabus for the Degree of Bachelor of Procurement and Supply Chain Management

### **1 Introduction**

Procurement is the acquisition of appropriate goods and/or services at the best possible total cost of ownership to meet the needs of the purchaser in terms of quality and quantity, time, and location. Corporations and public bodies often define processes intended to promote fair and open competition for their business while minimizing exposure to fraud and collusion.

Supply chain management (SCM) is the management of a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers. Supply Chain Management spans all movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption (supply chain).

The Bachelor of Procurement and Supply Chain Management degree prepares candidates to work in areas of procurement and supplies in both private and public sectors. The course is structured to reflect the dynamic changes in procurement and supply processes

and provides a basis for the world of work. It also provides academic, professional, and ethical principles and practices in decision making in an operating business environment.

### **1.1 Justification**

The programme is meant to meet the current needs in procurement and supply chain management. It incorporates course units that will enable the graduates of the programme meet demands of the job market by providing solutions to problems prevailing in distribution network configuration, distribution Strategy, trade-offs in logistical activities, information, inventory management and cash-flow.

### **1.2 Programme objectives**

The objectives of the programme shall be:

- (a) To produce and/or develop holistic graduates for critically needed skilled manpower being not only knowledgeable in the theory but also in the practice and research of procurement and supply chain management.
- (b) To produce and/or develop a cadre of technical workers who are well-versed with production systems knowledge applicable to planning and managing procurement and supply.

(c) To produce and/or develop innovative and competent graduates with practical problem solving skills able to harness available resources for national development

## 2 Entry Requirements

Admission will be on the basis of academic qualifications and more specifically will be governed by any one of the following Senate approved regulations:

- (a) The common regulations of the Bachelor's degree of the South Eastern Kenya University shall be applicable.
- (b) Holder of KCSE certificate with a minimum aggregate of C+ and a minimum of C in both Mathematics and English/Kiswahili or a minimum of grade of B in bridging course offered in the South Eastern Kenya University with at least a C- in the subject at KCSE.
- (c) Holder of KCSE (mean grade C-) plus a Certificate and a Diploma from a recognized institution.
- (d) Holders of KACE certificate with a minimum of two principal passes and a minimum of a credit pass in Mathematics at KCE.
- (e) Holder of a degree from a recognized university.

(f) Holder of a diploma from a South Eastern Kenya University senate recognized institution and a minimum aggregate of C at KCSE or O-level Division III.

(g) Holder of a CPA/CPS part II or a relevant diploma from an institution recognized by Senate and must have obtained a minimum grade of C plain at KCSE.

(h) Holder of qualification deemed to be equivalent to any of the above.

## 3 Credits Transfer and Exemptions

### 3.1 Credit transfer(s)

A candidate from a recognized university, or any other equivalent institution recognized by the South Eastern Kenya University senate, wishing to transfer to Bachelor of Procurement and Supply Chain Management programme shall be allowed to transfer credits from his/her university if those credits are deemed relevant and meet the required minimum contact hours. The transfer of credits shall not be more than a third ( $\frac{1}{3}$ ) of the total prescribed credits and/or course units required for the award of Bachelor of Procurement and Supply Chain Management.



### 3.2 Exemptions

An applicant who wishes to be exempted from any course:

- (a) Shall be required to send a formal application of exemption to the Academic Registrar through the Dean justifying the candidates request and attaching relevant supporting documents.
- (b) May be required to sit examination on the course the candidate wishes to be exempted, set and administered by the representative department on behalf of the School Board of Examiners.
- (c) Must have attained a minimum grade of C or equivalent in the course units for which exemption is applied.
- (d) Exemptions can only be allowed in Part I of the program subject to a maximum of 2/3 of the course units

### 4 Course Structure and Duration

- (a) The degree programme shall extend for over a period not less than four academic years and not more than seven years leading to the award of Bachelor of Procurement and Supply Chain Management with each academic year having two Semesters. Each

semester will take 15 weeks. All course units in first and second years of study are compulsory. During third and fourth years, each student will take 4 core courses and select any other 2 from the electives.

- (b) Each course unit in the programme has a loading of a minimum of 45 hours.
- (c) Each student will be required to take an Industrial Attachment for 3 months. Assessment shall be three fold i.e., by the supervisor in the place of attachment, follow up visits by academic staff and from the logbook filled by students on attachment.
- (d) The programme may also be offered through distance learning modes.

### 5 Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (attachment) shall be deemed to be part of the fourth year.

5.3 All examination procedures shall be governed by the following:

(a) Each course examination shall be examined out of a total of 100%.

(b) The pass mark in each course examination shall be 40% and graded as follows:

70-100%	=	A
60-69%	=	B
50-59%	=	C
40-49%	=	D
39% and below	=	Fail

(c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical / field trip reports 10%.

(d) Field Practice/Attachment shall be examined by oral examination and written reports. The grades shall be used in the degree classification. Evaluation of the student's performance while in the field shall constitute; field assessment 30%, written reports 40% and oral presentations 30%.

(e) The Research project shall be examined through written reports and presentation, and shall be graded for use in the degree classification. The project proposal shall constitute 30%, the project report shall constitute 60% and the oral presentation shall constitute 10%.

(f) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.

(g) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.

(h) A candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate who opts to

- attend classes in the failed courses shall be required to pay the required tuition fees for the failed course units, examination, and any other necessary charges as may be determined by the University.
- (i) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
  - (j) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
  - (k) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.
  - (l) A candidate who fails to attain the pass mark in supplementary examination shall on recommendation of the school Board and approval by the Senate be allowed to do a second supplementary, ONCE ONLY as long as the total of such examinations does not exceed four in number during any one sitting for that particular academic year.
  - (m) A candidate who fails a supplementary on a second attempt according to regulations 5.3 (i) shall on recommendation of the

- School Board and approval by Senate be discontinued from the degree programme.
- (n) No candidate shall be allowed to repeat any year of study more than once for academic reasons.

## 6 Study Intermission

A student may intermit studies at any time, for good cause conveyed in writing to the Academic Registrar and may resume later after dully notifying the Academic Registrar. During the entire period of intermission the student will be required to keep his or her registration current by paying the prescribed registration charges.

## 7 Course Outline

### YEAR 1 Semester 1

BPS 101	Fundamentals of Supply Chain Management
BPS 102	Inventory Management I
BPS 103	Principles of Management
BPS 104	Financial Accounting I
BIT 101	Introduction to Computer Systems
CCS 001	Communication Skills
CCS 010	HIV/AIDS

**Semester 2**

BPS 105	Principles of Economics
BPS 107	Human Resources Management
BPS 108	Financial Accounting II
BPS 109	Inventory Management (II)
BPS 110	Procurement Legal Framework
CCS 007	Science and Technology in Development
BIT 103	Computer Applications

**Year 2**

**Semester 1**

BPS 201	Transport Economics
BPS 202	Quantitative Methods I
BPS 203	Management of Retail Operations
BPS 204	Inventory Management III
BPS 205	Procurement Management
BIT 201	Information System Analysis and Design
BIT 206	Computer Network Principles

**Semester 2**

BPS 208	Quantitative Methods II
BPS 209	Operations Management
BPS 210	Managing Supply Chain Relationships
BPS 211	Contract and Dispute Management
BPS 213	Cost Accounting
BPS 214	Procurement Audits and Investigations I
BIT 104	Database Systems

**YEAR 3**

**Semester 1**

BPS 301	Sustainable Supply Chain Management
BPS 302	Transport Management and Policy
BPS 303	Supply Chain Vulnerability and Risk Management
BPS 304	Procurement Audits and Investigations II

**Electives (Any Two)**

BPS 305	Procurement Policy and Strategy
BPS 306	Finance for Purchasers
BPS 307	Organizational Behavior
BPS 308	Total Quality Management

**Semester 2**

BPS 309	Ethics in Purchasing and Supplies
BPS 310	Public Finance and Purchasing Practices
BIT 310	Management Information Systems
BPS 311	Research Methods

**Electives (Any Two)**

BPS 312	Marketing Management
BPS 313	Clearing and Forwarding
BPS 314	Materials Handling and Storage Management
BPS 315	Warehousing and Distribution
BPS 316	Industrial Attachment

## YEAR 4

### Semester 1

BPS 401	Global Purchasing and Supply
BPS 402	Logistics in Purchasing and Supply Chain Management
BPS 403	Strategic Procurement Management
BPS 415	Research Project I

### Electives (Any Two)

BPS 404	Managing Relationships with Financial Institutions
BPS 405	Customer Relations Management
BPS 406	Financial Management
BPS 407	Entrepreneurship Skills

### Semester 2

BPS 408	Supply Chain Management
BPS 409	E-Commerce
BPS 411	E-Procurement and Supply Chain Management
BPS 415	Research Project II

### Electives (Any Two)

BPS 410	Operations in Purchasing and Supplies
BPS 412	Management Accounting
BPS 413	Industrial Relations
BPS 414	Development Studies and Social Ethics

## MASTER OF BUSINESS ADMINISTRATION

*Regulations and Syllabus for the Degree of Master of Business Administration*

### 1 Introduction

The Master of Business Administration (MBA) programme of the South Eastern Kenya University seeks to equip its graduates with skills, techniques and knowledge required for successful managerial careers in the public and private sectors of the economy. Participants are drawn from the Eastern African region and beyond. The programme caters for students with prior business training at undergraduate level as well as those whose professional backgrounds are in other disciplines. The MBA course is therefore also a conversion course that aspires to make managers out of practitioners in different professional areas.

Worldwide, professionals in different areas such as engineering and medicine emphasize technical expertise in their undergraduate studies, but in time upward mobility demands knowledge of general management that includes organization structures, marketing, finance, operations, human resources, information systems and other emerging areas. The MBA course complements technical knowledge with simulated managerial

experiences and knowledge to make them effective managers in a dynamic organizational environment. Teaching goes beyond theoretical concepts to practical knowledge based on cases and real life experiences; shared experiences by the diverse student body are an integral part of MBA programme.

The strength of the South Eastern Kenya University MBA is derived from its long history; it was launched in 1972, experienced lecturers with a variety of backgrounds, and diversity in the student body in terms of backgrounds and nationalities. Students hail from Uganda, Tanzania, South Africa, Eritrea, Liberia, Malawi and Ethiopia amongst other countries. Our proximity to the vibrant Nairobi metropolis and central location gives us an important competitive edge regionally. The course is distinguished by its rigor and variety, offering one of the highest numbers of specialization options in the region. In its most recent revision, we benchmarked against top universities worldwide including those in North America, Europe, South Africa and the Far East. The MBA programme acts as a terminal degree for those interested in careers in the corporate world, but also as a preparatory course for those aspiring to pursue doctorates and pursue careers in research and teaching in business and management.

The South Eastern Kenya University MBA also aims at training the critical manpower required towards achieving Kenya's Vision 2030 and other development objectives, and to making East Africa a vibrant region ready to face a globalizing world characterized by constant change and new demands. The quality of our graduates remains undisputed and will be zealously guarded through strict quality control and benchmarking with the world's best.

The objectives of the programme are to:

- (a) Equip the student with a knowledge of key generic and specific areas of management;
- (b) Enhance self-confidence and the ability of the student to evaluate practical business experience from an academic, practical, and critical perspective;
- (c) Develop awareness in the student of the changing local and international business environment;
- (d) Provide specialized knowledge of the chosen area; and
- (e) Instill a professional and problem-solving attitude in the practice of management.

## 2 Entry requirements

The common regulations for the masters' degree in the South Eastern Kenya University shall be applicable. The following shall be admissible:

- (a) A holder of at least an upper second class honors degree or equivalent in non-classified degrees.
- (b) A holder of lower second class with at least two years of work experience, or a pass degree with at least five years of work experience, and/or having relevant professional qualifications.
- (c) In addition to requirements in (a) and (b), the candidate must have attained a minimum of C+ (plus) at O level or equivalent

## 3. Credits transfer and exemptions

Applicants who have completed equivalent Masters course units at other Senate recognized universities may, with the approval of the Senate, be allowed to transfer credits up to one third (six) core course units into their program. Students desiring to receive credit for any prior course units done will need to make a formal request, which includes:

- (a) A list of the South Eastern Kenya University core course units for which the student is requesting credits transfer;
- (b) Official transcripts, indicating courses that may be equivalent and;

- (c) Description and syllabus/outlines for the courses previously taken and passed. In addition there may be an exemption examination.
- (d) All those seeking to transfer credits will be required to pay an appropriate fee.

## 4. Examination Regulations

### Part I: Taught Courses

- (a) In each semester, candidates will be required to take a minimum of two (2) and a maximum of six (6) examination papers inclusive of resits.
- (b) All candidates shall be required to take and pass a total of eighteen (18) examination papers before being allowed to proceed to do a Research Project.
- (c) Each course shall be examined through a two-hour written examination paper at the end of each semester.
- (d) The final written examination shall account for fifty percent (50%) of the marks in each course, while continuous assessment shall account for the remaining fifty percent (50%).
- (e) The pass mark for each course shall be fifty percent (50%).
- (f) Candidates who fail to satisfy the examiners in any course unit may on the recommendation of the School Board of Examiners and approval

- by Senate be allowed to take up to two supplementary examinations.
- (g) A pass obtained in the supplementary examinations shall be recorded as 50% in the candidate's academic record.
  - (h) A candidate who fails to satisfy the examiners in the second supplementary examination shall be subject to the following on recommendation of the School Board of Examiners and approval by Senate:-
    - (i) Discontinued if the failed course is a core course, or
    - (j) Allowed to change to another specialization option if the failed course is a specialization course, or
    - (k) Allowed to take another elective if the failed course is an elective course.
    - (l) Conditions (ii) and (iii) shall only apply provided the stipulated maximum period of 15 semesters is not exceeded, otherwise the candidate shall be discontinued.
  - (b) For purposes of examination regulations, the Research Project shall be considered to be equivalent to six (6) courses.
  - (c) The pass mark for the Research Project shall be fifty percent (50%)
  - (d) A candidate who fails in the research project may on the recommendation of the School Board or Examiners and approval by Senate, be allowed to re-submit the project for examination, up to two times within the stipulated period of 15 semesters.
  - (e) A pass obtained in the re-submission of a research project shall be recorded as 50% in the candidate's academic record.
  - (f) Candidates who fail to satisfy the examiners in the second re-submission of the research project or fails to complete their study within the stipulated period of 15 semesters shall on recommendation of the School Board of Examiners and approval by senate be discontinued. A candidate shall not be allowed to work on a research project for more than two semesters. All re-submissions must be done within the two semesters.

### Part II: Research Project

- (a) Candidates shall be required to submit supervised research project for examination at least three weeks before end of semester in which it is to be examined.

### 5. Course Structure and Duration

- (a) The programme consists of eighteen (18) taught course units that constitute Part I, while a Research Project constitutes Part II, which is equivalent to six (6) taught course units.



- (b) The minimum duration for the programme shall be four (4) semesters, while the maximum duration shall be fifteen (15) semesters, and will involve coursework, examinations and the Research Project.
  - (c) A candidate shall be allowed to take a maximum of six (6) course units and a minimum of two (2) course units per semester.
  - (d) The programme is offered through a face-to-face mode of delivery; each course unit shall be taught for forty five (45) contact hours.
  - (e) There will be twelve (12) core course units which shall be taken by all candidates
  - (f) In addition to the core course units, candidates will be required to take four (4) specialization course units in a chosen thematic area, and two (2) elective course units. Specialization course units allow a student to concentrate in their chosen thematic area, while Elective course units provide options for additional knowledge in other areas of interest, not necessarily in their chosen thematic area.
  - (g) Electives may be chosen from the list of elective course units in any area of study, or from specialization course units from a different thematic area, that would now count as electives.
  - (h) Course units can only be taken after the necessary prerequisites have been successfully completed.
- (i) 5.9. After completing Part I (all the taught course units – 12 core, 4 specialization elective course units, and 2 elective course units), candidates will carry out research and produce a project report (Part II). Part II shall commence in the semester immediately succeeding successful completion of Part I. Once the project has started it must be completed within the semester, or equivalent duration of six course units, with the maximum duration equivalent to the minimum load of two course units per semester.

**Core Courses**

**Prerequisites**

DMS 501	Business Quantitative Analysis	
DMS 502	Business Research Methods	DMS 501
DIS 511	Information Systems	
DOM 511	Operations Management	
DHR 501	Human Resource Management	DSM 501
DSM 501	Management Theory and Practice	
DAC 501	Financial Accounting	
DAC 503	Management Accounting	DAC 501
DFI 501	Financial Management	DAC 501
DMA 501	Marketing Management	
DFI 502	Managerial Economics	

## School of Business and Economics

### Thematic Areas of Specialization

- Accounting
- Finance
- Human Resource Management
- Strategic Management
- International Business Management
- Marketing
- Risk Management and Insurance
- Entrepreneurship
- Management Information Systems
- Operations Management
- Procurement and Supply Chain Management

### 32.5 Courses for thematic areas of specialization

#### Accounting Option Prerequisites

DAC 505	Auditing and Assurance Services	DAC 501
DAC 601	Corporate Financial Reporting	DAC 501
DAC 603	Strategic Cost Management	DAC 503
DAC 606	Accounting Seminar	DAC 601
DAC 699	Research Project	Completion of Part I

### Electives

DAC 502	Accounting For governmental and Non-profit Entities	DAC 501
DAC 504	Taxation	DAC 501
DAC 604	Tax Management and Practice	DAC 504
DAC 605	Auditing Practice and Attestation	DAC 505

### Finance Option

DFI 503	Financial Institutions and Markets	DFI 501
DFI 505	Personal Finance	DFI 501
DFI 601	Corporate Finance	DFI 501
DFI 605	Finance Seminar	DFI 601
DFI 699	Research Project	Completion of Part I

### Electives

DFI 504	Real Estate Finance and Investment	DFI 501
DFI 506	Monetary Management	DFI 501
DFI 507	Public Finance	DFI 501
DFI 602	Investments Analysis and Portfolio Management	DFI 501
DFI 603	Management of Financial Institutions	DFI 501
DFI 604	International Financial Management	DFI 501
DFI 606	Financial Statement Analysis and Security Valuation	DFI 501
DFI 607	Advanced Financial Economics	DFI 501

### Human Resource Management Option

DHR 502	Procurement of Human Resources	DHR 501
DHR 503	Human Resource Development	DHR 501
DHR 602	Employee Relations Management	DHR 501
DHR 604	Human Resources Seminar	DHR 501, DHR 501
DHR 699	Research Project	Completion of Part I

### Electives

DHR 601	Compensation	DHR 501
DHR 603	Public Relations Management	DHR 501
DHR 605	Employee Performance Management	DHR 501
DHR 608	E-Human Resources Management	DHR 501
DHR 609	Human Resource Management in the	DHR 501
DHR 610	Public and Non Profit Organizations Occupational Health and Safety Management	DHR 501

### Strategic Management Option

DSM 602	Global Strategic Management	DSM 601
DSM 608	Advanced Strategic Management	DSM 601
DSM 610	Management of Strategic Change	DSM 601
DSM 611	Strategic Management Seminar	DSM 601
DSM 699	Research Project	Completion of Part I

### International Business Management Option

DIB 601	Managing Across Cultures	DSM 501
DIB 504	International Business	DSM 501
DIB 602	Global Strategic Management	DSM 601
DIB 605	International Business Seminar	DIB 504
DIB 699	Research Project	Completion of Part I

### Electives

DIB 503	International Business Environment	DIB 504
DIB 505	International Economics and Trade	DIB 504
DIB 601	Global Marketing Strategy	DIB 504
DIB 602	International Financial Markets	DIB 504
DIB 604	International Managerial Finance	DIB 504

### Marketing Option

DMA 503	Consumer Behaviour	DMA 501
DMA 602	Advertising Management Strategy	DMA 501
DMA 604	Applications of Marketing Research	DMA 501
DMA 606	Marketing Seminar	DMA 501
DMA 699	Research Project Completion of Part I	DMA 501
DMA 502	Strategic Marketing	DMA 501
DMA 504	Sales Management Strategy	DMA 501
DMA 505	Social Marketing	DMA 501
DMA 506	Marketing of Services	DMA 501
DMA 507	Distribution Channels & Logistics	DMA 501
DMA 605	Management	DMA 501
DMA 607	Business to Business Marketing Strategy	DMA 501
DMA 608	Strategic Brand Management	DMA 501
DMA 609	Green Marketing Strategy	DMA 501
DMA 609	Public Relations in Marketing	DMA 501
DMA 610	Retailing management Marketing of Nations and places	DMA 501

### Risk Management and Insurance Specialization course units

DIN 501	Risk Management Applications	DIN 501
DIN 509	Strategic Risk Management	DIN 501
DIN 504	Property and Casualty Insurance	DIN 501
DIN 605	Risk Management and Insurance Seminar	DIN 501
DIN 699	Research Project	Completion of Part I

### Elective course units

DIN 501	Legal Aspects of Insurance	DIN 501
DIN 505	Assurance of the Person	DIN 501
DIN 506	Insurance Markets	DIN 501
DIN 507	Professional Risk Management	DIN 501
DIN 603	Retirement Benefits Management	DIN 501
DIN 608	Micro-Insurance	
DIN 699	Public Sector Risk Management	

### Entrepreneurship

DSE 501	Entrepreneurship Theory and Practice	502
DSE 502	New Venture Creation and Development	DSE 501
DSE 606	Management of Small and Medium Enterprises	DSE 501 DSE 501
DSE 611	Entrepreneurship and SME Seminar	DSE 501
DSE 699	Research Project	Completion of part I

DSE 503	Entrepreneurship Policy and Development	
DSE 504	Entrepreneurial Finance	
DSE 601	Technological Innovations and	DSE 501
DSM 603	Entrepreneurship and SME	DSE 501
	Research and Consultancy	DSE 501

### Management Information Systems Specialization course units

DIS 512	Information Systems Analysis and Design	DIS 511
DIS 513	Information Systems Management	DIS 511
DIS 514	Data Management	DIS 511
DIS 605	Management Information Systems Seminar	DIS 511
DIS 699	Research Project	Completion of Part I

### Elective course units

DIS 515	Networks and Internet Technologies	DIS 511
DIS 516	Applications Software Development	DIS 511
DIS 604	Decision Support & Business Intelligence Systems	DIS 511
DIS 606	E-Business Strategy	DIS 511
DIS 607	ICT for Development	DIS 511

### Operations Management Specialization course units

DOM 512	Manufacturing and Service Operations Management	DOM 511
DOM 513	Operations Research for Business	DMS 501
DOM 601	Strategic Quality Management	DOM 511
DOM 606	Operations Management Seminar	DOM 511
DOM 699	Research Project	Completion of Part I

### Elective course units

DMS 504	Multivariate Statistical Analysis	DMS 501
DOM 602	Project Management	
DOM 605	Performance Management	DOM 511
DOM 608	Business Forecasting	DMS 501
DOM 610	Innovations and Technology Management	
DOM 612	Business Analysis and Consulting	DMS 501, DSM 501

### Procurement and Supply Chain Management Specialization course units

DPS 501	Procurement and Supply Chain Practice	DOM 511
DPS 502	Strategic Inventory Management	DOM 511
DPS 504	Logistics and Transportation Management	DOM 511
DPS 604	Procurement & Supply Chain Management Seminar	DOM 511
DPS 699	Research Project	Completion of Part I

### Elective course units

DPS 601	Global Supply Chain Management	DOM 511
DOM 610	Innovations and Technology Management	
DOM 513	Operations Research for Business	DMS 501
DMS 504	Multivariate Statistical Analysis	DMS 501
DPS 610	Negotiation and Dispute Resolution	

### Award of Degree

After completion of all the requirements the successful candidate shall be recommended for the award of the Master of Business Administration degree.

## DIPLOMA PROGRAMMES

### DEPARTMENT OF MANAGEMENT SCIENCE

### DIPLOMA IN BUSSINESS MANAGEMENT

Regulations and Syllabus for the Diploma in Business Management

#### 1 Course Objectives

The Diploma in Business management aims at:-

- (a) Developing the human resources base needed for industrialization.
- (b) Giving skills for efficient management of business.

- (c) Creating a base for the graduates to proceed for higher business management professional courses in the university.

### 2 Course Structure and Duration

- (a) The course is divided into two (2) semesters of six (6) months.
- (b) The students will take all 16 course units.
- (c) Each course unit will be covered in 45 contact hour of study.
- (d) The course will be delivered in 45 contact hours of study.
- (e) The course will take one calendar year.
- (f) No candidate will be registered in this course for more than six semesters (equivalent to 3 years).
- (g) The students will be expected to carry out a Research Project which will constitute two units.

### 3 Entry Requirements

The following shall be the minimum entry requirements for the Diploma in Business Management.

- (a) KCSE Mean Grade C or above with C- in Mathematics or commerce, or Economics, or Accounts and C- in English or Kiswahili

or a bridging course grade C- in English or Kiswahili or Mathematics from a recognized institution.

- (b) KCE Div. II or above with a pass in Mathematics or Commerce, or Accounts and a pass in English or Kiswahili.
- (c) 'A' level Certificate with at least one principal pass.
- (d) KCSE C- or KCE Div III with a professional certificate from a recognized Institution.

### 4 Examination Regulations

- (a) The examination will be governed by the general examinations regulations of the South Eastern Kenya University.
- (b) For the award of the Diploma in Business management, a candidate will be required to pass in all prescribed courses units taken.
- (c) Each course unit shall be examined by a two (2) hour written examination at the end of the semester during which the course was offered.
- (d) The written examination shall constitute 70% of the marks in each course unit while coursework constitutes 30%.
- (e) Course work assessment shall comprise assignment and test.

- (f) The pass mark shall be 40%.
- (g) A candidate who fails to satisfy the examiners in any unit, with a mark below 40% may on the recommendation of the Board of Examiners and approval of Senate, re-sit the failed examination(s) during the next semester examination.
- (h) A candidate who fails in the re-sit examinations(s) shall be required to repeat failed units.
- (i) A candidate shall be allowed to repeat a course unit for three semesters.
- (j) The project will be marked out of 100%. The pass mark shall be 40%. The project will be graded by the appointed supervisor.
- (k) A candidate who fails to satisfy the examiner in the project with a mark below 40% may on the recommendation of the board of examiners and approval of the Senate re-do the project.
- (l) A candidate shall be allowed to re-do the project for a maximum of three semesters.
- (m) A candidate shall only be allowed to repeat a maximum of three course units in a semester.
- (n) Any candidate who fails in more than three units in a semester shall be discontinued.

## 5 Transfer of Credit

Applicants who have undertaken courses recognized by Senate may, on the recommendation of School and approval of the Senate, be allowed to transfer credits up to a maximum of one-third of courses offered in the programme. A student desiring to receive credit for any prior courses work will need to make a formal request giving the following information:

- (a) A list of the South Eastern Kenya University courses which the student is interested in getting credit.
- (b) Official transcript indicating courses that may be equivalent.
- (c) Description of syllabus/outline for the courses which the applicant seeks transfer credit.

## 6 Classification of the Diploma

The final award of the Diploma in Human Resource Management will be based on the average marks obtained in all course units taken and shall be classified as follows:

70-100%	Pass with distinction
56-69%	Pass with credit
40-55%	Pass
39% and below	Fail

### 7 Course Structure

#### Semester 1

DBM 101	Personnel Management & Industrial Relations
DBM 105	Fundamentals of Accounting
DBM 107	Marketing Management
DBM 109	Introduction to Research Methods
DBM 111	Computer Applications
DBM 113	Quantitative Methods
DBM 115	Introduction to Insurance & Banking

#### Semester 2

DBM 102	Financial Management
DBM 103	Commercial Law
DBM 104	Business Policy & Strategic Planning
DBM 106	Marketing, Planning & Control
DBM 108	Human Resource Management
DBM 110	Purchasing & Supplies Management
DBM 112	Material Production, Control & Management
DBM 114	Project

### DIPLOMA IN HUMAN RESOURCE MANAGEMENT

Regulations and Syllabus for the Diploma in Human Resource Management

#### 1 Course Objectives

The diploma in Human resource Management aims at:

- Developing the middle level human resource base needed for management.

- Giving skills and knowledge for the candidates to manage human resource activities in any organisation.

#### 2 Course Structure and Duration

- The course is divided in to three parts each equivalent to one semester of four (4) months each.
- The student will take all the eleven (11) course units.
- Each course unit will be covered in 45 contact hours of study.
- The course will be delivered through lecturers and tutorials.
- The course will take one calendar year.
- No candidate will be registered in this course for more than six semesters (equivalent to 2 years).
- The student will be expected to carry out a Research Project which will constitute two (units).

#### 2 Entry Requirements

The following shall be the minimum entry requirements for the diploma Human Resource Management.

- 2.3.1 KCSE Mean Grade C or above with C- in Mathematics or Commerce, or Economics, or Accounts and C- in English or Kiswahili or a



bridging course grade C- in English or Kiswahili or Mathematics from a recognized institution.

OR

2.3.2 KCE Div.III or above with a pass in mathematics or Commerce, or Accounts and a pass in English or Kiswahili.

OR

2.3.3 'A' Level Certificate with at least one principal.

OR

2.3.4 Professional Certificate from a recognized Institutions such as Kenya Institute Management (KIM), National Polytechnics, Bandari College, Kenya Medical Training Centre (KMTC), Kenya National Examination Council (KNEC), Kenya Accounts & Secretarial National Examination Board (KASNEB), School of Professional Studies, Kenya Institute Administration (KIA), Kenya College of Communication & Technology (KCCT), Kenya School of Monetary Studies, Kenya Institute of bankers, Kenya Co-operative College, Pitman Level I, South Eastern Kenya University Extra-Mural Courses, or any other relevant certificate that the university may recognize.

2.3.5 In addition to professional certificate, the applicant must have a minimum of KCE Division IV with a

minimum pass in either Maths or Commerce or Accounts or Economics or Agriculture or KCSE D+ with a minimum D+ in either Mathematics, Economics, Accounts, Commerce or Agriculture.

OR

2.3.6 A University first degree and above in any field from a recognized University.

OR

2.3.7 PI or SI Certificate.

### 3 Examination Regulations

3.3 The examination will be governed by the general examinations regulations of the South Eastern Kenya University for the award of the Diploma in Human Resources Management, a candidate will be required to pass in all prescribed courses units taken.

3.4 Each course unit shall be examined by a two (2) hour written examination at the end of the semester during which the course was offered.

3.5 The written examination shall constitute 70 % of the marks in each course unit while course work constitutes 30 %.

3.6 Course work assessment shall comprise assignments, tests and practicals where applicable.

- 3.7 The pass mark shall be 40 %.
- 3.8 A candidate who fails to satisfy the examiner in any unit, with a mark below 40 %, may, on the recommendation of the board of Examiners and approval of Senate, re-sit the failed examination(s) during the next semester examinations.
- 3.9 A candidate who fails in the re-sit examination(s) shall be required to repeat the failed units.
- 3.10 The maximum score for re-sit examination shall be 40 %
- 3.11 The maximum score obtainable through a re-sit examination shall be 40 %
- 3.12 A candidate shall only be allowed to repeat a course unit three times
- 3.13 The project will be marked out of 100 %.The pass mark shall be 40 %.The project will be marked and grade by the appointed supervisor.
- 3.14 A candidate who fails to satisfy the examiner in the project with a mark below 40 % may on the recommendation of the board of examiners and approval of senate re-sit the project.
- 3.15 A candidate shall be allowed to re-sit the project for the maximum of three semesters.

### 4 Transfer of Credit

Applicants who undertaken courses recognized by Senate may, on the recommendation of Faculty and approval of the Senate, be allowed to transfer credits up to a maximum of one-third of courses offered in the programme. A student desiring to receive credit for any prior courses work will need to make a formal request giving the following information.

- 4.3 A list of the South Eastern Kenya University courses which the student is interested in getting credit.
- 4.4 Official transcript indicating courses that may be equivalent.
- 4.5 Description of syllabus/outline for the courses which the applicant seeks transfer credit.

### 5 Classification of the Diploma

The final award of the Diploma in Human Resource Management will be based on the average marks obtained in all course units taken and shall be classified as follows:-

70-100%	Pass with distinction
56-69%	Pass with credit
40-55%	Pass
39% and below	Fail

## 7 Course Structure

### Semester 1

LDH 101	Fundamental of Human Resource Management
LDH 103	Research Methods, Business Statistics & Business Mathematics
LDH 105	Fundamentals of Management
LDH 107	Fundamentals of Labour Economics

### Semester 2

LDH 102	Industrial, Labour Laws and the Laws of Tort
LDH 104	Labour and Industrial Relations
LDH 106	Organizational Behaviour
LDH 108	Strategic Human Resource management
LDH 110	Computer Applications

### Semester 3

LDR 110	Project
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## DIPLOMA IN PURCHASING AND SUPPLIES MANAGEMENT

Regulations and Syllabus for the Diploma in Purchasing and Supplies Management

### 1 Course Objectives

The diploma in Purchasing Management aims at:-

- (a) Giving skills and knowledge for the candidates to manage activities in any

organization, and describe the process of the Purchasing and Supply chain management.

- (b) Training individuals who wish to pursue a career in purchasing and supply management.
- (c) Enabling individuals who could not join public universities due to lack of space and time have access to university education.

### 2 Course Structure and Duration

- (a) The course is divided into two (2) semesters of six (6) months.
- (b) The students will take all 14 course units.
- (c) Each course unit will be covered in 45 contact hours of study.
- (d) The course will be delivered through in 45 contact hours of study.
- (e) The course will take one calendar year.
- (f) No candidate will be registered in this course for more than six semesters (equivalent to 3 years).
- (g) The student will be expected to carry out a Research Project which will constitute two units.

### 3 Entry Requirements

- (a) The following shall be the minimum entry requirements for the Diploma in Purchasing & Supplies Management.
  - (b) KCSE Mean Grade C or above with C- in Mathematics or Commerce, or Economics, or Accounts and C- in English or Kiswahili or a bridging course grade C- in English or Kiswahili or Mathematics from a recognized institution.
- OR
- (c) KCE Div.II or above with a pass in mathematics or Commerce, or Accounts and a pass in English or Kiswahili.
- OR
- (d) 'A' Level Certificate with at least one principal.
- OR
- (e) The applicant must have a minimum Div. III or KCSE C- plus Professional Certificate from a recognized Institutions e.g. Kenya Institute Management (KIM), National Polytechnics, Bandari College, Kenya Medical Training Centre (KMTTC), Kenya National Examination Council (KNEC), Kenya Accounts & Secretarial National

Examination Board (KASNEB), School of Professional Studies, Kenya School of Monetary Studies, Kenya Institute of Bankers, Kenya Co-operative College, Pitman secretarial Level I, South Eastern Kenya University Extra-Mural Courses, or any other relevant certificate that the university may recognize.

OR

- (f) A University first degree and above in any field from a recognized University.

OR

- (g) PI, SI Certificate.

### 4 Examination Regulations

- (a) The examination will be governed by the general examinations regulations of the South Eastern Kenya University for the award of the Diploma in Purchasing and Supplies Management, a candidate will be required to pass in all prescribed courses units taken.
- (b) Each course unit shall be examined by a two (2) hour written examination at the end of the semester during which the course was offered.

- (c) The written examination shall constitute 70 % of the marks in each course unit while course work constitutes 30 %.
- (d) Course work assessment shall comprise assignments and tests.
- (e) The pass mark shall be 40 %.
- (f) A candidate who fails to satisfy the examiner in any unit, with a mark below 40 %, may, on the recommendation of the board of Examiners and approval of Senate, re-sit the failed examination(s) during the next semester examinations.
- (g) A candidate who fails in the re-sit examination(s) shall be required to repeat the failed units.
- (h) A candidate shall only be allowed to repeat a course unit three times
- (i) The project will be marked out of 100 %.The pass mark shall be 40 %.The project will be graded by the appointed supervisor.
- (j) A candidate who fails to satisfy the examiner in the project with a mark below 40 % may on the recommendation of the board of examiners and approval of senate re-do the project.
- (k) A candidate shall be allowed to re-do the project for the maximum of three semesters.
- (l) A candidate shall only be allowed to repeat a maximum of three course units in a semester.
- (m) Any candidate who fails in more than three units in a semester shall be discontinued.

## 5 Transfer of Credit

Applicants who undertaken courses recognized by Senate may, on the recommendation of Faculty and approval of the Senate, be allowed to transfer credits up to a maximum of one-third of courses offered in the programme. A student desiring to receive credit for any prior courses work will need to make a formal request giving the following information.

- (a) A list of the South Eastern Kenya University courses which the student is interested in getting credit.
- (b) Official transcript indicating courses that may be equivalent.
- (c) Description of syllabus/outline for the courses which the applicant seeks transfer

## 6 Classification of the Diploma

The final award of the diploma in Purchasing and Supplies Management will be based on the average

marks obtained in all course units taken and shall be classified as follows:

70-100%	Pass with distinction
56-69%	Pass with credit
40-55%	Pass
39% and below	Fail

### 7 Course Structure

#### Semester 1

LDPI01	Introduction to Purchasing and Chain Management
LDPI03	Principles of Economics
LDP 105	Marketing Management
LDP 107	Computer Applications
LDP 109	Fundamentals of Accounts
LDP 111	Research Methods
LDP 113	Quantitative Techniques

#### Semester 2

LDPI02	Commercial Law
LDPI04	Materials and Production Management
LDP 106	Purchasing and Supplies Management Strategy
LDP 108	Purchasing Principles and techniques
LDP 110	Cost and Management Accounting
LDP 112	Management Principles and Practice
LDP 114	Public Procurement
LDP 115	Project

## DIPLOMA IN PUBLIC RELATIONS

Regulations and Syllabus for the Diploma in Public Relations

### 1 Course Objectives

The Diploma in Public Relations aims at:

- Training individuals who wish to pursue a career in public relations.
- Developing the human resources base needed for development.
- Creating a base for its graduate to proceed to higher business management professional courses in the university.
- By the end of the course, students will be able to explain the public relations process and the ways in which it can be effectively used to accomplish organizational and individual goals; they will also be able to outline a public relations plan and to explain the strategies that will help them to accomplish their objectives.

### 2 Course Structure and Duration

- The course is divided into three semesters of four (4) months.
- The students will take all the eleven (11) course units.
- Each course unit will be covered in 45

- contact hours of study.
- (d) The course will be delivered through lecturers and tutorials.
  - (e) The course will take one calendar year.
  - (f) No candidate will be registered in this course for more than six semesters (equivalent to 2 years).
  - (g) The student will be expected to carry out a Research Project which will constitute two units.

### 3 Entry Requirements

The following shall be the minimum entry requirements for the diploma in Public Relations.

- (a) KCSE Mean Grade C or above with C- in Mathematics or Commerce, or Economics, or Accounts, and C- in English or Kiswahili or a bridging course grade C- in Mathematics, or Kiswahili or English from a recognized University.
- (b) KCE Div. III or above with a pass in mathematics or Commerce or Accounts and a pass in English or Kiswahili.

OR

- (c) 'A' level Certificate with at least one principal.
- (d) Professional Certificate from a recognized

Institutions i.e. Kenya Institute Management (KIM), National Polytechnics, Bandari College, Kenya Medical Training Centre (KMTC), Kenya National Examination Council (KNEC), Kenya Accounts & Secretarial National Examination Board (KASNEB), School of Monetary Studies, Kenya Institute of bankers, Kenya Co-operative College, Pitman Level I, South Eastern Kenya University Extra-Mural Courses, or any other relevant certificate that the university may recognize.

OR

- (e) PI, SI Certificate

OR

- (f) A degree and above in any field from a recognized by Senate.

### 4 Examination Regulations

- (a) The examination will be governed by the general examinations regulations of the South Eastern Kenya University.
- (b) For the award of the Diploma in Public Relations, a candidate will be required to pass in all prescribed courses units taken.
- (c) Each course unit shall be examined by a

two (2) hour written examination at the end of the semester during which the course was offered.

- (d) The written examination shall constitute 70 % of the marks in each course unit while course work constitutes 30 %.
- (e) Course work assessment shall comprise assignments and tests.
- (f) The pass mark shall be 40 %.
- (g) A candidate who fails to satisfy the examiner in any unit, with a mark below 40 %, may, on the recommendation of the board of Examiners and approval of Senate, re-sit the failed examination(s) during the next semester examinations.
- (h) A candidate who fails in the re-sit examination(s) shall be required to repeat the failed units.
- (i) A candidate who fails in the repeated unit(s) shall be discontinued.
- (j) The maximum score for re-sit examination shall be 40 %

### 5 Transfer of Credit

Applicants who undertaken equivalent courses recognized by Senate may, on the recommendation

of Faculty and approval of the Senate, be allowed to transfer credits up to a maximum of one-third of courses offered in the programme. A student desiring to receive credit for any prior courses work will need to make a formal request giving the following information.

- (a) A list of the South Eastern Kenya University courses which the student is interested in getting credit.
- (b) Official transcripts indicating courses that may be equivalent.
- (c) Description of syllabus/outline for the courses which the applicant seeks transfer credit.

### 6 Classification of the Diploma

The final award of the Diploma in Public Relations will be based on the average marks obtained in all course units taken and shall be classified as follows:

70-100%	Pass with distinction
56-69%	Pass with credit
40-55%	Pass
39% and below	Fail



## 7 Course Outline

### Semester 1

PRM 101	Foundation of Public Relations
PRM 103	Foundations of Social Psychology
PRM 105	Research Methods
PRM 107	Marketing Management
PRM 109	Writing for Public Relations

### Semester 2

PRM 102	Mass Communication
PRM 104	Strategic Public Relations Management
PRM 106	Computer Applications
PRM 108	Marketing Communications

### Semester 3

PRM 110	Project
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## DIPLOMA IN SALES AND MARKETING

Regulations and Syllabus for the Diploma in Sales and Marketing

### 1 Course Objectives

On completion of the course, the students will have:

- (a) Acquired the conceptual and analytical skills necessary to carry out sales and marketing management activities effectively and efficiently.

- (b) Acquired the necessary skills to operate effectively in diverse sales and marketing situations.
- (c) Built an adequate base for higher level studies in sales, marketing management, if they so desire

### 2 Entry Requirements

The following shall be the minimum requirements for admission to the Diploma in Sales and Marketing.

- (a) KCSE mean grade C or equivalent with D+ pass in Mathematics and English or
- (b) Certificate in Sales and Marketing of the South Eastern Kenya University, Kenya Institute of Management, National Polytechnics or of any institution approved by the Senate.
- (c) The School may, with the approval of Senate, admit applicants with lower qualifications with mitigating or equivalent qualifications such as length of employment, work experience or other training experiences.

### 3 Examination Regulations

- (a) The examination will be governed by the general examinations regulations of the South Eastern Kenya University.

- (b) For the award of the Diploma in Public Relations, a candidate will be required to pass in all prescribed courses units taken.
- (c) Each course unit shall be examined by a two (2) hour written examination at the end of the semester during which the course was offered.
- (d) The written examination shall constitute 70 % of the marks in each course unit while course work constitutes 30 %.
- (e) Course work assessment shall comprise assignments and tests.
- (f) The pass mark shall be 40 %.
- (g) A candidate who fails to satisfy the examiner in any unit, with a mark below 40 %, may, on the recommendation of the board of Examiners and approval of Senate, re-sit the failed examination(s) during the next semester examinations.
- (h) A candidate who fails in the re-sit examination(s) shall be required to repeat the failed units.
- (i) A candidate who fails in the repeated unit(s) shall be discontinued.
- (j) The maximum score for re-sit examination shall be 40 %

### 4 Transfer of Credit

Applicants who undertaken equivalent courses recognized by Senate may, on the recommendation of Faculty and approval of the Senate, be allowed to transfer credits up to a maximum of one-third of courses offered in the programme. A student desiring to receive credit for any prior courses work will need to make a formal request giving the following information.

- (a) A list of the South Eastern Kenya University courses which the student is interested in getting credit.
- (b) Official transcripts indicating courses that may be equivalent.
- (c) Description of syllabus/outline for the courses which the applicant seeks transfer credit.

### 5 Classification of the Diploma

The final award of the Diploma in Public Relations will be based on the average marks obtained in all course units taken and shall be classified as follows:

70-100%	Pass with distinction
56-69%	Pass with credit
40-55%	Pass
39% and below	Fail

## 6 Course Outline

### Semester 1

DSM 101	Marketing Management
DSM 103	Consumer Behaviour
DSM 105	Computer Applications
DSM 107	Quantitative Methods
DSM 109	Financial Management
DSM 111	Introduction to Research Methods

### Semester 2

DSM 102	Fundamentals of Management
DSM 104	Marketing Communication
DSM 106	Marketing Research
DSM 108	Marketing Planning & Control
DSM 110	International Marketing
DSM 112	Sales Management
DSM 116	Introduction to Insurance & Banking

### Semester 3

DSM 114	Research Project
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**School of  
Engineering  
and Technology**

## 1 Introduction

The School of Engineering and Technology aims at training graduates with solid knowledge and readily marketable skills in the relevant areas of specialization in Engineering and Technology. This knowledge and skills will enable them to adapt readily to a wide variety of technical and managerial careers. The school provides a strong foundation in sciences and technical courses in addition to relevant managerial and socio-economic courses the relevant disciplines. The programmes generally, focus on the practical application of engineering knowledge, and broad managerial skills. The school lays a lot of emphasis on production of professionally qualified graduates who would be trusted to undertake developmental projects in their relevant fields of engineering and technology. Our graduates are expected to register with the relevant regulatory and professional bodies and get the relevant certification for practice, and to be extremely competitive in the job market. The school also encourages innovativeness, freedom of thought, scholarly excellence and consultancy services in all fields in the school. Staff quality and development are given top priority to enable development of highly qualified and competent team of teaching, research and innovative staff.

### 1.1 Vision

School of excellence in training, research and innovation in the broad field of Engineering and Technology.

### 1.2 Mission

School of Engineering and Technology is dedicated to providing excellent demand driven training programmes, conducting leading-edge research and scholarly programmes; and performing responsible service and outreach activities that have broad national and international reach with the objective of transforming lives.

### 1.3 Objectives

- (a) To promote excellent standards in teaching, research consultancy and scholarship, and professionalism in practice.
- (b) To attract, train and retain highly competent and motivated staff for training, research, innovativeness, and service delivery.
- (c) To develop highly trained, qualified, responsible and dependable graduates in the respective fields of Engineering and Technology who meet the thresholds for registration by regulatory and professional organizations nationally and internationally.
- (d) To carry out training, research and development, and innovation in the broad field of Engineering and Technology.

### DEPARTMENT OF AGRICULTURAL ENGINEERING AND PROCESSING

#### 1 Introduction

The Department agricultural of Engineering and Technology has the mandate to develop and offer tailor-made programmes in the fields of Agricultural Engineering: Soil and Water Engineering, Irrigation Engineering and Technology, Food Processing, farm structures, farm machinery. The department offer support in terms of expertise to other related Departments.

#### 1.1 Vision

An excellent Center for training, research and innovation in the field of Agricultural and Irrigation Engineering.

#### 1.2 Mission

To provide quality Training, Research, Innovation and Outreach for advancement of humanity through application of Agricultural Engineering and related fields at national and international level

#### 1.3 Objectives

- (a) To train in undergraduate and postgraduate programmes that allow graduates to

become professionals and leaders in Agricultural and Irrigation Engineering and Technology

- (b) To improve the quality and quantity agricultural products, such as food, feed, fuel, and fiber production for increased food security.
- (c) To offer solution in applied Soil and Water Conservation, Irrigation, Waters Supply and Climate Change Adaptation.
- (d) To play a leading role in Farm Structures and Agricultural Processing, and Value Addition through Food Processing, Development of Industries and Manufacturing processes
- (e) To conduct and collaborate

### DEPARTMENT OF INDUSTRIAL, MANUFACTURING AND ENERGY ENGINEERING

#### 1 Introduction

The Department of Industrial, Manufacturing and Energy Engineering is mandated to develop market driven programmes in the broad field of Industrial, Manufacturing and Energy Engineering, train high quality graduates for industry, leadership and academia in this

field and to carry out academic and developmental research and innovation in Industrial, Manufacturing and Energy Engineering.

### 1.1 Vision

A world class leading department in training, research and innovation in the broad field of Industrial, Manufacturing and Energy Engineering.

### 1.2 Mission

To provide quality education, training, research, innovation and services in Industrial, Manufacturing and Energy engineering and to prepare students for careers in industry and academia.

### 1.3 Objectives

- (a) To attract and retain highly qualified students of diverse backgrounds and prepare them for successful careers in Industrial, Manufacturing and Energy Engineering including leadership positions.
- (b) To develop capacity in human and capital resources for training, research, innovation and service delivery.
- (c) To promote scholarly activities and excellence in research and innovation involving faculty and students.

- (d) To develop partnerships with industry, business, government, and the scientific community, and other relevant organizations and be responsive to their needs for Industrial and Energy engineering education, service and research.

## ACADEMIC PROGRAMMES

### TVET PROGRAMMES

### CRAFT CERTIFICATE IN MOTOR VEHICLE MECHANICS

#### YEAR I

##### Trimester 1

MVM310	Mathematics I
MVM311	Science
MVM312	Technical Drawing I
MVM313	Workshop Organization I
MVM314/315	Trade Theory and Practice I
AGC013	Social Studies
AGC017	Entrepreneurship

##### Trimester 2

## School of Engineering and Technology

MVM310	Mathematics II
MVM311	Science
MVM312	Technical Drawing II
MVM313	Workshop Organization II
MVM314/315	Trade Theory and Practice II
AGC013	Social Studies
AGC017	Entrepreneurship II

### Trimester 3

MVM310	Mathematics III
MVM311	Science
MVM312	Technical Drawing III
MVM313	Workshop Organization III
MVM314/315	Trade Theory and Practice III
AGC013	Social Studies
AGC017	Entrepreneurship III
MVM317	Industrial Attachment

## Year 2

### Trimester 1

MVM310	Mathematics I
MVM311	Engineering Science I
MVM312	Technical Drawing IV
MVM313	Workshop Organization IV
MVM314/315	Trade Theory and Practice IV
AGC017	Entrepreneurship IV

### Trimester 2

MVM310	Mathematics V
MVM311	Engineering Science II
MVM312	Technical Drawing V
MVM313	Workshop Organization V
MVM314/315	Trade Theory and Practice V
AGC017	Entrepreneurship V

### Trimester 3

MVM310	Mathematics VI
MVM311	Engineering Science II
MVM312	Technical Drawing VI
MVM313	Workshop Organization VI
MVM314/315	Trade Theory and Practice VI
AGC017	Entrepreneurship VI

## CRAFT CERTIFICATE IN ELECTRICAL INSTALLATION Year I

### Trimester 1

CIS010	Mathematics I
EIC013	Science
EIC012	Technical Drawing I
EIC014	Industrial Orientation
EIC010	Electrical Installation
AGC017	Communication Skills
AGC013	Entrepreneurship
EIC011	Electrical Principles
EIC015	Installation Practice
EIC016	Electrical Maintenance



### Trimester 2

CIS010	Mathematics I
EIC013	Science
EIC012	Technical Drawing I
EIC014	Industrial Orientation
EIC010	Electrical Installation
AGC017	Communication Skills
AGC013	Entrepreneurship
EIC011	Electrical Principles
EIC015	Installation Practice
EIC016	Electrical Maintenance

### Trimester 3

CIS010	Mathematics
EIC013	Science
EIC012	Technical Drawing
EIC014	Industrial Orientation
EIC010	Electrical Installation
AGC017	Communication Skills
AGC013	Entrepreneurship
EIC011	Electrical Principles
EIC015	Installation Practice
EIC016	Electrical Maintenance
EIC 001	Industrial Attachment

### Year 2

#### Trimester 1

CIS020	Mathematics
EIC021	Electrical Principles
EIC020	Electrical Installation
EIC023	Installation Practice
EIC024	Lab Practice
AGC020	Entrepreneurship
EIC025	Electrical Maintenance
EIC022	Trade Project

#### Trimester 2

CIS020	Mathematics
EIC021	Electrical Principles
EIC020	Electrical Installation
EIC023	Installation Practice
EIC024	Lab Practice
AGC020	Entrepreneurship
EIC025	Electrical Maintenance
EIC022	Trade Project

#### Trimester 3

CIS020	Mathematics
EIC021	Electrical Principles
EIC020	Electrical Installation
EIC023	Installation Practice
EIC024	Lab Practice
AGC020	Entrepreneurship
EIC025	Electrical Maintenance
EIC022	Trade Project

## DIPLOMA IN CLOTHING TECHNOLOGY

### YEAR I

#### Trimester 1

CTD 010	Garment Making Theory
CTD 011	Garment Making Practical
CTD 012	Fashion Design
CTD 013	Pattern Drafting Ladies
CTD 014	Pattern Drafting Men's
CTD 015	Textile Science
AGD 013	Entrepreneurship Education
CAS 010	Mathematics
CAS 011	Science
AGD 010	Social Studies
AGD 017	Communication Skills

#### Trimester 2

CTD 010	Garment Making Theory
CTD 011	Garment Making Practical
CTD 012	Fashion Design
CTD 013	Pattern Drafting Ladies
CTD 014	Pattern Drafting Men's
CTD 015	Textile Science
CTD 016	Pattern Drafting Children's
CTD 017	Garment Cutting Theory
AGD 013	Entrepreneurship Education

#### Trimester 3

CTD 010	Garment Making Theory
CTD 011	Garment Making Practical
CTD 012	Fashion Design
CTD 013	Pattern Drafting Ladies
CTD 014	Pattern Drafting Men's
CTD 015	Textile Science
CTD 016	Pattern Drafting Children's
CTD 017	Garment Cutting Theory
AGD 013	Entrepreneurship Education
CTD 020	Industrial Attachment

### Year 2

#### Trimester I

CTD 020	Garment Making Theory
CTD 021	Garment Making Practical
CTD 022	Fashion Design
CTD 023	Pattern Drafting Ladies
CTD 024	Pattern Drafting Men's
CTD 025	Textile Science
CTD 026	Pattern Drafting Children's
CTD 027	Garment Cutting Theory
CTD 028	Industrial Organization Management
CTD 029	Trade Project
AGD 023	Entrepreneurship Education

### Trimester 2

CTD 020	Garment Making Theory
CTD 021	Garment Making Practical
CTD 022	Fashion Design
CTD 023	Pattern Drafting Ladies
CTD 024	Pattern Drafting Men's
CTD 025	Textile Science
CTD 026	Pattern Drafting Children's
CTD 027	Garment Cutting Theory
CTD 028	Industrial Organization Management
CTD 029	Trade Project
AGD 023	Entrepreneurship Education
CTD 020	Industrial Attachment

### Year 3

#### Trimester 1

CTD 030	Garment Making Theory
CTD 031	Garment Making Practical
CTD 032	Fashion Design
CTD 033	Pattern Drafting Ladies
CTD 034	Pattern Drafting Men's
CTD 035	Textile Science
CTD 036	Pattern Drafting Children's
CTD 037	Garment Cutting Theory
CTD 038	Industrial Organization Management
CTD 039	Trade Project
AGD 033	Entrepreneurship Education

### Trimester 2

CTD 030	Garment Making Theory
CTD 031	Garment Making Practical
CTD 032	Fashion Design
CTD 033	Pattern Drafting Ladies
CTD 034	Pattern Drafting Men's
CTD 035	Textile Science
CTD 036	Pattern Drafting Children's
CTD 037	Garment Cutting Theory
CTD 038	Industrial Organization Management
CTD 039	Trade Project
AGD 033	Entrepreneurship Education

### CRAFT CERTIFICATE IN CLOTHING TECHNOLOGY

### Year I

#### Trimester I

CTC 010	Garment Making Theory
CTC 011	Garment Making Practical
CTC 012	Design and Sketching
CTC 013	Pattern Drafting Ladies
CTC 014	Pattern Drafting Men's
CTC 015	Material Science
CTD 016	Production Techniques
AGC 013	Entrepreneurship Education
CAS 010	Mathematics
AGC 010	Social Studies
AGC 017	Communication Skills

### Trimester 2

CTC 010	Garment Making Theory
CTC 011	Garment Making Practical
CTC 012	Design and Sketching
CTC 013	Pattern Drafting Ladies
CTC 014	Pattern Drafting Men's
CTC 015	Material Science
CTD 016	Production Techniques
CTC 017	Pattern Drafting Children's
CTC 018	Garment Cutting Theory
AGC 013	Entrepreneurship Education

### Trimester 3

CTC 010	Garment Making Theory
CTC 011	Garment Making Practical
CTC 012	Design and Sketching
CTC 013	Pattern Drafting Ladies
CTC 014	Pattern Drafting Men's
CTC 015	Material Science
CTC 016	Production Techniques
CTC 017	Pattern Drafting Children's
CTC 018	Garment Cutting Theory
AGC 013	Entrepreneurship Education
CTC 002	Industrial Attachment

### Year 2 Trimester I

CTC 020	Garment Making Theory
CTC 021	Garment Making Practical
CTC 022	Design and Sketching
CTC 023	Pattern Drafting Ladies
CTC 024	Pattern Drafting Men's
CTC 025	Material Science
CTD 026	Production Techniques
CTC 027	Pattern Drafting Children's
CTC 028	Garment Cutting Theory
CTD 029	Trade Project
AGC 023	Entrepreneurship Education

### Trimester 2

CTC 020	Garment Making Theory
CTC 021	Garment Making Practical
CTC 022	Design and Sketching
CTC 023	Pattern Drafting Ladies
CTC 024	Pattern Drafting Men's
CTC 025	Material Science
CTC 026	Production Techniques
CTC 027	Pattern Drafting Children's
CTC 028	Garment Cutting Theory
CTD 029	Trade Project
AGC 023	Entrepreneurship Education

## DEPARTMENT OF BUILDING AND CONSTRUCTION ENGINEERING

### 1 Introduction

The department was created to train and produce graduates with excellent knowledge, skills, attitudes and personality in the field of Technological development. It provides a concrete foundation in technology and engineering by focusing on practical oriented approach for the development of the Nation.

Graduates for these programmes get access to employment in construction projects such as: road construction, building project, irrigation schemes, sports ground in addition to self-employment in the field of engineering and technology. The students are also equipped with entrepreneurial and management skills which enables them to relate well with the development of the community in their residential areas of stay.

#### 1.1 Mission

To provide increased training opportunities, practical skills, Education and encourage self-employment.

#### 1.2 Objectives

- (a) To provide increased training opportunities for the increased number of Secondary

- school leavers to enable them to prepare for salaried employment or self-supporting.
- (b) To provide practical education and training skills which are responsive and relevant to the countries Agricultural, Industries, commercial and economic needs.
- (c) Provides practical skills, changed attitudes, behaviour and personality which will lead to income generating activities in both the urban and rural areas through self-employment or wage employment.
- (d) To encourage self-employment while at the same time producing skilled artisans, craftsmen, technicians and technologists for both formal and informal sectors.

### 1.3 Academic Programmes

Department of Building and Construction Engineering offer the following training programmes:

- (a) Diploma in Building Construction
- (b) Craft Certificate in Building Construction (Masonry option)
- (c) Craft Certificate in Building Construction (Carpentry and Joinery option)

## 2 COURSE STRUCTURE

### 3 TVET PROGRAMMES

## DIPLOMA IN BUILDING AND CIVIL ENGINEERING

### Year 1

#### Trimester 1

BCE 0117	Communication Skill.
BCE 0104	Social Studies.
BCE 0116	Entrepreneurship.
BCE 0101	Mathematics.
BCE 0105	Physical Science.
BCE 0106	Technical Drawing.
BCE 0115	Workshop Practice.
BCE 0112	Structures.
BCE 0110	Soil Mechanic.
BCE 0102	Building Technology.

#### Trimester 2

BCE 0104	Social Studies
BCE 0116	Entrepreneurship Education
BCE 0118	Computer Application
BCE 0101	Mathematics
BCE 0105	Physical Science
BCE 0106	Technical Drawing
BCE 0119	Engineering Materials
BCE 0115	Workshop Practice
BCE 0112	Structures
BCE 0110	Soil Mechanics
BCE 0102	Building Technology
BCE 0117	Communication Skill.

### Trimester 3

BCE 0104	Social Studies
BCE 0116	Entrepreneurship
BCE 0118	Computer Skill
BCE 0101	Mathematics
BCE 0105	Physical Science
BCE 0103	Construction Management
BCE 0119	Engineering Material
BCE 0115	Workshop Practice
BCE 0112	Structures
BCE 0110	Soil Mechanic
BCE 0102	Building Technology

#### Industrial Attachment

### Year 2

#### Trimester 1

BCE 0116	Entrepreneurship Skills
BCE 0117	Communication Skills.
BCE 0118	Computer Application
BCE 0101	Mathematics
BCE 0106	Technical Drawing
BCE 0103	Construction Management
BCE 0119	Engineering Materials
BCE 0120	Surveying
BCE 0121	Concrete Technology
BCE 0122	Construction Plant
BCE 0112	Structure
BCE 0123	Measurement of Building
BCE 0102	Building Technology

### Trimester 2

BCE 0116	Entrepreneurship Education
BCE 0117	Communication Skills
BCE 0118	Computer Application
BCE 0101	Mathematics
BCE 0106	Drawing
BCE 0103	Construction Management
BCE 0119	Engineering Material
BCE 0120	Surveying
BCE 0121	Concrete Technology
BCE 0122	Construction Plant
BCE 0112	Structures
BCE 0123	Measurement of Building Works
BCE 0102	Building Technology
BCE 0124	Geology

*Industrial Attachment*

### Year 3

#### Trimester 1

BCE 0117	Communication Skills
BCE 0110	Entrepreneurship
BCE 0101	Mathematics
BCE 0103	Construction Management
BCE 0120	Surveying
BCE 0112	Structures
BCE 0123	Measurement of Building Works
BCE 0125	Estimating and Costing
BCE 0102	Building Technology
BCE 0124	Project

### Trimester 2

BCE 0110	Entrepreneurship
BCE 0117	Communication
BCE 0101	Mathematics
BCE 0103	Construction Management
BCE 0112	Structures
BCE 0123	Measurement of Building Works
BCE 0125	Estimating and Costing
BCE 0102	Building Technology
BCE 0124	Project

## CRAFT CERTIFICATE IN BUILDING CONSTRUCTION

### Year 1

#### Trimester 1

CFT 0104	Mathematics
CFT 0101	Social Studies
CFT 0100	Communication
CFT 0108	Entrepreneurship
CFT 0106	Building Science
CFT 0107	Technical Drawing
CFT 0102	Building Theory
CFT 0105	Workshop Practice

### Trimester 2

CFT 0104	Mathematics
CFT 0101	Social Studies
CFT 0100	Communication
CFT 0108	Entrepreneurship
CFT 0106	Building Science
CFT 0107	Technical Drawing
CFT 0105	Workshop and Site Management
CFT 01	Building Practice

### Year 2

#### Trimester 1

CFT 0104	Mathematics
CFT 0108	Entrepreneurship
CFT 0106	Building Science
CFT 0107	Technical Drawing
CFT 0102	Building Theory
CFT 0105	Workshop Practice
CFT 0109	Workshop Project

#### Trimester 2

CFT 0104	Mathematics
CFT 0108	Entrepreneurship
CFT 0106	Building Science
CFT 0107	Technical Drawing
CFT 0102	Building Theory
CFT 0105	Building Practice
CFT 0109	Building Project

### Trimester 3

CFT 0104	Mathematics
CFT 0108	Entrepreneurship
CFT 0106	Building Science
CFT 0107	Technical Drawing
CFT 0102	Building Theory
CFT 0105	Building Practice
CFT 0109	Building Project

## DEPARTMENT OF AGRICULTURAL ENGINEERING AND PROCESSING

### 1 Introduction

The department is one of the three existing departments that constitute the School of Engineering and Technology. The department is focused on teaching, research and outreach services in the following areas but not limited to: Soil and Water Engineering, Surveying, Irrigation Systems, Farm Power and Machinery, Rainwater and Surface Runoff Harvesting and Postharvest Technology. The Department of Agricultural Engineering and Processing has the mandate to develop and offer tailor-made programmes in the fields of Agricultural Engineering and Food Processing.

#### 1.1 Vision

An excellent Center for training, research and capacity building in the fields of agricultural and process engineering.

#### 1.2 Mission

To provide quality Training, Research Innovation and Extension Services for the advancement of humanity.

#### 1.3 Strategic Orientation

Engineering and Technological Application in Research , Innovation and dissemination for transforming lives



**School of  
Water Resources  
Science and  
Technology**

### 1 Introduction

The School of Water Resources, Science and Technology is one of the ten schools that have been established at South Eastern Kenya University. The school was established to focus on teaching, research and capacity development in water resources, in fisheries management and in aquaculture technology.

#### 1.1 Vision

A school of excellence in high quality water resources training, research, outreach, technological development and consultancy for the advancement of human well-being.

#### 1.2 Mission

To provide an academically stimulating environment that enhances training of highly qualified personnel for water resources development and management through provision of quality education, research, extension and consultancy services.

#### 1.3 Objectives of the School

- (a) To train personnel in water resources sector by offering educational programmes in hydrology, limnology, marine sciences, fisheries and aquaculture at certificate, diploma, undergraduate and postgraduate levels.
- (b) To offer extension services and increase awareness on water resources development and management issues among professionals, government officials, local communities, institutions and other key stakeholders.
- (c) To provide a forum for effective collaboration between the public and the private sectors and other interested parties for development and management of water resources.
- (d) To offer consultancy services in the development and management of surface and groundwater resources, fisheries, aquaculture, limnology, and marine resources.
- (e) To conduct research and generate publications in hydrology, limnology, marine sciences, fisheries and aquaculture in order to disseminate information and innovative technologies for sustainable water resources development and management.

## 1.4 Departments

The school is currently made up of the following three (3) departments:-

- (a) Department of Hydrology and Water Resources Management
- (b) Department of Fisheries Management and Aquaculture Technology.
- (c) Department of Applied Limnology and Marine Science

## DEPARTMENT OF HYDROLOGY AND WATER RESOURCES MANAGEMENT

### 1 Introduction

The Department of Hydrology and Water Resources Management is one of the three Departments in the School of Water Resources Science and Technology of the South Eastern Kenya University. The Department was created with an objective of spearheading training and research in the field of hydrology and water resources, with emphasis on the development and management of water resources in arid and semi-arid lands of Kenya. This is vital in the realisation of the Kenya's Vision 2030 including the Millenium Development Goals.

The Department is currently offering three courses, namely (1) Diploma in Hydrology, (2) Bachelor of Science (B.Sc.) in Hydrology and Water Resources Management and (3) Master of Science (M.Sc.) in Water Resources and Waste Water Planning and Management. The three courses provide an integrated coverage of both the scientific, technical, social-economic and political aspects of water resources planning and management. The main goal is to provide our students with skills and knowledge that will enable them, either pursue a career in water resources management or undertake postgraduate studies in specialized areas in hydrology and water resources and wastewater management. The courses, in addition to providing a strong theoretical background, also incorporates practical training where our students are exposed to real working conditions and use of various specialised equipment through field attachments in relevant institutions in the country. The courses also expose our students to advanced scientific tools such as Geographical Information Systems (GIS) and Remote Sensing (RS), including various hydrological and water resources planning models.

The creation of the Department of Hydrology and Water Resources Management followed the realisation of need to increase the capacity of water resources specialists, not only in Kenya but also in other parts of

Africa. In particular, the demand for water resources specialists has risen in the recent past due to increasing complexities of managing the dwindling water resources in the country. The water resources experts specialising in hydrology, hydrogeology, hydrometeorology, water quality and integrated water resources management, are still limited in most countries of Africa including Kenya. Also, most of the institutions in the water sector still lack adequate capacity for effective implementation of projects focused on planning and management of the surface and groundwater resources. In addition, recent reforms in the water sector have generated the need for enhanced building of human capacity in water resources management and planning to aid in the implementation of fundamental reforms in the sector. Lastly, the increasing challenges of addressing water related issues such as water pollution, degradation of aquatic ecosystems, over-exploitation of water resources, water resource use conflicts, climate change, etc. require water resources specialists who can provide practical solutions to these challenges.

### 1.1 Vision

A recognised Centre of Excellence for the provision of high quality training in hydrology and water resources management.

### 1.2 Mission

To provide undergraduate and postgraduate training to students aspiring to become high calibre professionals in the field of hydrology and water resources managements, and also carry out innovative hydrological and water resources research and consultancy.

### 1.3 Objectives of the Department

The following are the objectives of the Department:

- (a) To train students aspiring to pursue career in the water resources sector by offering educational programmes in hydrology and water resources management at certificate, diploma, undergraduate and postgraduate levels.
- (b) To conduct innovative research in the fields of hydrology and water resources management and, disseminate information to stakeholders in the water sector through publication of research findings in local and international journals.
- (c) To offer extension services to local communities on issues related to water resources development, conservation and management.

- (d) To provide consultancy services to both public and private sector players in the water and wastewater management sectors.

#### 1.4 Opportunities for Graduates

Graduates trained in hydrology and water resources planning and management normally find employment and consultancy opportunities in a wide range of institutions. As such the graduates usually find opportunities in the following institutions in Kenya;

- (a) Research Institutions: Kenya Agricultural Research Institute (KARI), Kenya Forestry Research Institute (KEFRI), Kenya Marine and Fisheries Research Institute (KMFRI), etc.
- (b) Government: the main agencies requiring the services of hydrologists and water resources specialists include the ministry responsible for water resources. Other relevant public sector institutions include the Water Resources Management Authority (WARMA), Kenya Water Institute (KEWI), National Irrigation Board (NIB), National Water Conservation and Pipeline Corporation (NWCPC), Regional

Water Service Boards, and Water and Sewerage Companies.

- (c) Regional Development Organisations: Tana and Athi Rivers Development Authority (TARDA), Lake Basin Development Authority (LBDA), Coast Development Authority (CDA), Ewaso Ng'iro North Development Authority (ENNDA), and Kerio Valley Development Authority (KVDA).
- (d) Non-Governmental Organisations: There are numerous NGOs that are active in the water and sanitation sector. Examples include Action Aid, German Agro Action (GAA), WWF and IUCN.
- (e) International Organisations: UN agencies such as UNDP, UNEP, UN-Habitat, WMO, FAO, WFP, World Bank; Regional Development Banks (e.g. African Development Bank).
- (f) Consultancy Firms: numerous consultancy firms require services of trained hydrologists and water resources specialists. In addition graduates can also establish their own firms and offer consultancy services to private and public sector institutions.

### 1.5 Programmes Offered in the Department:

The Department is currently offering a B.Sc. degree course in Hydrology and Water Resources Management.

### BACHELOR OF SCIENCE IN HYDROLOGY AND WATER RESOURCES MANAGEMENT

Regulations and Syllabus for the Degree of Bachelor of Science in Hydrology and Water Resources Management

#### 1. Introduction

The Bachelor of Science in Hydrology and Water Resources Management is intended for students who plan to venture into a career in water resources planning and management. The course thus provides a broad coverage of both the scientific, technical and social aspects of water resources that are critical in management and planning. The main goal of the programme is to provide students with skills and knowledge that will enable them pursue a career in water resources management and planning and/or undertake postgraduate studies in specialized areas in hydrology and water resources management. In

addition to providing a strong theoretical background, the course also incorporates practical training where students are exposed to real working conditions and use of various instruments through field attachments.

#### 1.1 Justification

- (a) There is increasing demand for water resources specialists to address the growing challenges of managing the scarce water resources in the country. Previously, most of the graduates working in the water resources sector were non-water resources specialists drawn from other disciplines.
- (b) Reforms in the water sector in the country has also generated a need for further building of the human capacity in water resources planning and management to aid in the implementation of various reforms in the sector.
- (c) The increasing challenges of dealing with water related issues such as water pollution, water resources use conflicts, integrated water resources management, environmental impact assessment, etc, require highly trained water resources specialists.

- (d) The course is vital in the realisation of the Millennium Development Goals and Vision 2030 given that management of water resources is an important ingredient for sustainable social and economic growth and development.
  - (e) The course equips the candidates with essential and relevant tools like Geographical Information Systems (GIS) and Remote Sensing (RS) required for the assessment and monitoring of water resources at a wide scale.
  - (f) The course prepares candidates for competitive global job market in areas of water resources and environmental management.
- (c) Provide candidates with knowledge and skills necessary for the establishment of water resources assessment and monitoring programmes.

## 2 Entry Requirements

The candidate must satisfy the minimum university entry requirements.

### 2.1 KCSE Candidates

In addition to satisfying the minimum University requirements, the candidates should also possess passes at C+ or above in Biology or Biological Sciences and a minimum of a C plain in , Chemistry and either Physics/ Physical Sciences, Geography or Mathematics.

### 2.2 Other Candidates

Admission to the degree course may be granted to the following categories of candidates:

- (a) Holders of KCSE, or equivalent with a minimum of 2 Principal passes in either Biology, Chemistry, Geography, or Agriculture and at least a pass in Mathematics or a Mathematics credit at ordinary level where Mathematics was not offered at A-Level.

## 1.2 Programme Objectives

- (a) Provide students with knowledge necessary for effective and sustainable planning, management, and utilization of water resources.
- (b) Provide candidates with knowledge and skills for applying multi-disciplinary and integrated approaches to water resources planning and management.

- (b) Holders of a Diploma in Agricultural Sciences or related sciences from a recognized Institution with credit or distinction, with KCSE mean grade of C or above.
- (c) Holders of a Higher National Diploma or equivalent in Biological, Physical or related Agricultural Sciences from a recognized institution.
- (d) Holders of degree in Biological Sciences, Physical Sciences or related Sciences from a recognized institution.

### 3 Credits Transfer and Exemptions

#### 3.1 Credit Transfers

Candidates from other universities recognized by the South Eastern Kenya University Senate may be considered for credit transfer based on course unit content equivalence. The transfer of credits shall not be more than one third (1/3) of the total prescribed credits and /or course units required for the award of B.Sc. Hydrology and Water Resources Management.

#### 3.2 Exemptions

South Eastern Kenya University Senate may exempt students from some courses on

recommendation of the School Board provided that:

- (a) Such candidates had taken those courses in a recognized university or equivalent institution and had achieved a pass grade.
- (b) Candidates seeking such exemptions submit a duly completed a senate approved form specifying the courses for which exemption is desired and attach evidence of 3.2(a) above showing contents of what was studied.
- (c) Courses specified in 3.2(b) are to satisfy the requirements of the first year of study only. Candidates requiring exemptions from 2nd, 3rd and 4th year courses shall in the absence of credit transfer be required to sit University examinations and attain at least a pass grade, which will then be used in the degree classification.
- (d) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programme.
- (e) A non-refundable course exemption fee as determined by the University be paid with each application for exemption.



## 4 Course Structure and Duration

The programme will be offered under three modules, full time (modules I and II) and through Open Distance Learning (ODL) (Module III) for students who cannot attend regular university programme.

### 4.1 Full time

- (a) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 15 teaching weeks and two (2) weeks for examination.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree
- (c) A candidate for B.Sc. in Hydrology and Water Resources Management shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.

- (d) Each student shall be required to undertake satisfactory field/industrial attachment of eight (8) weeks at the end of the third year of study.

### 4.2 Open Distance Education Learning (ODEL)

The delivery mode of these programmes will be use of open and distance education learning modes involving the use of various media (multi-media modes of learning) and shall largely be home based.

## 5 Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two-thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the fourth year.
- 5.3 All examination procedures shall be governed by the following:

- (a) Each course examination shall be examined out of a total of 100%.
- (b) The pass mark in each course examination shall be 40% and graded as follows:
- |               |          |
|---------------|----------|
| 70-100%       | A        |
| 60-69%        | B        |
| 50-59%        | C        |
| 40-49%        | D        |
| 39% and below | E (FAIL) |
- (c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical / field trip reports 10%.
- (d) Field Practice/Attachment shall be examined by a written report. The grades shall be used in the degree classification. Evaluation of the students' performance while in the field shall constitute field assessment and shall contribute 30% of the end of semester examination while the written report shall contribute 70% of the end of semester examination.
- (e) The Research Project shall be examined through written reports and presentations, and shall be graded for degree classification.
- (f) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.
- (g) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- (h) A Candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate who opts to attend classes in the failed courses shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.

- (i) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
- (j) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- (k) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.
- (c) Classified into First Class Honours, Second Class Honours (Upper or Lower Divisions) and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.

5.4 The Degree of Bachelor of Science in Hydrology and Water Resources Management shall be:

- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/ Industrial Attachment.
- (b) Based on the average score of all examinations of courses taken in the entire course duration.

5.5 In arriving at the decision as to the degree classification for each candidate, the School Board of Examiners shall consider, while observing regulation 5.4(c) above, the overall mean mark obtained by the candidate and shall apply the principle that a mean score of:

70-100%	-	First Class Honours
60-69%	-	Second Class Honours (Upper Division)
50-59%	-	Second Class Honours (Lower Division)
40 -49%	-	Pass.

## **6 Study Intermission**

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## 7 Course Outline

### Year 1

#### Semester 1

CCS 001	Communication Skills
CCS 010	HIV/AIDS
WRM 101	Introduction to Water Resources Management
BOT 101	Introductory Botany
ZOO 101	Invertebrate Zoology
WRM 102	Elementary Survey
WRM 103	Fundamentals of Geology
PHY 101	Foundation Physics

#### Semester 2

WRM 104	Principles of Hydrology
WRM 105	Water Resources of Kenya
WRM 106	Introduction to Water Quality
ENF 107	General Chemistry
BIT 112	Introduction to ICT
PAS 108	General Mathematics
WFA 203	Aquatic Ecology
CCS 009	Elements of Economics

### Year 2

#### Semester 1

WRM 201	Surface Water Hydrology
WRM 202	Water and Irrigation
WRM 203	Water Chemistry
WRM 204	Groundwater Hydrology
WRM 205	Soil Science and Mechanics
WRM 206	Soil and Water Conservation
WFA 205	Statistics I
WRM 207	Climatology

#### Semester 2

WRM 208	Environmental Engineering
WRM 209	Rainwater Harvesting Technology
WRM 210	Fluid Mechanics
WRM 211	Water, Environment and Sustainable Development
WFA 310	Conservation and Management of Aquatic Resources
WRM 212	Fluvial Geomorphology
WFA 214	Limnology
WRM 213	Water Quality Assessment and Monitoring

### Year 3

#### Semester 1

WRM 301	Fisheries and Aquaculture Development
WRM 302	Ecology of Invasive Aquatic Species
WRM 303	Dams and Reservoirs
WRM 304	Geographic Information System and Remote Sensing
WRM 305	Environmental Impact Assessment
WRM 306	Planning for Water Resources Development
WRM 307	Estuaries and Freshwater-Saltwater linkages
WRM 308	Watershed Systems and Management

## Semester 2

WFA 310	Research Methods
WRM 309	Flood Forecasting and Mitigation
WRM 310	Groundwater Pollution and Exploration
WRM 311	Wetlands Conservation and Management
WRM 312	Water and Wastewater Treatment
WRM 313	Eco- hydrology I
WFA 303	Statistics II
WRM 314	Economics of Water Resources Planning
WRM 315	Field /Industrial Attachment

## Year 4

### Semester 1

WRM 401	Water Resources Governance and Policy
WRM 402	Integrated Water Resources Management
WRM 403	Research Project
WRM 404	Water and Environmental Law
WRM 405	Eco- Hydrology II
WRM 406	Groundwater Recharge
WRM 407	Probability in Hydrology

### Semester 2

WRM 408	Sediment Transport and Sedimentation
WRM 409	Education and Extension in WRM
WRM 410	Climate Change and Water Resources
WRM 411	Current Topics in Water Resources Management
WFA 408	Aquatic Microbiology
WRM 412	Water Supply Systems and Drainage Management
WRM 413	Hydrologic Modeling
WRM 414	Hydro-Informatics

## MASTER OF SCIENCE IN INTEGRATED WATER RESOURCES AND WATERSHED MANAGEMENT

Regulations and Syllabus for the Degree of Master of Science in Integrated Water Resources and watershed management

### 1 Introduction

Water is becoming a scarce commodity due to over-exploitation associated with rapid population growth, pollution and degradation of the watersheds. This is straining economic development at local, regional and international levels. The challenges associated with increasing demand for water resources and degradation of watersheds can however be offset through implementation of integrated water resources and watershed management approaches that takes into consideration the requirements and impacts of various water use sectors such as agriculture, industry, municipal, energy, environment, fisheries sectors, etc. The implementation of these approaches require experts trained in integrated water resources and watershed management. At the moment there is a deficiency in human capacity for integrated water resources management and planning at local, regional and national levels. There is therefore a need to train professionals

in this area in order to spearhead sustainable water resources management. Such experts need to have sufficient grounding in integrated and multi-disciplinary management approaches including the capacity to undertake comprehensive analysis of complex water management issues including the analysis and review of policy, legal, budgetary and institutional frameworks and conflict resolution.

This Master of Science degree Programme provides a multi-disciplinary approach integrating both scientific and non-scientific approaches in the training since these are essential for effective water resources and watershed management. The graduates who complete this course will have a thorough understanding of key concepts in water resources and watershed planning and management. The objectives of this programme are to:

- (a) Produce well trained integrated water resources and watershed management specialists.
- (b) Provide students with appropriate knowledge on the water resources and river basin processes influencing the spatial-temporal distribution of water resources;
- (c) Equip students with relevant, appropriate and diverse skills for planning and management of water resources in river basins;
- (d) Provide students with knowledge on the current global trends and approaches in the management of water resources and watersheds.

## 2 Admission Requirements

- (a) The common regulations governing the admission into Masters Degree in all Schools/Faculties/Institutes of the South Eastern Kenya University shall apply.
- (b) Candidates must meet the minimum requirements for registration for Masters Degree as laid down by the South Eastern Kenya University, College of Biological and Physical Sciences shall apply.
- (c) In addition, a candidate must have the following minimum qualifications:
  - i. Bachelor of Science degree, of at least Upper Second Class Honors degree in either Environmental Sciences, Natural Sciences, Biological Sciences, Water Resources Engineering, Agricultural Engineering, Agriculture, Hydrology and Water Resources Management, Geology, Geography, Meteorology or related disciplines, from a university recognized by the Senate of the South Eastern Kenya University.

- ii. Bachelor of Arts degree, of at least Upper Second Class Honors degree in either Environmental Studies, Water Resources Management, Geography or related disciplines, from a university recognized by the Senate of the South Eastern Kenya University.
- iii. Bachelor of Science degree, of Lower Second Class Honors in above fields and a postgraduate Diploma in a relevant field from a university recognized by the Senate of the South Eastern Kenya University.
- iv. Bachelor of Science degree, of Lower Second Class Honors in above fields and a minimum of 2 years work experience in a relevant field.
- v. Bachelor of Science degree, of Pass in above fields, a Postgraduate Diploma in a relevant and a minimum of 3 years work experience in the water or environment sectors.

### 3 Transfer of Credits and Exemptions

- (a) The common regulations governing the transfer of credits in all Schools and those in the College of Biological and Physical Sciences, South Eastern Kenya University shall apply.
- (b) A candidate may be exempted from some course units and credit transferred from institutions recognized by the Senate subject to the following conditions:
  - i. Must have passed in similar course units at Masters or equivalent level.
  - ii. The applicant must meet the entry requirements of the School of Water Resources Science and Technology or other science related Schools of the South Eastern Kenya University.
  - iii. The applicant cannot transfer more than one third of the course work and must take two-thirds of the course work during the course of study.
  - iv. Request for exemption must be made in writing on admission, addressed through the Dean/Director of the

School, to the Director of the Board of Postgraduate Studies and must be accompanied by officially endorsed supporting documents including the institution's syllabuses for the relevant courses.

### 4 Course Structure and Duration

- (a) The common regulations governing course structure and duration in all Schools and those in the School of Water Resources Science and Technology Programmes shall apply.
- (b) The Masters Degree Programme shall consist of coursework, examination, and thesis and shall be covered in a minimum of four (4) semesters of fifteen (15) weeks each and a maximum of eight (8) semesters; and this maximum may be extended only with the prior approval of the Senate of the South Eastern Kenya University.
- (c) In the first year of study (Part I), each Masters candidate shall be required to register and successfully take a total of twelve (12) taught course units. In each semester, a candidate shall undertake six (6) taught course unit comprising four

(4) core course units and two (2) elective course units. In addition, during the second year of study (Part II), candidates shall be required to conduct research and prepare a thesis, which shall be equivalent to eight (8) course units.

- (d) Each course unit shall have a minimum of forty five (45) contact hours and shall be covered within a semester.

### 5. Course Outline

WRM 503	Watershed Hydrology
WRM 504	Water Resources Planning and Management
WRM 505	Integrated Water Resources Management (IWRM)
WRM 515	Watershed Erosion and Reservoir Sedimentation

### Electives

WRM 506	Environmental Impact Assessment and Audit
WRM 507	Applied Remote Sensing and Geographic Information Systems in WRM
WRM 508	Hydro-Informatics and Water Resources Modeling
WRM 513	Analysis of Extreme Hydrological Events in watersheds
WRM 514	Stormwater and Wastewater Management
WRM 516	Water Resources Governance and Policy Frameworks



WRM 501	Statistical Techniques and Analysis
WRM 502	Research Methods
WRM 508	Water Resources Development and Management
WRM 509	Watershed Processes and Management

### Electives

WRM 510	Water Resources and Sustainable Development
WRM 513	Water Harvesting Technologies and Management
WRM 512	Groundwater Hydrology and Management
WRM 517	Watershed Water Quality Management
WRM 518	Economics of Water Resources Planning and Management
WRM 519	Thesis (Minimum: 1 Year)

## 6 Examination Regulations

Common regulations governing examination regulations in all Schools and those in the South Eastern Kenya University shall apply.

### 4.4. Written Examinations:

- (a) Final University examinations shall be given at the end of every semester in each taught course unit and each final examination shall be in the form of a three (3) hour written examination paper.
- (b) Each end-of-semester examination shall constitute sixty percent (60%) of all the marks in each course unit, while continuous assessment tests shall constitute forty percent (40%).

- (c) Continuous assessment shall be undertaken in form of written tests, term papers, field exercises, oral presentations, or any combination of any these methods.
- (d) In every course unit taken, the pass mark shall be fifty percent (50%).
- (e) The grading of the course units shall be as follows:

70-100%	A
60-69%	B
50-59%	C
40-49%	D
39% and below	E (FAIL)

- (f) A candidate who fails to satisfy the examiners in any course unit shall on the recommendation of the School Board of Examiners and approval by Senate be allowed to take up to two (2) supplementary examinations according to the University regulations.
- (g) A candidate who, for a good cause supported by authenticated documentary evidence fails to sit or complete an end-of-semester examinations, shall be allowed to sit for the paper(s) concerned when the examination is next scheduled, without paying additional fees.

- (h) A candidate who fails in any course shall be subjected to the South Eastern Kenya University regulations governing supplementary examination, repeating and discontinuation.

### 4.5. Thesis

- (a) A candidate who successfully completes the coursework and written examinations shall proceed to prepare and present a research proposal in a Departmental seminar.
- (b) A candidate who successfully defends his/her proposal in the Departmental seminar and undertakes all the necessary corrections will be allocated at least two (2) University supervisors.
- (c) The candidate shall undertake supervised research, write and submit a thesis for examination within a minimum of one academic year and a maximum of two academic years.
- (d) The supervision and examination of candidates shall be done in accordance with the common regulations for the Masters Degrees.

### 5. Award of Degree

The final degree award shall be Master of Science in Integrated Water Resources and Watershed Management.

## DEPARTMENT OF FISHERIES AND AQUACULTURE TECHNOLOGY

### 1 Introduction

The Department of Fisheries Management and Aquaculture Technology is one of the three departments in the School of Water Resources, Science and Technology of the South Eastern Kenya University. The department was created with the objective of spearheading research, training and extension in the field of fisheries and aquaculture with particular emphasis on the development of culture-based fisheries resources in the arid and semi-arid lands (ASALs) of Kenya

#### 1.1 Vision

To be a recognized Centre of Excellence for the training of high quality professionals in fisheries and aquaculture industry so as to enhance food security in Kenya and beyond.

#### 1.2 Mission

To provide training at certificate, diploma, undergraduate and postgraduate levels in order to produce high calibre professionals in the field of fisheries and aquaculture, and stimulate intuitive research and consultancy in fisheries resources.

### 1.3 Objectives of the Department

To train and produce resourceful professionals in the field of fisheries and aquaculture at certificate, diploma, undergraduate and postgraduate levels.

- (a) To offer extension services and increase awareness on fisheries and aquaculture resources development and management issues among professionals, government officials, local communities, institutions and other key stakeholders.
- (b) To provide a forum for effective collaboration between the public and the private sectors and other interested parties for development and management of fisheries resources of natural and man-made water bodies.
- (c) To offer consultancy services in the development and management of fisheries and aquaculture production in Kenya
- (d) To conduct research and generate publications in fisheries and aquaculture in order to disseminate information and innovative technologies for sustainable fisheries resources development and management. Below: Fisheries of man-made Small Water Bodies

### 1.4 Programmes Offered

The department is currently offering B.Sc. in Fisheries Management and Aquaculture Technology

#### **BACHELOR OF SCIENCE IN FISHERIES MANAGEMENT AND AQUACULTURE TECHNOLOGY**

Regulations and Syllabus for the Degree of Bachelor of Science in Fisheries Management and Aquaculture Technology

#### **1 Introduction**

With expansion of global population, the demand for high-quality protein, especially from aquatic sources, is rising dramatically. At the same time, capture fisheries seem to have reached capacity and is even showing precipitous declines due to overfishing, habitat destruction and pollution. There is therefore urgent need to generate scientific knowledge that can be used as a basis for sustainable exploitation of the fisheries resources if further increases in capture fisheries are to be met under the current global conditions. Secondly, heavy investment in aquaculture production is clearly needed to complement capture fisheries and meet this increasing demand in the third millennium. Increased demands for aquaculture production mean increasing

pressure for development of more efficient production systems. Major improvements can be achieved through scientifically enhanced management, nutrition, disease diagnostics and therapeutics, water quality maintenance and genetic improvement of production traits. These challenges can only be met by training highly skilled fisheries and aquaculture resource scientists and managers.

### 1.1 Justification

The Bachelor of Science in Fisheries Management and Aquaculture Technology is designed to prepare students for career in the management of fisheries and the efficient, ecologically sustainable use of aquaculture resources, particularly Kenya's water resources. The Kenya government is currently promoting aquaculture among rural communities under the Economic Stimulus Programme and the success of this programme will depend among other things the availability of high quality seeds (fingerlings). The B.Sc. programme will directly contribute to the economic development of Kenya as it would contribute to improved food security among rural communities.

### 1.2 Programme objectives

- (a) Train students with a scientific and technological knowledge base and the practical experience to address issues relating to sustainable utilization of fisheries resources and development of aquaculture.
- (b) Train students to integrate the planning and management of fisheries and aquaculture resources with education, applied scientific research, and sustainable development.
- (c) To provide firm foundation based on scientific and technological knowledge in fisheries and aquaculture technology and create skills and preparedness for successful undertaking of research and development oriented careers.

## 2 Entry Requirements

The candidate must satisfy the minimum university entry requirements.

### 2.1 KCSE Candidates

In addition to satisfying the minimum University requirements, the candidates should also possess passes at C+ or above in Biology or Biological Sciences and a minimum of a C plain in , Chemistry and either Physics/ Physical Sciences or Mathematics.

### 2.2 Other Candidates

Admission to the degree course may be granted to the following categories of candidates:

- (a) Holders of KACE, or equivalent with a minimum of 2 Principal passes in Biology and Chemistry and

- at least a pass in Mathematics or a Mathematics credit at ordinary level where Mathematics was not offered at A-Level.
- (b) Holders of a Diploma in Agricultural Sciences or related sciences from a recognized Institution with credit or distinction, with KCSE mean grade of C or above.
  - (c) Holders of a Higher National Diploma or equivalent in Biological or other related Agricultural Sciences from a recognized institution.
  - (d) Holders of degree in Biological Sciences or related Sciences from a recognized institution.
- (a) Such candidates had taken those courses in a recognized university or equivalent institution and had achieved a pass grade.
  - (b) Candidates seeking such exemptions submit a duly completed a senate approved form specifying the courses for which exemption is desired and attach evidence of 3.2(a) above showing contents of what was studied.
  - (c) Courses specified in 3.2(b) are to satisfy the requirements of the first year of study only. Candidates requiring exemptions from 2nd, 3rd and 4th year courses shall in the absence of credit transfer be required to sit University examinations and attain at least a pass grade, which will then be used in the degree classification.
  - (d) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programme.
  - (e) A non-refundable course exemption fee as determined by the University be paid with each application for exemption.

### 3. Credits Transfer and Exemptions

#### 3.1 Credit Transfers

Candidates from other universities recognized by the South Eastern Kenya University Senate may be considered for credit transfer based on course unit content equivalence. The transfer of credits shall not be more than one third (1/3) of the total prescribed credits and /or course units required for the award of B.Sc. Fisheries Management and Aquaculture Technology.

#### 3.2 Exemptions

The South Eastern Kenya University Senate may exempt students from some courses on recommendation of the School Board provided that:

### 4 Course Structure and Duration

The programme will be offered under three modules, full time (modules I and II) and through Open Distance Education Learning (ODEL) (Module III) for students who cannot attend regular university programme.

### 4.1 Full time

- (a) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 15 teaching weeks and two (2) weeks for examination.
- (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.
- (c) A candidate for B.Sc. Fisheries Management and Aquaculture Technology shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (d) Each student shall be required to undertake satisfactory field/industrial attachment of eight (8) weeks at the end of the third year of study.

### 4.2 Open Distance Education Learning (ODEL)

The delivery mode of these programmes will be use of open and distance education learning modes involving the use of various media (multi-media modes of learning) and shall largely be home based.

### 5 Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two-thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the fourth year.
- 5.3 All examination procedures shall be governed by the following:
  - (a) Each course examination shall be examined out of a total of 100%.
  - (b) The pass mark in each course examination shall be 40% and graded as follows:

70-100%	A
60-69%	B
50-59%	C
40-49%	D
39% and below	E) FAIL

- (c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical / field trip reports 10%.
- (d) Field Practice/Attachment shall be examined by a written report. The grades shall be used in the degree classification. Evaluation of the students' performance while in the field shall constitute field assessment and shall contribute 30% of the end of semester examination while the written report shall contribute 70% of the end of semester examination.
- (e) The Research Project shall be examined through written reports and presentations, and shall be graded for degree classification.
- (f) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.
- (g) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- (h) A candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate who opts to attend classes in the failed courses shall be required to pay the required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.
- (i) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
- (j) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
- (k) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.

5.4 The Degree of Bachelor of Science in Fisheries Management and Aquaculture Technology shall be:-

- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/ Industrial Attachment.
- (b) Based on the average score of all examinations of courses taken in the entire course duration.
- (c) Classified into First Class Honours, Second Class Honours (Upper or Lower Divisions) and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.

5.5 In arriving at the decision as to the degree classification for each candidate, the School Board of Examiners shall consider, while observing regulation 5.4(c) above, the overall mean mark obtained by the candidate and shall apply the principle that a mean score of:

- 70-100% - First Class Honours
- 60-69% - Second Class Honours (Upper Division)
- 50-59% - Second Class Honours (Lower Division)
- 40 -49% - Pass.

## 6 Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## 7 Course Outline

### Year 1

#### Semester 1

CCS 001	Communication Skills
CCS 010	HIV/AIDS
WFA 101	Introduction to Fisheries Science
WFA 102	Fundamentals of Animal Ecology
WFA 103	Genetics and Evolution
WFA 104	Soil Science
WFA 105	General Parasitology
ZOO 101	Invertebrate Zoology

#### Semester 2

ENF 107	General Chemistry
WFA 106	Cell Biology
WFA 107	Animal Physiology
CHE 102	Introductory Biochemistry
ZOO 102	Vertebrate Zoology
BIT 112	Introduction to ICT
PAS 108	General Mathematics
CCS 009	Elements of Economics



## Year 2

### Semester 1

WFA 201	Developmental Biology
WFA 202	General Microbiology
WFA 203	Aquatic Ecology
WFA 204	Principles of Aquaculture
WFA 205	Statistics I
WFA 206	Ichthyology
WFA 207	Fish Capture Techniques
WFA 208	Utilization and Management of Natural Resources

### Semester 2

WFA 209	Water Quality and Pollution Control
WFA 210	Animal Population Dynamics
WFA 211	Fish Anatomy and Physiology
WFA 212	Fish Genetics
WFA 213	Physical Oceanography
WFA 214	Limnology
WFA 215	Plankton Systematics and Ecology
WFA 216	Biology of Marine Organisms

## Year 3

### Semester 1

WFA 301	Conservation and Management of Aquatic Resources
WFA 302	Fisheries and Mariculture
WFA 303	Statistics II
WFA 305	Fish Stock Assessment
WFA 306	Fish Processing Technology and Quality Assurance
WFA 307	Wetland Ecology
WFA 308	Ecology of Estuarine Ecosystems Seed and Larval Production

## Semester 2

WFA 310	Research Methods
WFA 311	Diseases of Fish
WFA 312	Aquaculture Systems
WFA 313	Fisheries Management and Conservation
WFA 314	Fisheries and Aquaculture Extension
WFA 315	Fisheries Economics and Marketing
WFA 316	Fish Nutrition and Feed Technology
WFA 317	Marine Ecological Survey Techniques

*Field Attachment*

## Year 4

### Semester 1

WFA 401	Research Project
WFA 402	Current Topics in Fisheries and Aquaculture
WFA 403	Aquaculture Genetics
WFA 404	Fishing Gear and Vessel Technology
WFA 408	Aquatic Microbiology

### Electives (Candidates to choose any 2 courses)

WFA 405	Ecology of Coral Reefs
WFA 406	Law of the Sea and Inland Waters
WFA 407	Algal Ecology and Systematics

### Semester 2

BPS	203	Entrepreneurship Skills
WFA	409	Fisheries Project Planning and Management
WFA	410	Fisheries Policy and Law
WFA	411	Economics of Aquaculture
WFA	412	Water Borne Diseases

### Electives (Candidates to choose any 3 courses)

WFA	413	Ornamental and Recreational Fisheries
WFA	414	Ecotoxicology
WRM	312	Water and Waste water Treatment
WRM	404	Water and Environmental Law
WFA	415	Fish Ethology

## DEPARTMENT OF APPLIED LIMNOLOGY AND MARINE SCIENCES

### 1 INTRODUCTION

The Department of Applied Limnology and Marine Sciences is one of the three departments established in

the School of Water Resources, Science and Technology, South Eastern Kenya University. The department was established to focus on teaching, research and capacity development in Aquatic ecology.

#### 1.1 Vision

To be a department of excellence in high quality Aquatic Sciences training, research, outreach, technological development and consultancy for the advancement of human well-being.

#### 1.2 Mission

To provide an academically motivating environment that enhances training of highly qualified personnel for Aquatic ecosystems conservation and management through provision of quality education, research, extension and consultancy services.

#### 1.3 Objectives of the Department

- (a) To train personnel in Aquatic ecology by offering educational programmes in applied Limnology and Marine Sciences at undergraduate and postgraduate levels.

- (b) To offer extension services and increase awareness on aquatic ecosystems conservation and management issues among professionals, government officials, local communities, institutions and other key stakeholders.
- (c) To provide a forum for effective collaboration between the public and private sectors and other interested parties for conservation and management of aquatic ecosystems.
- (d) To offer consultancy services in the conservation and management of aquatic ecosystems.
- (e) To conduct research and generate publications in Aquatic Sciences in order to disseminate information and innovative technologies for sustainable aquatic resources conservation and management.

**School of  
Humanities and  
Social Sciences**

### 1 Introduction

The School of Humanities and Social Sciences formerly the school of Liberal Arts and Sciences launched its first academic programme- the B.A. Social Work course- in May 2010. Apart from providing Social Work education the school focuses on training both out of high school and continuing students in a wide range of humanities and social science disciplines at pre-university, undergraduate and postgraduate levels. The school trains and equips students to work in diverse careers in the fields such as languages and communication, social work, public and social service administration, criminal justice, international organizations, media, corporations, government agencies, Non Governmental Organizations, and academic and research organizations. In its programmes and operations the school endeavours to achieve the following.

#### (a) Mission

To provide quality, transformative, interdisciplinary, and practical education in Arts, Humanities and Social and Behavioural Sciences

#### (b) Departments and Academic Programs

The academic programs of the school are designed, as far as possible, to integrate discipline-specific and

general education courses. The discipline specific courses are designed to provide students with the knowledge, skills, and abilities necessary for proficiency in their chosen field of study or program. The general education courses, on the other hand, set the foundation of higher education curriculum and provide a coherent intellectual and social experience for all students regardless of their program of study. We have also established mentorship programs to benefit both students and staff.

The school has three established departments, namely,

- (a) Department of Gender and Development Studies
- (b) Department of Linguistics and Communication
- (c) Department of Sociology and Anthropology

### DEPARTMENT OF GENDER AND DEVELOPMENT STUDIES BACHELOR OF ARTS IN GENDER AND DEVELOPMENT

Regulations and syllabus for the Degree of Bachelor of Arts in Gender and Development

#### 1 Introduction

The need to integrate concerns in all situations of development interventions has been the focus of many

development efforts throughout the world over the last few decades. The reason for the concern is the need to work towards a more equitable gender balance in all sectors of the economy and in different facets of life.

The Bachelor of Arts in gender and Development at the Institute of African Studies is a degree programme designed and developed to articulate gender and development issues in a changing political, social-economic and cultural environment. At a more theoretical level, the programme seeks to provide a deeper understanding of an evolving gender system as a socially constructed system of hierarchical relationships, which are manifested differently under diverse cultural contexts. At the level of intervention, the focus is on how development partners can be sensitized and encouraged to increase their support for commitment to the promotion of gender equity through a variety of gender responsive policies and programmes and also to develop strategies to accelerate and institutionalize the process of gender mainstreaming.

The overarching concern here is that the goal of sustainable development cannot be achieved without the full participation of men and women as equal partners in the development and decision-making processes at all levels. A persistent challenge is how to

overcome the constraints that limit women's access to resources and participation in the development process on equitable and democratic bases through continuous gender negotiations.

### 2 Entry Requirements

Eligible candidates for the Bachelor of Arts in gender and Development shall be:-

- (a) Those who have obtained an aggregate of C+ in the Kenya Certificate of Secondary Education (KSCE) or its equivalent;
- (b) Those with at least Division II in 'O' level certificate plus three years relevant work experience.
- (c) Those who have obtained at least two principal passes of D plain in A-level certificate or its equivalent;
- (d) Those with a degree or diploma from a recognized University or other institutions of higher learning.

### 3 Choice of Courses

- (a) Candidates once admitted must register in all the prescribed courses in the programme, and the registration must be approved by the Director of the Institute of African Studies.
- (b) Candidates must attend all the scheduled lectures and do all the assignment coursework.

- (c) No candidate shall be presented for the award of the degree of Bachelor of Arts in Gender and development until he/she has accumulated the total number of units required for that degree.

#### **4 Course Structure and Duration**

- (a) Candidates shall be required to take a minimum of 40 courses, including all the course courses.
- (b) Candidates shall take a minimum of four and a maximum of six course units during a semester.
- (c) Each course shall be covered in 45 contact hours.
- (d) The degree programme shall last for a minimum of four and a maximum of eight years of study.

#### **5 Credits Transfer and Exemptions**

Applicants who have undertaken equivalent undergraduate course units at other universities recognized by South Eastern Kenya University Senate may, on recommendation of the Institution of African Studies and approval of Senate, be allowed to transfer credits upto a maximum of one-third ( $\frac{1}{3}$ ) of all courses offered in the programme. Students desiring to receive credit for any prior coursework will need to make a formal request to the Academic Registrar, South Eastern Kenya University giving the following information:

- (a) A list of the South Eastern Kenya University courses for which the student is interested in getting credit;
- (b) Official transcript indicating courses that may be equivalent and;
- (c) Descriptions and syllabi/outlines of the courses in which the applicant is seeking transfer of credit.

The South Eastern Kenya University through the Institute of African Studies, reserves the right to administer an appropriate exemption examination in order to determine whether an exemption should be granted. All those seeking to transfer credits will be required to pay an appropriate exemption fee.

#### **6 Examinations**

- (a) At the end of each semester, candidates shall be required to sit for a two (2) hour examination.
- (b) A candidate shall not be permitted to sit for University examinations unless he/she has attended lectures regularly throughout the semester and covered at least two-thirds ( $\frac{1}{3}$ ) of the course.
- (c) Each course unit shall be graded out of 100%. Coursework assessment shall account for 30% and the final examination 70% of the total marks.
- (d) The pass mark for each course unit shall be 40%

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- (e) A candidate who fails an examination in any course shall be allowed to re-sit that paper upto a two times during the next regular University examinations after paying an appropriate examination fee.
- (f) When a candidate re-sits an examination his/her grade shall be based entirely on the marks obtained in that exam. Coursework marks shall NOT be taken into account.
- (g) A pass obtained in a re-sit shall account for only 40%.
- (h) A candidate who fails three core courses after two resits shall be discontinued.
- (i) To qualify for the award of the degree a candidate must have studied for and passed a minimum of 40 units, including all the core courses.

### 7 Award of Degree

- (a) To qualify for the award of the degree, a candidate shall have passed all the prescribed courses.
- (b) The final grade and degree classification will be based on the average percentage marks obtained in all the courses taken throughout the study period.
- (c) The classification of final award of the degree of Bachelor of Arts in Gender and Development shall be based on the following standard formula of the South Eastern Kenya University:

First Class Honours	70–100%
Second class (Upper Division)	60 – 69%
Second class (Lower Division)	50 – 59%
Pass	40 – 49%

A candidate who qualified for the award of the degree only after re-examination as a result of having failed an end of semester exam shall not be eligible for the award of an honors degree.

## 8 Course Outline

### Year 1 Semester 1

NGE 101	Introduction to Gender and development Studies
NGE 102	Gender and Culture
NGE 103	Gender Division of Labour
NGE 104	Introduction Anthropology

### Elective Courses

NGE 105	Inter-disciplinary Approaches to Gender Analysis
NGE 106	Cultural Anthropology

### Semester 2

NGE 107	Mainstreaming Gender into the Development Process
NGE 108	Gender Analysis in cross-Cultural Perspectives
NGE 109	Women and Democratization Process
NGE 110	Gender and Homelessness



### Elective Courses

NGE 110	Introduction to ethnology
NGE 112	Gender and Entrepreneurship

### Year 2

#### Semester 1

NGE 201	Gender and Agricultural Development
NGE 202	Gender and Poverty
NGE 203	Gender and Employment
NGE 204	Gender and Government

### Elective Courses

NGE 205	Comparative Ethnography
NGE 206	Ecological anthropology

### Elective courses

NGE 207	Gender and Shelter
NGE 208	Gender and sustainable Development
NGE 209	Gender and Politics
NGE 210	Gender and Education
NGE 211	Gender and Shelter
NGE 212	Ethnology of African Societies

### Year 3

#### Semester 1

NGE 301	Gender and Health
NGE 302	Theoretical Perspectives in Gender Studies
NGE 303	Gender and Community Development
NGE 304	Gender Violence

### Elective courses

NGE 305	Gender and Communication
NGE 306	Economic Anthropology

### Semester 2

NGE 307	Gender and Law
NGE 308	Gender and Environment Management
NGE 309	Gender and Migration
NGE 310	Gender and Technology

### Elective courses

NGE 311	Women's Development Organizations in a Changing World
NGE 312	Family and Kingship

### Year 4

#### Semester 1

NGE 401	Gender and Reproductive Health
NGE 402	Gender and the Media
NGE 403	Gender and Research Methodology
NGE 404	Gender and Pastoralism

### Elective courses

NGE 405	Gender and Armed Conflict
NGE 406	Cultural Context of Nutrition

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### Semester 2

NGE 407	Gender, Power and Decision-Making
NGE 408	Gender and Tourism
NGE 409	The Impact of Development on Gender Roles and Relations
NGE 410	Cultural Change and Development

### Elective courses

NGE 411	Gender in the Third World
NGE 412	Gender and Medical Pluralism
NGE 413	Gender and Aging

## DEPARTMENT OF SOCIOLOGY AND ANTHROPOLOGY

### 1 Introduction

The Department of Sociology and Anthropology is hosted at the School of Humanities and Social Sciences at the South Eastern Kenya University. In general sociology is about people and how they live together in social groups. BA Social Work offers you opportunity to look in depth at issues in the contemporary world and to learn skills and tools of analysis vital to working in the developing and developed societies. BA Social Work students develop research skills along with a general intellectual preparation, which stands them in

good stead for graduate work in the disciplines and/or for a broad range of professions such as law, medicine, social work or journalism. In addition to the courses offered, the Department also offers seminars on special topics of both social and anthropological interests to current societal needs. Such issues are related to Poverty, Child Abuse; Technology and Society, amongst others.

### 1.2 Vision

To be the lead department in the development of self-motivated agents of social change.

### 1.3 Mission

To train and impart necessary knowledge and skills that will contribute to the improvement and development of a sustainable human society.

### 1.3 Objectives

The programs are set to:

- (a) Provide practical working skills in Applied Sociology and Anthropology.
- (b) Provide professionals with a firm theoretical and practical background in Sociology and Anthropology.

- (c) Train highly specialized graduates to undertake postgraduate studies in social anthropological issues affecting society. Opportunities exist in all aspects of social development across the globe.
- (c) Supervision, management and administrative skills
- (d) Legislative and policy analysis and development
- (e) Advocacy on behalf of individuals, families or the larger community

### 1.4 Programmes Offered

To achieve its objectives, the department is currently offering various Diploma and Degree programs namely:

1. BA, Social Work
2. Dip. in Social Work and Social Development

### 1.5 Skills of a Social Worker

Social workers are involved in a variety of settings, and with a variety of people. Social workers should therefore be emotionally mature, objective, and sensitive to people and their problems. In this regard, social workers should be self-motivating agents of social change. They must be able to handle responsibility, work independently, and maintain good working relationships with clients and coworkers. Volunteer or paid jobs as a social work aide can help people test their interest in this field. A social worker should be able to:

- (a) Understand the range of issues which make up the social welfare field
- (b) Direct intervention with individuals, families, groups or community services

### 1.6 Career Opportunities

At SEKU, we view sociology and anthropology as disciplines engaged in a common intellectual task. Sociology and anthropology analyze individual experiences and connect them to larger social issues. The disciplines illustrate how matters that are often perceived as “personal problems” are actually consequences of social structures-including the gender, ethnic, or racial dynamics of society. The goal of sociology and anthropology is not merely to acquire knowledge about different societies, but also to critically engage with the complexities of social life.

What unites the two disciplines in SEKU is that Sociology and Anthropology provide an academic training which is rigorous, local and global in scope. Students develop research skills along with a general intellectual preparation, which stands them in good stead for graduate work in the disciplines and/or for a broad range of professions such as law, medicine, social work or journalism.

## **BACHELOR OF ARTS (SOCIAL WORK)**

Regulations for the Degree of Bachelor of Arts (Social Work)

### **1 Admission Requirements**

- (a) A candidate must satisfy the prescribed South Eastern Kenya University requirements.
- (b) Subject to regulation 1 above, a candidate for admission to the Faculty of Arts (hereinafter referred to as “the Faculty”) must have any of the following as minimum qualifications:
  - (i) K.C.S.E. with a C+ or equivalent
  - (ii) K.C.S.E. with a C plain or equivalent (Plus a Diploma or equivalent, K.C.E. Div. II or equivalent) from a recognized post-secondary institution.
  - (iii) E.A.C.E. Div. II or equivalent
  - (iv) K.A.C.E. or E.A.A.C.E. certificate with two principal passes or equivalent.
  - (v) A degree from a recognized University or equivalent.

### **2 Registration Requirements**

- (a) A candidate shall be allowed to register only in those course units and their combinations approved by the Faculty. Any modification of such combination(s) shall be allowed only after obtaining approval of the School, provided such modification is done within the first two weeks of the semester.
- (b) A candidate must also satisfy requirements of the department(s) in which he/she wishes to register.
- (c) Continuing students must register for course units before the first two weeks of the semester.

### **3 Duration Of Degree Programme**

- (a) The minimum period required for a candidate to study and qualify for the award of the degree is seven (7) semesters. The maximum period allowed is sixteen (16) semesters, assuming two (2) semesters per academic year or twenty four (24) semesters, assuming three (3) semesters per academic year.
- (b) There shall be three (3) semesters in each academic year. The third semester shall be

optional. A candidate wishing to complete the degree programme within seven (7) semesters may utilize the optional semester. But the candidate must consult the head(s) of relevant department(s) for the choice of appropriate course unit(s) and obtain approval from the Dean to register for the optional semester.

#### 4 Degree Options and Loading

- (c) A candidate for a B.A. degree shall be required to register, study, sit examinations and pass in at least 44 course units, taken throughout his/her period of study. These units shall include Faculty-based Common Courses (CCCs) and prescribed Common Undergraduate Courses (CUC).
- (d) Subject to Regulations 3 and 8 above, the minimum 44 course units in the B.A. degree programme shall be offered along the following four options:

##### Option One: Two Majors:

18 units from the first major discipline  
18 units from the second major discipline  
4 level I units from a third discipline  
\*4 units from the CCC, drawn from disciplines other than the three (3) above, and/or CUC .

**TOTAL = 44**

##### Option Two: One Major (Specialization)

32 units from the major discipline  
4 level I units from a second discipline  
4 level I from a third discipline  
\*4 units from the CCC, Drawn from disciplines other than the three (3) above, and/or CUC.

**TOTAL = 44**

##### Option Three: One Major and One Minor:

24 units from the major discipline 12 units from the minor discipline  
4 level I units from a third discipline  
\*4 units from the CCC, drawn from disciplines other than the three (3) above, and/or CUC.

**TOTAL = 44**

##### Option Four: One Major Two Minors:

18 units from the major discipline  
11 units from the first minor discipline  
11 units from the second minor discipline  
\*4 units from the CCC, drawn from discipline other than the three (3) above, and/or CUC.

**TOTAL = 44**

*\* The designated courses shall belong to the same pool as the University Common Undergraduate Courses. Each department shall contribute a course to the pool of Designated Common Courses (CCCs).*

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- (e) A candidate shall choose only ONE of these four options. Before choosing an option, a candidate shall, first, take and pass twelve (12) units from level I, drawn equally from any three disciplines in the Faculty. These units shall be included in the minimum number of units required for the chosen option. A candidate choosing option Two shall be required to have a mean grade of B PLAIN or higher in Level I in the discipline in which he or she wishes to specialize, and to meet any additional Departmental/Programme requirements.
- (f) Should a candidate at any level wish to change his/her majors(s)/Minors, he/she shall be required to take all courses prescribed at all levels for the new major(s)/Minor(s).
- (g) A candidate who does not pass all twelve units in Level I shall be allowed to carry up to FIVE incomplete or fail grades (Grade E) to Level II, provided that the aggregate grade for all the twelve course units or Level I (including any available marks in units with incomplete grade) shall be 40% or better. Such a candidate shall nevertheless be required to pass in all incomplete or failed Level I courses before graduation subject to regulation 30 (ii and iii) below.
- (h) A candidate who scores an aggregate grade of less than 40% in all twelve units in Level I shall be required to retake or resit and pass, subject to regulation 30 (ii and iii) below, such units as shall raise the aggregate to 40% or better, so as to enable him/her to proceed to level II.
- (i) No candidate shall be allowed to specialize in a discipline, programme or Department in which he/she has obtained a fail grade in Levels I at first attempt.
- (j) A candidate with one or more fail grades in Level I shall have the option of dropping the programme or Department concerned and choosing another one, instead of resitting or retaking the course unit(s) in which he/she obtained a fail grade.
- (k) Subject to Regulation 9 above, enrolment for other courses outside and within the Faculty, and at any level, shall be allowed provided it is done in consultation with relevant departments(s) and with the approval of the Deans concerned; provided also that the contents of the units enrolled for do not overlap.
- (l) Selection of units for major and minor disciplines must comply with the departmental requirements.

## 2 Semester Loading

- (a) Each semester shall last a period of not more than fifteen (15) weeks. Subject to regulations 6 and 9 above, students shall take and/or retake a minimum of two (2) and a maximum of seven (7) course units per semester. However, in the final semester a student shall be allowed to take or retake only one unit if that shall be sufficient to complete the minimum number of units required for the award of the degree.
- (b) In deciding what number of units to take within the given limits, a student shall be allowed to take the number of units s/he can handle comfortably, as overloading oneself might lead to poor performance.
- (c) All candidates for the Bachelor of Arts degree shall be required to attend all scheduled lectures and tutorials for which they are registered.
- (d) All courses shall be structured as units, and a course unit shall be completed in 45 lecture-hour equivalents. For this purpose, a one-hour lecture shall be equivalent to two one-hour tutorials and one three-hour practical session; or such combination of these as may be approved by the Faculty Board.

## 3 Transfer of Credits and Exemptions

- (a) A candidate from a recognized University, or any other equivalent institution, wishing to transfer to the B.A. programme at the South Eastern Kenya University shall be allowed to transfer credits from his/her University if those credits are deemed relevant. A South Eastern Kenya University student who obtains a credit or credits from a recognized university shall also be allowed to transfer those credits to the South Eastern Kenya University. The transferred credits shall not be more than a third (1/3) of the total prescribed credits required for the award of the B.A. degree.
- (b) Where a candidate wishes to be exempted from any course unit, he/she shall follow the procedure set out below:-
  - (a) The candidate shall send a formal application for exemption to the Academic Registrar, justifying his/her request and attaching evidence of the credentials, which would support such a request.
  - (b) The candidate shall undertake to submit himself/herself to an exemption examination set and administered by the Faculty of Arts, and approved by Senate. In any such examination the pass mark shall be 50%.

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- (c) A candidate who has to take an exemption examination shall be required to pay to the University an exemption fee as may be decided by the Faculty.
- (c) An exemption examination shall be assessed within three weeks of its taking place, and the Faculty Board shall make its recommendations to the Senate. The Academic Registrar shall communicate to the candidate the Senate's decision.
- (d) The Faculty may, for reasons of exceptional academic merit, recommend to Senate the exemption of an applicant from a core course or an elective course without being subjected to an exemption examination.
- (e) Regulation 9 above notwithstanding, and subject to the recommendation of the department(s) concerned, and approval of the faculty, any person qualified to attend lectures at the South Eastern Kenya University at any given level may register for, attend lectures and be examined in one or more course units of his/her choice whenever these are taught in the parallel programme, provided that he/she shall apply through the official channels, and pay the stipulated fees for the selected course unit(s) as well as other specified charges. At the end of the semester or academic

year the student shall receive an official university transcript certifying his/her performance in the course unit(s) concerned.

### **4 Course Evaluation by Students**

- (a) At the end of each semester, an appropriate time shall be set aside for students registered in each taught course unit to anonymously evaluate the course and the lecturer, using a questionnaire developed by the Faculty office in consultation with the departments.
- (b) The Evaluation Questionnaire shall cover the following topics as a minimum: Course title; Quality of course content (in terms of breadth, depth and integration of sources and themes); References (how current or relevant?); Delivery by lecturer (well informed, clear and interesting); Match between course description and content as actually delivered, and quality of course outline; Availability of member of staff for consultations between lectures; Availability and currency of reading materials; Quality of preparation by lecturer; Quality of class discussions; Lecturer's punctuality and/or absences.
- (c) The Evaluation Questionnaire shall be administered to students in every taught course by a member of staff, or student attending that



course, appointed by the Faculty, provided that such a member shall not have taught the course during the semester in question. The member of staff or student shall seal the completed questionnaires in a prescribed envelope in the presence of the students, and shall immediately submit the said envelope to the School office, which shall arrange for the expeditious processing of the answers.

- (d) Students may otherwise register their views regarding the quality of teaching by any lecturer to the Chair of the Department concerned, or the Dean, at any time during the semester.

## 5 Examination Regulations

- (a) Except as hereunder specified, common university examination regulations shall apply.
- (b) There shall be University examinations at the end of each semester. All course units shall be examined and written examinations processed at the end of the semester in which they are taken.
- (c) A candidate shall NOT be permitted to sit an examination unless he/she has attended prescribed courses of study in accordance with University regulations and to the satisfaction of the departments or programmes concerned, as well as the Faculty.

- (d) Unless otherwise specified, end of semester examinations shall consist of a two-hour paper for each course unit taken in the semester.
- (e) Assessment of each candidate's performance in the course unit taken shall be through Continuous Assessment Tests (CATs) and end of semester examinations based on percentage grades. CAT assessment(s) shall constitute 30% of the total marks in a given unit and shall consist of an average of at least two (2) assignments while end of semester examinations shall constitute 70% of the unit examined. Every department shall set procedures for CAT(s) assessments.
- (f) Each course unit shall be graded out of an examination of 100 marks, and the pass mark shall be 40% for each unit. These marks shall be translated into letter grades as follows:-
- |               |         |
|---------------|---------|
| 70-100%       | A       |
| 60-69%        | B       |
| 50-59%        | C       |
| 40-49%        | D       |
| 39% and below | E) FAIL |
- (g) An external examiner shall be invited at least once in each academic year to moderate all end of semester examinations. Between the visits of the external examiner, each department shall appoint

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one or more competent person(s) to internally moderate end of semester examinations in order to facilitate the convening of the Faculty Board of Examiners and the subsequent issuance of provisional results to candidates. The appointment of internal moderators shall be subject to approval by the University.

- (h) Provisional examination results shall be made available to students upon request following the Faculty Board of Examiners meeting at which those results are approved. The requesting candidate shall be issued with a provisional transcript showing letter grades for each course unit examined.
- (i) A candidate who fails any end-of-semester examination paper on the first attempt shall be allowed two more attempts to sit and pass that paper when it is next offered. A candidate who fails a paper may, in consultation with the department and with approval by the faculty, substitute that course unit with another unit of the same level from the same department.
- (j) Subject to regulation (h) above,
  - (i) A candidate who has up to but NOT MORE THAN FIVE failed grades at any one time shall be allowed to proceed to

the next semester and resit the failed units when they are next offered. However, if the failed units happen to be prerequisites for other advanced courses, the candidate must first pass them before he/she can be allowed to register in the advanced units that require the prerequisites. When resat, a failed unit shall carry a maximum of 40% of the total marks and coursework marks shall not be considered.

- (ii) A candidate who fails in a course unit at whatever level shall be required to resit the same and shall score a maximum of 40% only of the total marks in that course. A candidate required to resit a course unit may opt to retake it (register, attend lectures, submit coursework and sit final examination again when next offered). Such a course shall be graded out of 100 marks.
  - (iii) In all retakes or resits, marks obtained in the more recent examination(s) shall prevail; and transcripts shall identify all course units with marks obtained after a resit or retake.
- (k) A candidate shall NOT be allowed to carry forward six or more failed grades at any one time.

- (l) A candidate who has six or more failed grades after three unsuccessful attempts at each of the units concerned shall be discontinued.

## 6 Award of Degree

- (a) In order to qualify for the award of the B.A. degree, a candidate must have registered for, attended lectures, sat the examinations and passed in at least 44 units taken throughout his/her period of study for the degree. Where a candidate takes more than 44 units, only the best 44 shall be considered in the award of the degree, provided that these units satisfy all departmental and Faculty requirements. Of these 44 course units at least nine (9) shall be taken from each of levels II, III and IV.
- (b) A candidate may register and pay to audit for courses during his/her degree programme. The audited courses must be indicated as such during registration, and only one audited course shall be allowed per semester. Grades for successfully audited courses, taken from outside the prescribed ones, shall be included in the candidate's transcript and shall be identified by means of the symbol (AS) in parenthesis, where

(AS) means Audited Successfully.

- (c) The audited courses shall not be considered when calculating the cumulative average score for the award of the B.A. degree, since they fall outside the prescribed units required for the degree.
- (d) A candidate who satisfies the examiners shall be recommended for the award of the degree of Bachelor of Arts. He/she shall be placed in one of the following four classes according to his/her performance:
- (i) First Class
  - (ii) Second Class Hons. Upper Division
  - (iii) Second Class Hons. Lower Division
  - (iv) Pass

## 7. Course Outline

### Year I

CSO	101 Introduction to Sociology
CSO	102 Introduction to Anthropology
CSO	103 Introduction to Comparative Sociology
CSO	104 The Socialization Process
CSW	100 Introduction to Principles and methods of Social Work

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### Year 2

- CSO 210 Sociological Theory I
- CSO 202 Methods of Social Investigation (Quantitative Research Methods)
- CSO 203 Social Structure of East African Societies
- CSO 204 Social Statistics
- CSO 205 Sociology of the Family
- CSO 206 Rural Sociology
- CSO 207 Sociology of Education
- CSO 208 Social Stratification, Class and Mobility
- CSO 209 Sociology of Deviant behaviour
- CSO 210 Social Psychology
- CSW 200 Human Growth and Development
- CSW 204 Social Work Methods
- CSW 208 Professional Theory and Practice

### Year 3

- CSO 301 Sociology Theory II
- CSO 302 Qualitative Research Methods
- CSO 303 Social Change
- CSO 304 Formal Organization
- CSO 305 Sociology of Religion
- CSO 306 Urban Sociology
- CSO 307 Criminology
- CSO 308 Social Statistics II
- CSO 309 Political Sociology
- CSO 310 Demography
- CSO 311 Sociology of Science
- CSO 312 Medical Sociology
- CSO 313 Community Development and Social Welfare
- CSO 314 Sociology of Work and Industry
- CSO 317 Statistics II
- CSW 300 Social Policy and Administration
- CSW 301 Environment and Social Development
- CSW 302 Family and Child Welfare

- CSW 303 Social Work Theory and Practice II
  - CSW 304 Social Change and Development
  - CSW 305 Personnel Management in Human Services Agencies
  - CSW 306 Evaluative Research
  - CSW 307 Human Relations
  - CSW 308 Social Psychology
  - CSW 309 Economics for Social Development
  - CSW 310 Community Organization and Action
  - CSW 311 Social Work and Social Ethics
  - CSW 312 Deviation and Social Rehabilitation I
  - CSW 313 Statistics
- Plus 8 weeks field practice at the end of the year

### Year 4

- CSW 400 Women in Development
  - CSW 401 Adolescence
  - CSW 402 Population and Development
  - CSW 403 Dissertation or Project Paper
  - CSW 404 urbanization
  - CSW 405 Social Work: Theory and Practice
  - CSW 406 Counseling
  - CSW 407 Formal Organizational Behaviour
  - CSW 408 Health Community
  - CSW 409 Gerontology
  - CSW 410 Introduction to Psychiatry
  - CSW 411 Social Law
  - SCW 412 Social Psychiatry
  - CSW 413 Social Development and Rehabilitation II
- Plus four weeks field practice in between semesters

## DIPLOMA PROGRAMMES

### DIPLOMA IN SOCIAL WORK AND SOCIAL DEVELOPMENT

Regulations and Syllabus for the Diploma in Social work and Social Development

#### Objectives

Build upon practical experiences of Para-professional field staff of welfare and development agencies and CBOs and enhance their people-orientation and know-how in participatory intervention strategies and techniques that facilitate attainment of development and welfare goals and objectives.

Equip practicing Para-professional with technical skills, know-how and values appropriate to professional social work practice in order for the workers to be able to probe and understand fully the nature of human needs, potentialities of services and effective intervention. In addition, the program hopes to prepare the workers to confront the complex and changing personal and social problems.

#### Entry Requirements

A candidate must satisfy the prescribed University requirements. In addition, the minimum qualifications for admission to an Ordinary Diploma programme are:

KCSE certificate with a minimum aggregate of C (plain), or equivalent.

'O' level certificate with a minimum grade of Division II, or equivalent; or Division III plus evidence of relevant academic or professional training.

'A' level qualification with a minimum of one (1) principal pass, or equivalent.

Individual departments within the School of Humanities and Social Sciences may set additional requirements specific to their disciplinary mandates, and these shall be subject to Senate approval.

Subject to approval by the School of Humanities and Social Sciences and the department(s) concerned, a candidate enrolled in **any** ordinary diploma programme, or equivalent, at the University or any other University recognized by the South Eastern Kenya University Senate may register for, attend lectures and be examined in any one or more course units in **any** equivalent programme of his/her choice within the School of Humanities and Social Sciences.

Registration for courses by continuing students shall take place before the end of the preceding semester. Where these regulations are silent on any aspect of

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University admission, existing University regulations shall apply.

### Course Structure and Duration

Each Ordinary Diploma candidate shall be required to successfully take at least eight (8) approved course units as well as a project paper where specified. Individual departments shall determine how the eight course units shall be apportioned in terms of core, specialization, and elective clusters.

Each department may identify core, theory and/or methods courses which all Ordinary Diploma candidates within the department shall take, provided that these shall not exceed two (2) course units. Each candidate shall be entitled to take at least one elective course.

The Ordinary Diploma programme shall consist of lectures, lecture-discussions, class presentations, seminars, demonstrations, fieldwork, student-teacher consultations, supervised independent study, coursework, or any combination of these, as well as written final examinations, and shall run for a minimum of two (2) semesters of fifteen weeks each and a maximum of eight (8) semesters. However, some departments or programmes may, with prior Senate approval, require a minimum of three semesters, with

the third semester being devoted to additional taught courses, semester-long laboratory work, field work, field placement, or project paper.

Except where a semester-long project is required, the minimum load in each semester shall be two (2) course units; while the maximum load shall be four (4) course units per semester. A semester-long project consisting of laboratory/field work or project paper shall be treated as the equivalent of two course units.

Where a semester-long project paper is not required, one course unit out of the minimum of eight required to graduate may be designed to give candidates the opportunity to develop skills in independent research work and project report-writing.

Candidates shall be free to satisfy the requirements for elective courses in any department within the School of Humanities and Social Sciences or any other School or equivalent, subject to the prior approval of the department(s) and Schools concerned.

Students shall undergo continuous assessment in each taught course in each semester. Such assessment shall take the form of written tests, term paper, oral presentations, field assignment, or any combination of these.

### Course Evaluation by Students

At the end of each semester, during the last class, a time shall be set aside for students registered in each taught course unit to anonymously evaluate the course and lecturer using a questionnaire developed by the School of Humanities and Social Sciences office in consultation with the departments. Students may otherwise register their views regarding the quality of teaching by any lecturer to the Chair of the Department concerned, or the Dean, at any time during the semester.

### Examinations Regulations

Final University examinations shall be given at the end of every semester in each taught course unit; and each final examination shall be in the form of a two-hour written examination paper:

Where a semester-long project paper is required, work on the project paper shall be started and completed during the final semester of the ordinary diploma programme.

To be awarded the ordinary diploma, a candidate must pass all specialized, core and elective course units taken, as well as the Project Paper where applicable.

All examinations shall be governed by the following rules:

- (i) The written final examination shall account for seventy percent (70%) of all the marks in each course unit, while continuous assessment tests shall account for thirty percent (30%). The Project Paper or "Independent Research" paper shall be marked over 100, as there shall be no continuous assessment test associated with them.
  - (ii) A candidate who fails in any examination in any unit may re-sit or re-take that examination when it is next given during scheduled end-of-semester examinations, provided that he/she shall pay such fees as may be prescribed by the Faculty and the University.
  - (iii) A candidate who fails in any examination in an elective course unit may, at his/her own discretion, after payment of the request fees register in an alternative elective course unit.
  - (iv) In the event that a candidate re-sits the final examination in any course unit, the continuous coursework marks pertaining to that course unit shall not be considered in calculating the final grade.
- A student who, for good cause supported with authenticated documentary evidence, fails to sit or complete an end-of-semester may be allowed to sit for the paper(s) concerned when the examination is next scheduled, without paying additional fees.

## School of Humanities and Social Sciences

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### 6. Course Titles and Contents

#### Core Courses

CSO 001	Introduction to Sociology and Anthropology
CSO 002	Introduction to Social Psychology and Socialization
CSW 004/CSO 021	Introduction to Community Development
CSW 005/CSO 022	Basic Concepts in Community Organization and Action
CSO 023/CSW 007	Introduction to Program Planning and Impact Assessment
CSO 024	Participatory Research Methods in Rural Development Practice
CSW 006/CSO 025	Field Assignment and Research Report
CSW 001	Introduction to Methods and Principles of Social Work
CSW 002	Integrated Social Work Practice
CSW 003	Counselling: Theory and Practice

#### Electives

CSW 008	Administration of Social Welfare Organizations
CSO 026	Main Concepts and Perspectives in Social Change and Development
CSO 027	Introduction to Rural and urban Communities
CSO 028	Introduction to Attitudes and Behaviour Change
CSO 029	Introduction to Small and medium Enterprise (SMEs) Development
CSW 009	Family Social Work
CSW 010	Social Work in Industry
CSW 011	Criminology and Correctional Social Work
CSW 012	Medical and Psychiatric Social Work
CSW 013/CSO 030	Women Development
CSO 015	Human Services



# **School of Education**

### **BACHELOR OF EDUCATION (ARTS)**

Regulations and syllabus for the Degree of Bachelor of Education (Arts)

#### **1.0 Introduction**

The School of Education has revised its curriculum for the B.Ed. (Arts) programme to bring in line with the 2005 – 2010 Strategic Plan of the School and that of the South Eastern Kenya University. The curriculum has been rationalized and revised in accordance with the policy requirements of the Ministry of Education for teacher education as explained in Session Paper No. 1 of 2005. In addition the curriculum has been updated to meet the needs of the various stakeholders.

The Bachelor of Education (Arts) Degree Programme is intended to prepare teachers for secondary schools. However, it is also suitable for people who are involved in educational management and training in the tertiary institutions both in the public and private sectors. In addition some subject combinations provide competency in Economic Planning, Business and Financial Management as well as Accounting Practices. Students who go through the programme can also become trainers in tertiary institutions as well as institutions of higher learning

#### **1.1 Objectives**

By the end of the programme, learners should be able to:-

- (a) Acquire knowledge that is relevant to secondary school, teaching, supervision and management
- (b) Acquire skills and other competencies that facilitate effective teaching and learning
- (c) Exhibit attitudes that are appropriate to the teaching profession
- (d) Explore issues and trends in the development of secondary and teacher education
- (e) Design and carry out research in education related fields
- (f) Acquire knowledge, skills and attitudes that will enable them to make a positive contribution to the education sector
- (g) Acquire skills, knowledge and attitudes to improve living standards for socio-economic development.
- (h) Develop competencies that will enable them to be productive in their chosen careers.
- (i) Acquire knowledge, skills and attitudes that will enable them to become competent trainers at tertiary institutions as well as institutions of higher learning in the public and private sectors
- (j) Gain a proper foundation that will enable them to pursue further studies in education related disciplines.

## 2.0 Entry Requirements

The common regulations for the Bachelor's degree in the South Eastern Kenya University shall be applicable.

The following shall be admissible in the Bachelor of Educations (Arts) Programme

- (a) Holders of Kenya Certificate of Secondary Education (KCSE) with a minimum aggregate performance of C+ or equivalent
- (b) Holders of a Diploma from South Eastern Kenya University or other recognized institutions and an aggregate of C in KCSE or equivalent.
- (c) Holders of Mean Grade C- or equivalent plus a certificate and Diploma from a recognized institution.
- (d) Holders of 'O' Level Division II or equivalent plus a Diploma from a recognized institution.
- (e) Holders of 'O' Level Division III or equivalent plus a certificate and Diploma from a recognized institution.
- (f) Holders of 'O' Level Division III or equivalent plus a three year Diploma from a recognized secondary institution.
- (g) Holders of A level with two Principal passes or equivalent in relevant subjects.
- (h) Holders of a PI certificate from a two-year post-secondary training institution recognized by Senate
  - (i) Holders of Higher National Diploma in relevant fields and should have attained an aggregate of C in KCSE.
  - (j) Holders of a Degree certificate from a recognized University

## 3.0 Registration

- (a) A candidate admitted into this programme shall be registered by the School of Education.
- (b) Candidates registered in the School of Education must meet the minimum general admission requirements of the South Eastern Kenya University
- (c) Candidates registered in the School of Education must have passed in English in KCSE or equivalent examinations.
- (d) A candidate may, upon giving acceptable reasons, withdraw temporarily from the programme
- (e) Mode of Study
  - (i) Candidates for the Bachelor of Education (Arts) degree in the School of Education shall take their course in either of two modules: Module I and Module 2.
  - (ii) For candidates taking their course through either of the Modules, the common regulations for the Bachelor's degree in the South Eastern Kenya University shall be applicable.
  - (iii) Both Modules shall be taught using the face to face mode.

**4.0 Course Structure and Duration**

- (a) A candidate registering for the Bachelor of Education (Arts) degree shall take all the courses as prescribed by the School of Education.
  - (i) The course leading to the award of the Bachelor of Education (Arts) shall extend over a period of not exceeding eight (8) semesters of fifteen (15) weeks each
  - (ii) A candidate registering for the Bachelor of Education (Arts) degree shall be required to combine a major and minor teaching subject in the service faculties. Such a combination shall be subject to approval by the Board of the School of Education.
  - (iii) Courses shall be taught and evaluated in terms of units. For this purpose, a one hour lecture is equivalent to two tutorial hours or three practical courses. A course unit is covered over a period of forty-five (45) lecture hours.
  - (iv) In order to qualify for the award of the Bachelor of Education (Arts) degree a candidate shall have completed the prescribed course of study for a period of not less than four (4) academic years in face-to-face mode.
- (b) Candidates for the Bachelor of Education (Arts) degree shall take a minimum of 55 units for the four (4) years of study distributed as follows:-

Year	General Studies	Education	Teaching Major	Subjects Minor	Total
1st	3	5	4	4	16
2nd	0	5	4	4	13
3rd	0	7	6	2	15
4th	0	3	6	2	11
Total	3	20	20	12	55

- (c) The selection of major and minor teaching subjects shall be made at the beginning of the third year.
- (d) In all cases, registration for a particular teaching subject and course unit shall meet departmental requirements.
- (e) Candidates shall register for Education courses in the following departments:-
  - (i) Education Communication and Technology
  - (ii) Educational Administration and Planning
  - (iii) Educational Foundations
  - (iv) Psychology
- (f) Candidates shall register for any two teaching subjects listed below:-
  - (i) Business Studies (integrated)
  - (ii) English (integrated)
  - (iii) Geography
  - (iv) History and Government
  - (v) Kiswahili

- (vi) French
- (vii) Mathematics
- (viii) Religious Studies

- (xviii) Religious Studies and History/Government
- (xix) Mathematics and Business Studies
- (xx) Mathematics and Geography
- (xxi) French and Linguistics/Kiswahili/Literature
- (xxii) Physical Education and Mathematics
- (xxiii) Physical Education and Geography

### 5.0 Subject Combinations

(a) After successful completion of the second year candidates shall select their major and minor teaching subjects from the following subject combinations:-

- (i) Business Studies and mathematics
- (ii) Business Studies and Geography
- (iii) Business Studies and History/Government
- (iv) Business Studies and Religious Studies
- (v) Business Studies and Physical Education
- (vi) Business Studies and English
- (vii) English and Kiswahili
- (viii) English and History/Government
- (ix) English and Religious Studies
- (x) English and Physical Education
- (xi) Geography and History/Government
- (xii) Geography and Religious Studies
- (xiii) Kiswahili and Geography
- (xiv) Kiswahili and History/Government
- (xv) Kiswahili and Religious Studies
- (xvi) Physical Education and Kiswahili
- (xvii) Physical Education and Religious Studies

(b) The combination of major and minor will subjects will finally be subject to approval by the Board of the School of Education. Once registered a student may change subjects within two weeks.

### 6.0 Credit Transfer and Exemptions

(a) The exemption and credit transfers shall be governed by the regulations of the South Eastern Kenya University.

(b) The criteria for admission are flexible in terms of credit transfers and exemption, depending on the applicant's qualification. The procedure for seeking credit transfer or exemption is as follows:-

- (i) A candidate shall be required to send a formal application to the Academic Registrar, using prescribed forms and attaching evidence of the credentials, which would support the request.

## School of Education

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- (ii) May be required to sit the University ordinary examinations set and administered by respective departments under the authority of the School of Education and the results approved by Senate.
- (iii) No exemption shall be allowed in professional competency courses such as Teaching Methods, Educational Technology and Teaching Practice.
- (iv) The school shall charge Exemption/Credit transfer fee approved by the School Board. Such a fee shall be subject to review over a period of time.
- (v) The course on which exemption is sought shall not exceed one-third ( $\frac{1}{3}$ ) of the total units for the relevant degree programme.

### 7.0 Examination Regulations

- (a) All units shall be examined in the semester in which they are taken. Such examinations shall comprise continuous assessment tests and end of semester examinations.
- (b) A candidate shall be allowed to sit University Examinations unless they have taken and submitted all continuous assessment tests and end of the semester examinations. All examinations shall be governed by the following rules:-
  - (i) End of semester examinations shall constitute 70% and continuous assessment tests 30% of the marks in each unit taken.
  - (ii) The pass mark in each unit shall be 40%
  - (iii) A candidate who fails to attain the pass mark on the approval of Board of Examiners and Senate shall be allowed to resit examination in those units within (3) three months of the ordinary examination. Such a candidate shall be required to resit any of the failed units for a maximum of two attempts.
  - (iv) A candidate who shall have missed to do a paper at the end of semester examinations out of good cause shall be allowed to resit that paper at the next end of semester examinations.
  - (v) A candidate who fails to attain a pass mark in seven (7) or eight (8) units taken in an ordinary examination shall on the recommendation of the Board of Examiners and approval of the Senate repeat the year.

- (vi) A candidate who fails in a unit(s) after a resit shall be required to take the same course and examinations in the subsequent semesters.
  - (vii) A candidate who fails to attain the pass mark in nine or more units taken in any year shall be discontinued.
  - (viii) A candidate who fails a prerequisite unit shall be required to pass the unit before he/she can be allowed to take the subsequent units to which the failed units form a basic preparatory course.
  - (ix) A candidate who will not have passed the prescribed 55 units in 8 academic years from the time of entering the programme shall be discontinued.
  - (x) A candidate who has repeated the third and fourth year of study shall be eligible for pass degree only.
- (c) For a student to pass teaching practice, he or she will have taught for the whole of teaching practice period.
  - (d) Teaching practice is equivalent to two units. Each of the two teaching subjects taken during teaching practice is equivalent to one unit.
  - (e) Each student on teaching practice shall be assessed a minimum of three times of each of the teaching subjects.
  - (f) Each assessment shall be marked out of 100.
  - (g) The pass mark in each unit shall be 40%.
  - (h) Teaching practice will be the responsibility of the Department of Educational and Communication and Technology.
  - (i) Candidates who pass in teaching practice units but repeat the year shall carry forward their grades in those units.
  - (j) Candidates who fail to attain pass mark in teaching practice units shall do supplementary teaching practice.
  - (k) Candidates who fail to do teaching practice on acceptable grounds shall do special teaching practice within three months after completion of their final year.

## 8.0 Regulations for Teaching Practice

- (a) Teaching practice shall be taken by all students studying for the degree of Bachelor of Education.
- (b) Candidates shall be required to do teaching practice for a period equivalent to one semester during their third year of study. The period for

### 9.0 Classification and Award of the Bachelor of Education (Arts) Degree

- (a) The Bachelor of Education (arts) Degree shall be classified on the basis of the performance of the candidates. The final award of the degree shall be passed on passing all the 55 prescribed units done throughout the four (4) years. The final award to the degree shall be based on the calculated average score of the 3rd and 4th years, and shall be classified into; first class, second (upper division), second class (Lower division) and pass as follows:

70 – 100%	First Class Honours
60 – 69%	Second Class (Upper Division)
50 – 59%	Second Class (Lower Division)
40 – 49%	Pass

- (b) A candidate who repeats the course and resits/retakes examinations in such courses in the third and fourth part of study shall not be eligible for the award of an honours degree.
- (c) In the final year of study, a mark between 35% and 39% inclusive may be deemed to be a pass if the rule of compensation is applied. Compensation may be allowed in a maximum of the equivalent

of two course units only and shall be made by taking two marks in a passed subject with a mark above 40% to make up for every failed mark. The candidate's new aggregate mark shall be calculated on the basis of the individual course given after compensation.

### 11.0 Course unit listings by Department and Academic Year for B.Ed. (Arts)

#### DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND PLANNING

##### Year 1

TAP 102	Education and Development
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##### Year 2

TAP201	Curriculum Development
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##### Year 3

TAP 302	Educational Administration
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##### Year 4

TAP 401	Educational Planning
TAP 402	Teacher Education



## DEPARTMENT OF EDUCATIONAL COMMUNICATION AND TECHNOLOGY

### Year 1

TCT 102	Instructional Methods
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### Year 2

TCT 201	Instructional Technology
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### Year 3

TCT 320	Subject Methods: English Language
TCT 321	Subject Methods: Literature
TCT 322	Subject Methods: History and Government
TCT 323	Subject Methods: Geography
TCT 324	Subject Methods: Religious Studies
TCT 327	Subject Methods: Business Studies
TCT 328	Subject Methods: Economics
TCT 329	Subject Methods: Kiswahili
TCT 330	Subject Methods: Mathematics
TCT 334	Subject Methods: French
TCT 335	Subject Methods: Integrated English
TCT 336	Subject Methods: Physical Education and sport
TCT 340/341	Subject Methods: Teaching Practice

### Year 4

TCT 402	Distance Education
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## DEPARTMENT OF EDUCATIONAL FOUNDATION

### Year 1

TFD 101	History of Education
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### Year 2

TFD 201	Philosophy of Education
TFD 301	Sociology of Education
TFD 401	Comparative and Contemporary issues in Edu.
TFD 402	Adult and Continuing Education
TFD 403	Gender Issues in Education
TFD 404	Drug dependence & Preventive Education
TFD 405	Philosophy of Teaching

## DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES

### Year 1

T G NI01	The East African Environment
TGN 102	Introduction to Physical Geography
TGN 103	Fieldwork and Research Methodology in Geography
TGN 104	Introduction to Human Geography

### Year 2

TGN 201	Geography of Africa
TGN 202	Natural Resources Management
TGN 203	The Bio-Physical Environment
TGN 204	Elements of Surveying and Cartography

## School of Education

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### Year 3

TGN 301	Map and Image Interpretation
TGN 302	Statistical Technology In Geography
TGN 303	Geomorphology
TGN 304	Agricultural Geography
TGN 305	Economic Geography
TGN 306	Population Geography
TGN 307	Arid and Semi-Arid Lands
TGN 308	Settlement Geography
TGN 309	Geography of Outer Space
TGN 310	Coastal and Marine Resources Management
TGN 311	Geography of Recreation and Tourism
TGN 312	Soil Geography
TGN 313	Selected Studies in Regional Geography
TGN 314	Environmental Planning and Management

### Year 4

TGN 401	Computer Techniques in Geography
TGN 402	Regional Development and Planning

### Elective

TGN 432	Climatology
TGN 404	Biogeography
TGN 405	Industrial Geography
TGN 406	Hydrology
TGN 407	Transport Geography
TGN 408	Demography
TGN 409	Medical Geography
TGN 410	Political Geography
TGN 411	Remote Sensing

TGN 412	Geographic Information Systems
TGN 413	Dissertation
TGN 414	Urban Geography

## DEPARTMENT OF HISTORY AND GOVERNMENT

The department offers the following courses:

### Year 1

#### Semester 1

THG 101	Themes in African history upto 1885
TKG 101	Kenya Government and Politics

#### Semester 2

THG 102	Themes in African History upto 1885
TKG 102	Kenya constitution

### Year 2

#### Semester 1

THG 201	Themes in East Africa History
TKG 201	The National Bureaucracy of Kenya

#### Semester 2

THG 202	Topics in Kenyan History to the Present
TKG 202	Kenya's Foreign Relations

### Year 3

THG 301	Selected Topics in World History
TKG 301	International Relations

### Electives

THG 302	History of Central Africa
THG 303	History of Southern Africa
THG 304	Topics in North African History
THG 305	History of Imperial Russia
THG 306	Transformation of Europe 1789 – 1971
THG 307	History of U.S.A
THG 308	History of East Asia
THG 309	History and Theory in Africa
THG 310	History of the Middle East
THG 311	Sources of African History
TKG 302	Africa in International Relations
TKG 303	Government and Politics in E. Africa
TKG 304	Pan-Africanism and OAU
TKG 305	Introduction to Public Administration

### Year 4

THG 401	Comparative Studies in Imperialism and Nationalism
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### Electives

THG 402	African Economic History
THG 403	History of Science & Technology
THG 404	History of Political Ideas
THG 405	History of West Africa
THG 407	The Transformation of Indian Sub Continent
THG 408	Africa and the Black Diaspora
THG 409	Aspects of Latin American History

THG 410	Methods of Historical Research
THG 411	Transformation of Europe since 1971
THG 412	Research Project6
TKG 401	Public Administration & Development in Africa
TKG 402	International Organizations
TKG 403	Government and Politics in Africa
TKG 404	Politics of Developing Countries
TKG 405	Comparative Politics

## DEPARTMENT OF LINGUISTICS AND LANGUAGES – KISWAHILI

### Year 1

TKS 101	Communications Skills in Kiswahili
TKS 103	Early History of Kiswahili
TKS 102	Introduction to Linguistics in Kiswahili
TKS 104	Modern Development of Kiswahili

### Year 2

TKS 201	Kiswahili Stylistics & Literacy Devices
TKS 202	Gen. phonetics & Kiswahili Phonology
TKS 203	Kiswahili Morphology & Morphonology
TKS 204	Introduction to Kiswahili Literature

### Year 3

TKS 301	Theory of Syntax in Kiswahili
TKS 303	Literary Theory and Analysis
TKS 302	Kiswahili Syntax
TKS 304	Introduction to Kiswahili

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### Electives

TKS 305	Translate, Proof-reading & Edit Skills
TKS 307	Advanced communication Skills in Kiswahili
TKS 309	Kiswahili Resource Materials Analysis
TKS 306	Kiswahili Dialectology
TKS 308	Discourse and Discourse Analysis
TKS 310	Creative Writing in Kiswahili
TKS 312	Media Writing Skills

### Electives

TKS 401	Research Methods
TKS 403	Oral Literature in Kiswahili
TKS 405	Sociolinguistics in Kiswahili
TKS 407	Comparative Literature in Kiswahili
TKS 409	Semantic, Lexicology and Lexicography
TKS 411	Kiswahili Children's Literature
TKS 402	Pre-20th Century Kiswahili Literature
TKS 404	History & Comparative Studies in Kiswahili.
TKS 406	Text: Structure and Analysis
TKS 408	Psycholinguistics in Kiswahili
TKS 410	Error Analysis in Kiswahili
TKS 412	Kiswahili Research Project

## DEPARTMENT OF PHILOSOPHY AND RELIGIOUS STUDIES

### Semester 1

TPR 101	Introduction to Philosophy
TPR 103	Comparative Religion

### Semester 2

TPR 102	Introduction to Logic and Critical thinking
TPR 104	Phenomenology of Religion

### Year 2

### Semester 1

TPR 201	Philosophy of Religion
TPR 203	Africa Religion

### Semester 2

TPR 202	Ethics
TPR 204	Religion, Technology & Environmental

### Year 3

### Semester 1

#### Electives

TPR 301	Origin and Development of Christianity
TPR 303	Origin and Development of Islam
TPR 305	Philosophy of law
TPR 307	Old Testament Texts
TPR 309	African Philosophy
TPR 311	Religious Movement in East Africa
TPR 313	Islamic Reform Movements
TPR 315	Quran and Hadith

### Semester 2

TPR 304	Epistemology
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#### Electives

TPR 302	Research Methodology
TPR 306	New Testament Texts
TPR 308	Theology of the Bible
TPR 310	Philosophy of Science
TPR 312	Islamic Theology and Principles
TPR 314	Comparative Ethics
TPR 316	Leadership

**Year 4**  
**Semester 1**

TPR 401	African Social Political Philosophy
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**Electives**

TPR 403	Metaphysics
TPR 405	Existentialism
TPR 407	Christianity in East Africa
TPR 409	Islam in Africa
TPR 411	Quranic Arabic
TPR 413	Christian Theology in East Africa

**Semester 2**

TPR 402	Christian Response to Contemporary Issues
TPR 404	Research Project
TPR 406	Professional Ethics
TPR 408	Contemporary Philosophy
TPR 410	Islamic Response to Contemporary Issues
TPR 412	Philosophy of History

**DEPARTMENT OF PSYCHOLOGY**

**Year 1**

TPS 101	Introduction to Psychology
TPS 102	Psychology of Human Development

**Year 2**

TPS 102	Tests and Measurements
TPS 102	Psychology of Learning and Teaching

**Year 3**

TPS 302	Guidance and Counseling
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**Year 4**

TPS 402	Introduction to Special Education
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**BACHELOR OF EDUCATION  
(SCIENCE)**

**1 Introduction**

A candidate eligible for admission into B.Ed. (Science) must have:

- (a) Kenyan Certificate of Secondary Education (KCSE) with a minimum mean grade of C+ in the science subjects to be pursued; or
- (b) Diploma in Education or its equivalent in the science subjects; or
- (c) Trained Primary school teacher PI grade and KCSE with minimum of grade C (Plain); or
- (d) Degree in any science-related discipline other than education

**2 Entry Requirements**

Applicants to the programme can either be admitted through the Public Universities Joint Admission Board (JAB) or as privately sponsored students. Only

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students admitted through JAB do receive government sponsorship.

### 3 Course Duration

The course shall extend over a period of four years and will not exceed eight consecutive academic years and shall be offered in form of units.

### 4 Examination Regulations

All examinations shall be governed by the following rules:-

- (a) All units shall be examined in the semester in which they are taken. Such examinations shall comprise continuous assessment tests and end of semester examinations.
- (b) A candidate shall not be allowed to sit University examinations in a unit if he/she has missed  $\frac{1}{3}$  or more of the required course attendance for that unit.
- (c) Each unit shall be marked out of 100 marks. The end of semester examinations shall constitute 70% while continuous assessment tests shall constitute 30%.

(d) Marks shall be translated into letter grades as follows:-

70-100%	A
60-69%	B
50-59%	C
40-49%	D
39% and below	E) FAIL

(e) A candidate who, out of good cause, fails to sit the end of semester examination shall on the recommendation of the School of Education Board of Examiners and approval by Senate be given Special examinations. Special examinations shall be done within three months from the date of the ordinary examinations on a date approved by Senate.

(f) A candidate, who fails to attain a pass mark of 40% in any unit taken during the ordinary examinations, shall be allowed to take supplementary examinations in such failed units provided the failed units shall not exceed six units prescribed in a given academic year. The supplementary examinations shall be done within three months from the date of the ordinary examination on a date approved by Senate.

- (g) A supplementary examination is marked out of 100% but the grade awarded for a passed supplementary is D irrespective of the total marks scored above 40%.
- (h) A candidate who fails a unit after a supplementary will not advance to the next level of study but shall retake the course by attending classes, doing continuous assessment tests and the final university examinations.
- (i) A candidate who fails to attain the pass mark in seven or eight units taken in an ordinary examination shall on the recommendation of the School Board of Examiners and approval by Senate repeat the year and retake the units failed.
- (j) A candidate who fails to attain the pass mark in nine or more units taken in any year shall be discontinued.
- (a) A student studying for the degree of Bachelor of Education shall do teaching practice.
- (b) A candidate shall be required to do teaching practice for a period of equivalent to one semester after passing all the prerequisite units. The period of teaching practice shall coincide with a full school term.
- (c) For a candidate to pass teaching practice, he/she shall have taught for the whole teaching practice period.
- (d) Teaching practice is equivalent to two course units.
- (e) Each candidate on teaching practice shall be assessed a minimum of three times in each of the teaching subjects. Each assessment shall be marked out of 100%. The final grade is the mean of assessments done for each teaching subject.
- (f) The pass mark in each unit shall be 40%.

## 5 Teaching Practice Regulations

Teaching practice shall be governed by regulations for the degree of the Bachelor of Education Programmes as follows:-

## School of Education

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- (g) A candidate who fails to attain a pass mark in teaching practice shall be allowed to repeat the exercise upto to a maximum of two times.
- (h) A candidate who fails to do teaching practice on acceptable grounds shall be required to do special teaching practice within one year.

### 6 Classification and Award of the Bachelor of Education

The award of the degree shall be based on an average score derived from the candidate's score in third and fourth year course units. The degree shall be classified into either First Class Honours, Second Class Honours (Upper Division), Second Class Honours (Lower Division), and a pass as follows:-

70 – 100%	First Class Honours
60 – 69%	second class (Upper Division)
50 – 59%	second class (Lower Division)
40 – 49%	Pass

### 7 Subject Combinations

For a candidate to qualify to be awarded a B.Ed. (Science) degree, he/she is expected to register for the education units (compulsory) and for two other

science subjects. The Education course units and the various combinations of the two science subjects and their corresponding requirements are described herein, the registration for the appropriate course units must take place within the first two weeks of the academic year. No change of course units must take place within the first two weeks of the academic year. No change of course unit registration will be allowed after the 5th week of a semester.

### 8 Education Courses Listing by Department, Level and Duration

#### DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND PLANNING

##### Year 1

TAP 102	Education and Development
TAP 201	Curriculum Development

##### Year 3

TAP 302	Educational Administration
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##### Year 4

TAP 401	Educational Planning
TAP 402	Teacher Education



## DEPARTMENT OF EDUCATIONAL COMMUNICATION AND TECHNOLOGY

### Year 1

TCT 102	Instructional Communication
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### Year 2

TCT 201	Instructional Media
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### Year 3

TCT 323	Subject Methods: Geography
TCT 330	Subject Methods: Maths
TCT 331	Subject Methods: Biology
TCT 332	Subject Methods: Chemistry
TCT 333	Subject Methods: Physics
TCT 335	Subject Methods: Computer Science
TCT 336	Subject Methods: Physical Education
TCT 340	<i>Teaching Practice</i> – Subject 1
TCT 341	<i>Teaching Practice</i> – Subject 2
TCT 401	Distance Education

## DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

### Year 1

TPS 101	Introduction to Psychology
TPS 102	Psychology of Human Development

### Year 2

TPS 201	Educational measurement and evaluation
TPS 202	Psychology of learning

### Year 3

TPS 302	Guidance and counseling
TPS 402	Introduction to special education

## DEPARTMENT OF EDUCATIONAL FOUNDATIONS

### Year 1

TFD 101	History of Education
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### Year 2

TFD 201	Philosophy of Education
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### Year 3

TFD 301	Sociology of Education
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## School of Education

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### Year 4

TFD 401	Comparative and Contemporary Issues in Education
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### Electives

TFD 402	Adult and Continuing Education
TFD 403	Gender Issues in Education
TFD 404	Drug dependence & Preventive Education
TFD 405	Philosophy of Teaching

## BIOLOGY OPTION

### Entry Requirements

Candidates who intend to take Biology as a major subject must have obtained minimum admission requirements for South Eastern Kenya University. They must have passed in Biology with grade B- (minus) at KCSE or its equivalent. They must have passed with a minimum grade C in Chemistry or Geography at KCSE or its equivalent that may be recognized by Senate. Alternatively, they should have passed with two principal passes, one of which must be Biology, at Advance level certificate of Education.

### Subject Specialization

Candidates taking B.Ed. Science (Biology Major) must

take all 21 mandatory unit courses prescribed by the school of Biological Sciences (SBS) and approved by the School of Education. Candidates wishing to specialize in either plant or animal sciences are advised to take additional (optional) units in the respective disciplines as advised by the Director, SBS.

Candidates taking Biology as a Minor subject must take minimum of 12 course units, which are prescribed by SBS and approved by the Dean, School of Education. There is no opportunity available in these programmes.

### Course Unit for Biology Major Year 1

SBT 101	Survey of Plant Kingdom
SZL 101	Invertebrate Zoology
SZL 103	Fundamentals of Ecology
SBT 102	Introductory Biochemistry & Genetics
SZL 102	Vertebrate Zoology
SBT 105	Introduction to Microbiology

### Year 2

SBT 203	Plant Ecology
SBT 204	Plant Structure and Function
SZL 203	Animal physiology
SZL 204	Basic Immunology
SZL 201	Cell Biology
SBT 201	Gymnosperm and angiosperm Taxonomy

### Year 3

SBT 301	General Mycology
SZL 303	Biostatics
SZL 310	Introduction to Parasitology
SBT 304	General Genetics
SBT 306	Plant Physiology

### Year 4

SZL 402	Freshwater and Marine Biology
SBT 403	Plant Morphogenesis
SBT 401	Plant Biochemistry
SZL 404	Basic Entomology

## Course Unit for Biology Minor

### Year 1

SBT 101	Survey of Plant Kingdom
SBT 102	Introductory Biochemistry & Genetics
SZL 101	Invertebrate Zoology
SZL 102	Vertebrate Zoology

### Year 2

SZL 103	Fundamentals of Ecology
SZL 201	Cell Biology
SBT 301	General Mycology

### Year 3

SBT 306	Plant Physiology
SZL 303	Biostatics

### Candidates to choose one unit from the following set

SBT 304	General Genetics
SZL310	Introduction to Parasitology

### Year 4

### Candidates to choose one unit from the following set

SBT 403	Plant Morphogenesis
SZL 404	Basic Entomology
SBT 401	Plant Biochemistry
SZL 402	Freshwater and Marine Biology

Students who intend to take Chemistry as a subject in the degree course must have as part of their University entry qualifications (at KCSE or equivalent): EITHER a grade C+ in Chemistry or better or a grade C+ in physical Sciences or better AND must have C+ in mathematics and/or Physics.

Those candidates who intend to take Chemistry as their major subject are also required to take Mathematics Course units: SMA 101 and SMA 102 in the first year; and SMA 201, SMA 203, SMA 294 and SMA 208 in the 2nd year.

All students registering for the following units: SCH 102, SCH 201, SCH 202, SCH 302, SCH 304, SCH 306, SCH 309, SCH 401 and SCH 411 must take on practical class of three hours each week for each of the units.

## School of Education

Candidates who intend to Major in Chemistry will be required to take all the 17 core courses and the appropriate electives as approved by the Chairman, Department of Chemistry and the Dean of the School of Education.

### Chemistry Minor Chemistry Major

#### Year 1

SCH 101	Inorganic Chemistry I (General and Inorganic Chemistry)
SCH 102	Inorganic Chemistry I (Introduction to Inorganic Chemistry)
SCH 103	Physical Chemistry II I (General and Physical Chemistry)

#### Year 2

SCH 201	Inorganic Chemistry II (S and P Block Elements)
SCH 202	Organic Chemistry II (Alkynes, Aromatic Compounds, Spectroscopy)
SCH 203	Physical Chemistry II (Liquids, Thermodynamics I and Thermochemistry)
SCH 204	Physical Chemistry III (Introduction to Kinetics & Electrochem.)

#### Year 3

SCH 301	Inorganic Chemistry III (theory of Spectroscopic Methods)
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SCH 302	Organic Chemistry III (Carbonyls, carboxylic Acids, Phenols, Carbanions, Amines)
SCH 303	Physical Chemistry IV (Thermodynamics II and Phase Equilibria)
SCH 304	Inorganic Chemistry IV (Coordination Chemistry)
SCH 305	Organic Chemistry IV (Amino acids, peptides, proteins, carbohydrates and nucleic acids)

#### Year 4

SCH 306	Analytical Chemistry I (Quantitative Analysis)
SCH 307	Organic Chemistry V (Spectroscopy as applied to Organic Chemistry)
SCH 308	Physical Chemistry V (Statistical Thermodynamics)
SCH 309	Analytical Chemistry I (Instrumental Methods of Analysis)
SCH 310	Physical Chemistry VI (Surface and Colloid Chem.)
SCH 311	Analytical Chemistry II (Use of Computers in Chem.)

#### Core Units

SCH 401	Inorganic Chemistry V (Transition Elements and Organometallic Chem.)
SCH 402	Organic Chemistry VI (Heterocyclic & Polynuclear Aromatic Hydrocarbon Chemistry)
SCH 403	Physical Chemistry VII (Further Chemical Kinetics and Electrochemistry)
SCH 404	Organic Chemistry VII (Chemistry of Secondary Biomolecules)
SCH 405	Industrial Chemistry

#### Units

SCH 406	Inorganic Chemistry VI (Structures of Inorganic Solids)
SCH 407	Organic Chemistry VIII (Special Topics)

SCH 408	Inorganic Chemistry VIII (Nuclear and Radiation Chemistry)
SCH 409	Organic Chemistry IX (Applied Organic Chemistry)
SCH 410	Organic Chemistry IX (Quantum Chemistry)
SCH 411	Analytical Chemistry IV (Voltammetry and Separation Techniques)

## Geography and Environmental Studies Option

### Entry Requirements

A candidate must have done Geography in “O” level or “A” levels and/or is teaching Geography.

### Course Units

#### Year 1

##### Semester 1

SGP 105	Physical Geography I
SGP 107	Human Geography I

##### Semester 2

SGP 106	The East African Environment
SGP 108	Map & Aerial Photo Interpretation

#### Year 2

##### Semester 1

SGP 221	Physical Geography II
SGP 223	Human Geography II

##### Semester 2

SGP 222	Surveying and Cartography
SGP 223	Principles of Environmental Conservation and Management

#### Year 3

##### Semester 1

SGP 321	Economic Geography <sup>1*</sup> (core)
SGP 323	Geomorphology <sup>*</sup> (core)
SGP 327	Geography of Recreation and Tourism <sup>**</sup>
SGP 329	Environment and Development in Africa <sup>**</sup>

##### Semester 2

SGP 322	Research Methods and Field Work <sup>*</sup> (Core)
SGP 324	Climatology & Hydrology <sup>*</sup> (Core)
SGP 328	Remote Sensing & Geographic Information System <sup>**</sup>
SGP 332	Geography of World of Economies <sup>**</sup>

#### Year 4

##### Semester 1

SGP 421	Population Geography <sup>*</sup>
SGP 423	Biogeography <sup>*</sup>
SGP 425	Regional Development and Planning <sup>**</sup>
SGP 427	Soil Study and Land Degradation <sup>**</sup>

##### Semester 2

SGP 422	Statistical Techniques & Analysis <sup>*</sup>
SGP 424	Global Environmental Issues <sup>*</sup>
SGP 426	Demography <sup>**</sup>
SGP 430	Poverty, Food Security & Livelihood Systems <sup>**</sup>

\* Core for all (i.e both Geography minor and major students)

\*\* Core for those specializing in Geography (i.e only major students)

## School of Education

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### Mathematics Option

#### Entry Requirements

Candidates who intend to take Mathematics as a subject must have obtained minimum admission requirements for South Eastern Kenya University. They must have passed in Mathematics with grade C+ (Plus) at KCSE or its equivalent. Alternatively, they should have passed with two principal passes, one of which must be mathematics, at Advanced Level Certificate of Education.

The Course structure provides for two distinct categories of students: Mathematics Major and Mathematics Minor. In each case the student must take all the prescribed core units. A Mathematics Major student may specialize in any of the following areas: Pure Mathematics, Applied Mathematics, Statistics, or Operations Research, by selecting the appropriate electives after consultation with the Director of the School.

#### Mathematics Minor

##### Year 1

SMA 101	Basic Mathematics
SMA 103	Calculus I
SMA 104	Calculus II

##### Year 2

SMA 105	Geometry
SMA 140	Introduction to Probability & Statistics
SMA 203	Linear Algebra I
SMA 205	Introduction to Algebra

##### Year 3

SMA 206	Introduction to Analysis
SMA 208	Ordinary Differential Equations I

##### Year 4

SMA 306	Complex Analysis I
SMA 322	Numerical Analysis I

#### Mathematics Major

##### Year 1

SMA 101	Basic Mathematics
SMA 103	Calculus I
SMA 104	Calculus II

##### Year 2

SMA 105	Geometry
SMA 140	Introduction to Probability & Statistics
SMA 203	Linear Algebra I
SMA 205	Introduction to Algebra

##### Year 3

SMA 206	Introduction to Analysis
SMA 208	Ordinary Differential Equations I
SMA 240	Probability and Statistics I
SMA 306	Complex Analysis I
SMA 322	Numerical Analysis I
SMA 323	Dynamics I

### Electives Pure Mathematics

SMA 302	Real Analysis II
SMA 304	Linear Algebra III
SMA 308	Discrete Mathematics I

### Applied Mathematics

SMA 310	Ordinary Differential Equations II
SMA 324	Dynamics II
SMA 326	Fluid Mechanics I
SMA 328	Continuum Mechanics
SMA 342	Theory of Estimation
SMA 344	Sample Survey
SMA 328	Quality Control Methods
SMA 360	Programming Methodology for Mathematics
SMA 372	Linear Programming

### Year 4

SMA 301	Real Analysis
SMA 306	Algebra
SMA 303	Complex Analysis I
SMA 320	Methods I
SMA 371	Linear Programming I
SMA 403	Measure Theory
SMA 420	Mathematical Modeling

### Electives

SMA 400	Mathematical Logic
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### Pure Mathematics

SMA 402	Topology II
SMA 405	Algebra II
SMA 406	Algebra III
SMA 407	Discrete Mathematics II
SMA 408	Complex Analysis II
SMA 409	Ordinary Differential Equations II
SMA 410	Functional Analysis II
SMA 411	Number Theory

### Applied Mathematics

SMA 412	Theory of Computation
SMA 420	Mathematical Modeling
SMA 422	Methods II
SMA 423	Numerical Analysis II
SMA 424	Numerical Analysis III
SMA 425	First Order Partial Differential Equations
SMA 426	Second Order Partial Differential Equations
SMA 427	Differential Geometry
SMA 428	Fluid Mechanics II

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### Statistics

SMA 440	Probability Theory
SMA 441	Tests of Hypotheses
SMA 442	Non-Parametric Methods
SMA 443	Time Series Analysis
SMA 444	Stochastic Process
SMA 446	Statistical Methods
SMA 448	Multivariate Methods
SMA 461	Design and Analysis of Algorithms I
SMA 462	Design and Analysis of Algorithms II

### Operations Research

SMA 471	Inter Programming and Non-Linear Programming
SMA 472	Decision Theory and Game Theory
SMA 473	Graphs, Network Flows and Scheduling
SMA 474	Stochastic Models in Operation Research

### Physics Option

#### Entry Requirements

Candidates who intend to take Physics as a subject must have obtained minimum admission requirements for South Eastern Kenya University. They must have passed in Physics with grade C+ (Plus) at KCSE or its equivalent. Alternatively, they should have passed with two principal passes, one of which must be physics, at Advanced Level Certificate of Education.

In the B.Ed. (Science) Programme students can opt to take Physics as a Major or Minor subject. Students who wish to pursue and MSc. Degree in Physics must be registered as a Physics Major or Physics Minor with the specified 8 units in both third and fourth years of study. When registering for course units, especially the Majors, the students are expected to consult the Chairman, Department of Physics.

### Year 1 Semester 1

SPH 101	Mechanics I
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### Semester 2

SPH 102	Electricity and Magnetism I
SPH 103	Waves and Optics

**Note: Co-requisites; SMA 101, 103 and 104**

### Year 2 Semester 1

SPH 201	Mechanics II
SPH 202	Electricity and Magnetism II

### Semester 2

SPH 203	Structure and Properties of Matter
SPH 204	Mathematical Physics I

**Note: Co-requisites SPH 101, 102 and 103**

**Co-requisites SMA 105, 140, 203 and 205**



### Year 3 Semester 1

SPH 301	Practical Physics I (Core)
SPH 305	Classical Mechanics (Core)
SPH 306	Mathematical Physics II (Core for Majors)
SPH 307	Introductory Electronics (Core)
SPH 309	Quantum Mechanics (Core for Majors)

### Semester 2

SPH 301	Practical Physics I (Core) Continuation
SPH 302	Thermodynamics (Core)
SPH 303	Solid State Physics I (Core)
SPH 304	Electrodynamics I (Core)

#### Co-Requisites:

- **Physics Majors must take SMA 206 & 208**
- **Physics Non-Majors to choose from among: SMA, 206, 208, 240, 306, 322 & 323**

### Year 4 Semester 1

SPH 401	Electrodynamics I (Core)
SPH 404	Statistical Physics (Core)
SPH 407	Mathematic Physics III (Core for Majors)
SPH 409	Quantum Mechanics II (Core for Majors)

### Semester 2

SPH 402	Nuclear Physic (Core)
SPH 403	Solid State Physics II (Core)
SPH 405	Electrodynamics (Core)
SPH 420	Project

#### Co-Requisites

- **Physics Majors must take SMA 306 & 322**
- **Physics Non-Majors to choose from among: SMA 301, 303, 306, 320, 371, 403 and 420**

## MASTER OF EDUCATION DEGREE IN EDUCATIONAL FOUNDATIONS

Regulations and Syllabus for the Degree of Master of Education in Educational Foundations

### 1.0 Introduction

The Department of Educational Foundations seeks to offer postgraduate programme of study at the master's level. The major purpose is to train professional teachers and educators in foundations of education. Modern educational theories and practices rest on foundations dating from the rise of classical world civilizations in antiquity to the present, an essential knowledge to the understanding of the present systems of education and planning for future education. Personnel trained in foundations of education are usually equipped to serve as tutors, lecturers, and managers in the institutions of teacher education, while at the same time skilled with strategies for tackling critical issues and problems of education nationally and internationally.

The programme aims at meeting the following objectives:

- To expand and disseminate knowledge in foundations of education, dating from the rise of classical civilizations in antiquity to the present.

- (b) To provide pre-service training and in-service professional development of teachers, tutors, lecturers, and other relevant personnel.
- (c) To provide basic, and capacity for policy-oriented educational research in foundations of education.

### 2.0 Entry Requirements

- 2.1 The common regulations for the Master's degree in all Schools and Faculties in the South Eastern Kenya University shall apply.
- 2.2 The following shall be eligible for admission:
  - (a) A holder of the degree of Bachelor of Education (B.Ed.) of at least second class honours of the South Eastern Kenya University or its equivalent from any other recognized university.
  - (b) A holder of the degree of Bachelor of Arts (B.A) or Bachelor of Science (B.Sc.) of at least second class honours and a postgraduate diploma in education (PGDE) of the South Eastern Kenya University or equivalent qualifications from any other university recognized by Senate.
  - (c) A holder of a pass degree for categories a and b with an advanced professional certificate and five or more years of teaching or management in education.

### 3.0 Transfer of Credit and Exemptions

- 3.1: An applicant who has undertaken Master's courses at other recognized universities may on the approval by Senate, be allowed to transfer up to a maximum of one-third of prescribed courses units offered in the programme.
- 3.2: An applicant seeking credit transfer in courses taken in a recognized university shall be required to pay an appropriate fee and make a formal request giving the particulars listed below:
  - (a) A list of the South Eastern Kenya University courses for which the applicant seeks to secure credit.
  - (b) Official transcripts indicating the course units that are equivalent.
  - (c) Course descriptions for the units which the applicant seeks transfer of credits.
- 3.3: A student who wishes to be exempted from any course unit shall follow the guidelines set out below:
  - (a) An applicant for exemption shall send a formal application for exemption by completing Senate approved form justifying his/her request and attaching evidence of the credentials, which would support such a request.

- (b) He/she may be required to submit to an exemption examination set and administered by the School of Education.
- (c) The School of Education may, for exceptional reasons of academic merit, recommend to Senate the exemption of an applicant from a course unit without being subjected to an exemption examination.
- (d) The candidate must have attained a grade interpreted by the School of Education as a passing grade in the course units for which exemption is applied.
- (e) Exemptions can only be allowed in Part I (first two semesters) of the program subject to a maximum of 1/3rd of the course units.
- (c) A candidate shall write a project equivalent to 4 units.
- (d) The programme shall be for a minimum period of 4 semesters and a maximum of 12 semesters.
- (e) Each semester shall be of 15 weeks.
- (f) A candidate shall be allowed to register for a minimum of 3 course and a maximum of 5 course units per semester.

#### **4.0: Course Structure and Duration**

##### **4.1 Face to Face teaching mode**

- (a) The programme shall comprise 18 course units each of which shall have 60 contact hours.
- (b) A candidate shall be required to take 7 core course units and 7 units from the specialization areas selected from any one of the major areas of educational foundations.

##### **4.2 Open and Distance e-Learning (ODeL) mode**

Open and Distance e-Learning (ODeL) mode will involve various media of delivery:

- 4.2.1 Written self-instructional study modules issued at registration time shall consist of:
  - a) Course study materials
  - b) Relevant literature
  - c) Interactive devices and self-tests
- 4.2.2 Limited face-to-face sessions to provide overview of the course at commencement of semester; mid semester and revision period before examinations.

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4.2.3 Support study centres at the South Eastern Kenya University and its regional resource centres

- a) Access to information through computers and the e-learning platform
- b) Use of libraries at South Eastern Kenya University and other institutions

4.2.4 Immediately after registration candidates will be introduced to the following:

- a) Orientation in ODeL delivery
- b) Study in reading and computer skills
- c) Time management and techniques of handling assignment
- d) Mentorship, guidance and counseling
- e) Emphasis on the use of regional centres as the link between University of Nairobi students in the following manner: registration; collection of study materials, results and programme information, such as timetables and regional meetings.

4.2.5 The ODeL programme will run for a minimum of 4 semesters of 15 weeks each and a maximum of 12 semesters. There will be two semesters per academic year. The minimum course load per semester will be 3 units while the maximum is 5 units. The project shall be equivalent to 4 course units.

## 5.0: Course Outline

A candidate shall take all the 7 core course units listed and 7 other elective units from one area of specialization.

### Core Units

TFD 601	Statistics for Educational Research
TFD 602	Research Methods in Education
TFD 603	Information And Communications Technology in Education
TFD 604	Historical Foundations of Education
TFD 605	Philosophical Foundations of Education
TFD 606	Foundations of Adult and Continuing Education
TFD 607	Sociological Foundations of Education

### Specializations

#### History of Education

TFD 611	Education in Antiquity
TFD 612	Education in the Medieval and Modern Times
TFD 613	The Development of Modern Education in Africa
TFD 614	African Indigenous Education
TFD 615	The Development of Education in Kenya in the Colonial Period
TFD 616	Education in Kenya since Independence
TFD 617	The Great Educators

**Philosophy of Education**

- TFD 621 Modern Philosophies of Education
- TFD 622 Education and Knowledge
- TFD 623 Education and Values
- TFD 624 Philosophy of Science Education
- TFD 625 Philosophy of Religious Education
- TFD 626 Contemporary Themes in Philosophy of Education
  
- TFD 627 African Philosophy of Education
- TFD 628 Methods of Philosophical Research

**Sociology of Education**

- TFD 631 The Development of Sociology of Education
- TFD 632 Socialization Process and Education
- TFD 633 The School and Society
- TFD 634 Motivation and Social Achievement
- TFD 635 African Social Structure and Education
- TFD 636 The Family and Education
- TFD 637 Social Change and Education
- TFD 638 Social Problems and Education
- TFD 639 Gender and Education

**Comparative and International Education**

- TFD 641 The Development of Comparative Issues In Education
- TFD 642 Modern Trends in Comparative Issues in Education
- TFD 643 National Systems of Education
- TFD 644 Contemporary Issues In Education
- TFD 645 The Teaching Profession

- TFD 646 Alternatives in Education
- TFD 647 Issues in Vocational and Technical Education
- TFD 648 Critical Contemporary Issues in Comparative and International Education

**Adult and Continuing in Education**

- TFD 651 Evolution of Modern Adult Education
- TFD 652 Philosophy of Adult and Continuing Education
- TFD 653 Curriculum Development And Teaching in Adult and Continuing Education
- TFD 654 Community Development
- TFD 655 Distance Education And Open Learning
- TFD 656 Management of Adult and Continuing Education
- TFD 657 Extension Education
- TFD 658 Lifelong Education
- TFD 659 Non-Formal Education
- TFD 660 Research Project

**6.0 Examination Regulations**

**6.1:Written Examinations**

- a) Each course unit shall be assessed by written examinations, continuous assessment comprising tests, term papers, practical assignments and end of semester examinations.

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- b) The final written examination shall account for seventy per cent (70%) of the marks in each course unit, while continuous assessment shall account for the remaining thirty percent (30%).
  - c) The pass mark for each course unit shall be 50%.
  - d) Each candidate shall be required to pass the examinations for all units taken before proceeding to write the research project or thesis.
  - e) A candidate, who fails to satisfy the examiners in any prescribed course unit, may be allowed to sit a maximum of two supplementary examinations.
  - f) A candidate who fails two supplementary examinations shall be allowed to re-take the course unit once.
  - g) A candidate who fails a re-take may on the recommendation of the School Board of Examiners and approval of Senate be discontinued.
- c) A project is equivalent to four (4) units.
  - d) The project shall be a 20,000 word dissertation on an issue of interest which is relevant to the area of specialization that the candidate has studied.
  - e) A candidate shall be required to be supervised and to submit a research project report for examination to the department at least two (2) weeks before end of the semester in which work is to be examined.
  - f) The project report shall be marked out of 100% and the pass mark for the project shall be 50%.
  - g) A candidate who fails to satisfy examiners in the research project may on the recommendation of the School Board of Examiners and approval of Senate be allowed to re-submit the project for examination up-to two times within the stipulated maximum period of 12 semesters.

### 6.2:Regulations for the Research Project

- a) The research project shall be assessed in accordance with the common regulations of the University postgraduate studies.
  - b) At least five weeks before the beginning of the fourth semester, each candidate shall present a proposal for a project. The research project shall be assessed in accordance with the common regulations of the University postgraduate studies.
- h) A candidate may be allowed to work on a research project for up-to two semesters. All re-submissions, if any, must be done within the two semesters.
  - i) A candidate who fails after two re-submissions of a project may on the recommendation of the School Board of Examiners and approval of Senate be discontinued.

- j) A candidate who fails to complete the programme of study within a period of eight (8) academic years shall on the recommendation of the School Board of Examiners and approval of Senate be discontinued.

### 6.3: Award of Degree

After completion of all the requirements, the successful candidate shall be recommended for the award of the degree of Master of Education (M.Ed.) majoring in any one of the specialization areas listed below:-

- (a) History of Education
- (b) Philosophy of Education
- (c) Sociology of Education
- (d) Comparative Issues in Education
- (e) Adult and Continuing Education

## MASTER OF EDUCATION

Regulations and Syllabus for the Degree of Master of Education

### 1.0 Introduction

The demand for effective educational managers, administrators, curriculum developers, educational

planners and educational economists has been on the increase over the years. All the nation's educational institutions and programmes are expanding and require the services of highly qualified personnel. The school of Education of the South Eastern Kenya University has a duty to contribute to the training of these specialists for the nation.

Further, with liberalization of economy in recent years, and the democratization processes taking place, there is an urgent need to equip scholars and practitioners in education with broad management skills for the dynamic environment of the second Millennium. Hence, the need for a practical oriented management development programme for educational specialists.

Like all university programmes, the programmes proposed by the Department of Educational Administration and Planning will contribute to research into problems affecting national development; and in the development of educational materials for the education systems at all levels of the education system.

The objectives of the programme are to:

- (i) Acquire the necessary knowledge, skills and attitudes in the areas of Educational

- Administration, Curriculum Studies, Educational Planning, Economics of Education, and Corporate Governance.
- (ii) Acquire a deeper understanding of the complexities of planning, developing and managing educational systems.
  - (iii) Develop skills and attitudes appropriate to Corporate Governance and consequently exhibit leadership skills that are appropriate to the management of educational institutions at various levels.
  - (iv) Develop professionalism in the practice of managing curriculum.
  - (v) Design and carry out research in areas of specialization.
- b) A holder of Bachelor of Education degree with at least a Lower Second Class honours or equivalent qualifications from other universities recognized by Senate with two years working experience.
  - c) A holder of any other Bachelor's degree of the South Eastern Kenya University with at least Second Class honours and a /Postgraduate Diploma in Education (PGDE) or equivalent qualifications from universities recognized by Senate.
  - d) Applicants who wish to specialize in economics of education and Educational planning should have had prior exposure to economics and economics related subjects at undergraduate level. However, for those wishing to specialize in Educational Planning, a strong background in mathematics at undergraduate level.

### 2.0 Admission Requirements

- 2.1 The common regulations for Master's degree in all faculties and schools of the University shall apply.
- 2.2 The following shall be eligible for admission into the degree of Master of Education programme:
- a) A holder of Bachelor of Education degree with at least an Upper Second Class honours degree of the South Eastern Kenya University or equivalent qualifications from other universities recognized by Senate.

### 3.0 Credit Transfers and Exemptions

- 3.1 A candidate may be exempted up to a maximum of one third of the taught courses, provided that these are from institutions recognized by the Senate of the University of Nairobi.



- 3.2 Applicants seeking course exemptions shall send a formal application to the Director, Board of Postgraduate studies through the Dean School of Education which should include justification of request, and attach evidence of relevant credentials in support of the request. The application shall be processed only after payment of the prescribed fees.
- 3.3. Applicants will only be exempted from a course offered at a level which is equivalent to what is offered by the South Eastern Kenya University.

#### 4.0 Course Structure and Duration

- 4.1 A student may enroll in the M.Ed. programme either on a full time basis or on a part-time basis.
- 4.2 The part time programme is offered in the evenings and during the school holiday period. The programme offered during the holiday period is also known as the school based programme.
- 4.3 The full time programme shall extend over a minimum of four (4) semesters from the date of registration and a maximum of eight (8) semesters. The course shall consist of coursework, examination and Thesis.
- 4.4 The evening programme shall extend over a minimum of four (4) semesters from the date of registration and a maximum of twelve (12)

semesters. The course shall consist of course work, examination and project.

- 4.5 The school based programme shall be an intensive course taught during the school holidays. Two school holidays of four weeks each will constitute a semester.
- 4.6 The programme shall comprise of 18 units.
- 4.7 During the first three semesters, a student shall take ten (10) compulsory (core) units. Each unit consists of 60 contact hours.
- 4.8 Students shall be required to take the 10 Core Units before being allowed to take elective courses for project or embark on their thesis.
- 4.9
- (i) Students shall be required to choose the topic for research thesis or projects after successful completion of Core Units.
- (ii) Research thesis shall be considered to be equivalent to eight (8) units.
- (iii) Research project shall be considered to be equivalent to four (4) units.
- 4.10 Students admitted into the M.Ed. degree programme will specialize in any one of the following subject areas:
- a) Educational Administration
  - b) Educational Planning
  - c) Economics of Education
  - d) Corporate Governance in Education
  - e) Curriculum Studies

## School of Education

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The course shall be conducted through lectures, discussion groups, seminars, and field Excursions / assignment.

### 5.0 Course Outline

#### Core units

- TAP 501 Statistics for Educational Research
- TAP 502 Research Methods in Education
- TAP 503 Introduction to Education Management Information Systems
- TAP 505 Curriculum Theory and Practice
- TAP 506 Educational Finance
- TAP 507 Educational Policy formulation and Planning
- TAP 508 Monitoring and Evaluation
- TAP 509 Theories of Educational Administration
- TAP 510 Human Resource Management in Education

*Elective course units shall be selected from one of the following subject areas.*

#### Specialization Areas

##### Curriculum studies

- TAP 511 Curriculum Design
- TAP 512 Curriculum Evaluation
- TAP 514 Curriculum Development in Non-Formal Education

- TAP 515 Curriculum Implementation
- TAP 516 Curriculum Development in Teacher Education
- TAP 518 Curriculum Change and Innovation

##### Educational Administration

- TAP 520 Higher Education Administration
- TAP 522 Organizational Behaviour in Education
- TAP 524 Primary School Administration
- TAP 526 Secondary School Administration
- TAP 528 Instructional Supervision
- TAP 529 Gender Perspectives in Education

##### Corporate Governance in Education

- TAP 520 Higher Education Administration
- TAP 530 Human Resource Planning
- TAP 532: Entrepreneurship in Higher Education Institutions
- TAP 536: Institutional Planning
- TAP 536 Labour Relations in Education
- TAP 538: Safety and Health in Institutions of Higher Learning

##### Educational Planning

- TAP 540 Theories and concepts in Educational Planning

TAP 542	Methodologies in Educational Planning	6.3	For each course unit the Continuous Assessment (CAT) shall carry 30% and the end of semester examination 70% of the marks.
TAP 544	Issues in Educational Planning		
TAP 546	Population Studies in Educational Planning	6.4	Pass mark for each course unit shall be 50%.
TAP 548	Evaluation Strategies in Educational Planning and Implementation	6.5	A candidate who fails to satisfy the examiners in any course unit may on the recommendation of the School Board of Examiners and approval of Senate be allowed to take up to two supplementary examinations.
TAP 550	Communication Strategies in Educational Planning	6.6	A candidate who fails to satisfy the examiners in the second supplementary examination shall on the recommendation of the School Board of Examiners and approval by the Senate be:

### Economics of Education

TAP 552	Human Capital Development		
TAP 554	Private and Social Demand in Education	i)	Discontinued if the failed course is a Core course
TAP 556	Criteria for Investment in Education	ii)	Allowed to take another elective in the same area of specialization or re-take the failed course in the elective provided the stipulated maximum period of 12 semesters is not exceeded.
TAP 558	Efficiency and Equity in Education		
TAP 570	Thesis		
TAP 572	Project		

## 6.0 Examination Regulations

### Written Examinations

- 6.1 Each course unit shall be examined at the end of the semester in which it has been taken.
- 6.2 Each course unit shall be examined by Continuous Assessment Test (CAT) and a three hour written paper at the end of the semester.

### 6.2 Examination for Thesis

- 6.2.1 Regulations governing the examination of a thesis in the South Eastern Kenya University shall apply.
- 6.2.2 During the second year, a candidate shall be required to write a thesis in English, of about 50,000 words in their area of specialization under supervisors duly approved by the Senate.

### 6.3 Examination for Project

- 6.3.1 A candidate shall be required to submit a supervised research project report for examination to the department at most five (5) months after successful completion of the elective course units and at least two (2) weeks before end of the semester in which work is to be examined.
- 6.3.2 The project shall be about 20,000 words (approximately 80 pages) on an issue of interest and relevance to the six areas of specialization.
- 6.3.3 Pass mark for the research project shall be 50%.
- 6.3.4 A candidate who fails to satisfy the examiners in the research project may on the recommendation of the School Board of Examiners and approval of Senate be allowed to re-submit the project for examination up-to two times within the stipulated maximum period of 12 semesters.
- 6.3.5 Candidate shall be allowed to work on a research project for up-to two semesters. All re-submissions must be done within the two semesters.
- 6.3.6 A candidate who fails to complete the programme of study within a period of eight (8) years shall on the recommendation of the School Board of Examiners and approval of Senate be discontinued.

### 7.0 Degree Award

Upon successful completion of the programme, a student shall be awarded a Master's of Education (M.Ed.) degree of the South Eastern Kenya University in the relevant specialization

## MASTER OF EDUCATION IN EARLY CHILDHOOD EDUCATION (M.Ed. – ECE)

*Regulations and Syllabus for the Degree of Master of Education in Early Childhood Education*

### 1.0 Introduction

The Department of Educational Communication and Technology proposes a programme in Master of Education in Early Childhood Education. The programme is designed to meet the needs of a wide range of professionals like teachers, trainers, supervisors, managers, curriculum developers and researchers engaged in early childhood education and care so that they can acquire principles and concepts relevant to lives of children between the ages of birth and eight years.

The objectives of the programme will be to enable the student to:

- a) Attain a broad understanding of early childhood education a a wide range of settings.
- b) Examine trends and issues relevant to education of a child in early years of development.
- c) Acquire principles and concepts appropriate to the development of a child in the formative years.
- d) Develop competence necessary for carrying our research in the field of early childhood education.

## 2.0 Entry Requirements

- 2.1 Common regulations for Master of Education in the School of Education and the University shall be applicable.
- 2.2 The following shall be eligible for admission into M.Ed. programme in Early Childhood Education:
  - a) A holder of an Upper Second Class B.Ed. Degree in Early Childhood Education from South Eastern Kenya University or any other accredited university.
  - b) A holder of an Upper Second Class Degree in the area related to early childhood education from South Eastern Kenya University or any other accredited university.

- c) A holder of Upper Second Class Degree from South Eastern Kenya University or any other accredited university
- d) A holder of Lower Second Class Degree in Early Childhood Education from the South Eastern Kenya University or any other accredited university's and two years teaching/work experience.
- e) A holder of Pass Degree in Early Childhood Education from the South Eastern Kenya University or any other accredited university, and three years teaching/work experience.

## 3.0 Credit Transfer and Exemptions

- 3.1 A student may be allowed credit transfer up to a maximum of one-third of the taught course units provided that these are from university recognized by Senate.
- 3.2 A student shall only be allowed to transfer credit in a course unit which is equivalent and/or at the same level with what is offered by the South Eastern Kenya University.
- 3.3 A credit transfer shall only be given for unit courses passed at C grade and above.

## School of Education

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- 3.4 A credit transfer shall not be given in a project or thesis.
- 3.5 An applicant seeking transfer of credits shall send a formal application to the Director, Board of Postgraduate Studies through the Dean, School of Education, justifying the request and attaching supporting documents.
- 3.6 Application for credit transfer shall be processed only after payment of the prescribed fees.

### 4.0 Course Duration and Structure

- 4.1 The programme shall run for a minimum of four semesters and maximum of eight semester of fifteen weeks each.
- 4.2 M.Ed. in Early Childhood Education shall be offered by course work, examination and project, or thesis.
- 4.3 The programme shall comprise 18 course units.
- 4.4 A course unit shall constitute 60 contract hours.
- 4.5 A student shall be required to take a minimum of two course units up to a maximum of six course units in any given semester.
- 4.6 M.Ed. in Early Childhood Education by course work, examination and project.
  - 4.6.1 A student taking the programme through project shall take 10 core course units, 4 elective course units and a project.
  - 4.6.2 A project shall be equivalent to 4 course units.
  - 4.6.3 A student shall take 5 core course units in the first semester and 5 other core course units in the second semester.
  - 4.6.4 In the third semester, the student shall take 4 elective course units and another 120 hours in proposal writing.
  - 4.6.5 In the fourth semester, the student shall collect data, analyze, write the project and submit it for examination.
  - 4.6.6 A project shall be equivalent to 240 hours.
- 4.7 M.Ed. in Early Childhood Education by coursework, examination and thesis.
  - 4.7.1 A Student taking the course through thesis shall take 10 core course units, 2 elective course units and thesis.
  - 4.7.2 A thesis shall be equivalent to 6 course units.
  - 4.7.3 A student shall take 5 core course units in the first semester and 5 other core course units in the second semester.
  - 4.7.4 In the third semester, the student shall take 2 elective course units and another 240 hours in proposal writing, and its defense.
  - 4.7.5 In the fourth semester, the student shall collect data, analyse, write the thesis, submit the thesis for examination and defend it. A thesis shall be equivalent to 360 hours

## 5.0 Course Outline

### 5.1 Core Course units

#### Semester 1

TEC 601	Theoretical perspectives of early childhood education
TEC 603	Special needs early childhood programmes education
TEC 607	Pedagogy and early childhood education
TEC 609	Child Development

#### Semester 2

TEC 602	Learning in early childhood
TEC 604	Research methods in education
Tec 606	Family life studies and child upbringing
TEC 608	Contemporary issues in early childhood education
TEC 610	Media and early childhood education

### 5.2 Elective course units

#### Semester 3

TEC 611	Principles of management, supervision and early Childhood education
TEC 612	Curriculum development and implementation
TEC 613	Language and early childhood development

TEC 614	Science, Mathematics and Early Childhood development
TEC 615	Social studies, religion and early childhood education
TEC 616	Creative arts, physical education and early childhood Development
TEC 617	Health, food nutrition and early childhood development
TEC 640	Projects
TEC 650	Theses

## 6.0 Examination Regulations

### 6.1 Written Examinations

- 6.1.1 The common regulations governing examinations for the master's degree in the South Eastern Kenya University shall apply.
- 6.1.2 All taught course units shall be assessed by continuous assessment tests and semester examination.
- 6.1.3 The continuous assessment test shall be scored out of 30%.
- 6.1.4 The semester examination shall be scored out of 70% for each course unit.
- 6.1.5 The pass mark for each course unit shall be 50%.

- 6.1.6 A student undertaking the programme through a project shall be required to pass all the prescribed course units (14 course units) before proceeding to the project.
- 6.1.7 A student undertaking the programme through a thesis shall be required to pass all the prescribed course work (12 course units) before proceeding to the thesis.
- 6.1.8 A student who fails in any course unit shall on the recommendation of the School Board of Examiners and approval by Senate be allowed to resist the failed course unit, not more than twice.
- 6.1.9 A pass mark obtained by resitting a course unit shall be recorded as 50%.
- 6.1.10A student who fails the second resit shall on recommendation of the School Board of examiners and approval by Senate be discontinued.
- 6.1.11 A student who fails to complete the programme in the prescribed time shall on recommendation of the School Board of examiners and approval by Senate be discontinued.

### **6.2 Examination of the project.**

- 6.2.1 The project shall be examined according to the requirements of the South Eastern Kenya University.
- 6.2.2 Each student shall subject the project for examination two weeks before the end of second semester of the second year.
- 6.2.3 The project shall be marked out of 100 marks.
- 6.2.4 The pass mark shall be 50%.
- 6.2.5 A student who fails in the project shall be allowed two resubmissions within a period of one year.
- 6.2.6 The pass mark obtained after resubmission shall be recorded as 50%.
- 6.2.7 A student who fails in the project after second resubmission shall on the recommendation of the School a Board of examiners and approval by Senate is discontinued.

### **5.2. Examination of thesis**

- 5.2.1. The thesis shall be examined according to the requirements of the South Eastern Kenya University.
- 5.2.2. Each student shall present the thesis for examination four weeks before the end of second year.
- 5.2.3. Each student shall present the thesis for examination four weeks before the end of second semester of the second year.
- 5.2.4. The thesis shall be marked either pass or fail.



- 5.2.5. A student who fails in the thesis shall be allowed up to two resubmissions within a period of one year.
- 5.2.6. A student who fails in the thesis after the second resubmission shall on the recommendation of the School Board of examiners and approval by the Senate be discontinued.

### **7.0 Degree Award**

A student who shall have passed the required 18 course units shall be awarded a Master of Education in Early Childhood Education of the South Eastern Kenya University.

**School of  
Information and  
Communication  
Technology**

## 1. Introduction

The school of Information and Communication Technology is dedicated to the highest standards of education, research and community outreach in the areas of Computer Science and Information Technology. The school offers courses that are tailored to meet the job market demand and enhance efficiency in ICT process management. Delivery of the programs includes lectures, hands-on labs, educational trips and internships all aimed at producing graduates who are well rounded, highly skilled and exposed to the latest trends in Computer Science.

### 1.1 Vision

Center of excellence in research and human resource development in the areas of Information Communication Technology.

### 1.2 Mission

To meet the educational needs of the community, industry and academia in the areas of computing and information technologies by providing an outstanding environment for learning, research in applications of computing, expanding educational and research programmes in response to the rapid changes in the field of Information Technology to transform lives. The School has two departments.

## DEPARTMENT OF COMPUTER SCIENCE AND SOFTWARE ENGINEERING

### 1 Introduction

The Department of Computer Science and Software Engineering is a leading centre of excellence in research and development. The department has launched a Bachelor of Science in Computer Science programme which aims at providing students with a solid understanding of the underlying technologies upon which software solutions are built. The programme ensures graduates have the knowledge needed to continually grow as technology evolves and provide a basis for success in any computer science career the student chooses to pursue. The department has skilled staff and boasts of a state of the art computer laboratory.

### 1.1 Mission

To provide quality undergraduate and graduate education in both the theoretical and applied foundations of computer science and train students to effectively apply this education to solve real-world problems thus amplifying their potential for lifelong high-quality careers and give them a competitive advantage in the ever-changing work environment.

### **BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

Regulations and Syllabus for the Degree of Bachelor of Science in Computer Science

#### **1 Introduction**

The School of Information Communication and Technology offers a Bachelor of Science in Computer Science degree with the aim of developing professionals with theoretical and practical skills and build a management capacity with a practical orientation needed to link up the Computer Science field with industries. The continuous evolution of technology and the desire that organizations have to take advantage of the newest technology will continue to fuel the demand for computer scientists. This program provides students with a solid understanding of the underlying technologies upon which software solutions are built. It gives a foundation that ensures graduates will have the knowledge needed to continually grow as technology evolves and will provide a basis for success in any computer science career the student chooses to pursue. Graduates with this degree will have many career paths open to them including systems software engineer, applications software engineer, network administrator and database administrator, among many others.

#### **Objectives**

The objectives of the Bachelor of Science (Computer Science) programme are:

- (a) To present the theoretical foundations in computer science and to integrate these theories in a way that gives the learner deep knowledge of computer science.
- (b) To enable learners to use the knowledge gained to analyze, design and implement solutions to a wide range of real-world problems.
- (c) To develop learners who are practical and problem solving-oriented and capable of life-long learning.
- (d) To contribute to the production of computer science and information systems professionals required at the various levels of our nation's industrial development and thereby be a partner in the industrial development of Kenya.

#### **Learning Outcomes**

At the end the programme, the learners should:

- (a) Be able to apply the defining processes of computer science – theory, abstraction and design - to solve a variety of problems.
- (b) Have a breadth of knowledge across the subject areas of computer science.

- (c) Have a high level of programming skills.
- (d) Be able to expand their knowledge and skills in computer science through research and self-directed study and to communicate their knowledge in speaking and writing.

- (b) A candidate with Ordinary Diploma in Information Technology or its equivalent with, a pass at credit level from an institution recognized by the senate with a minimum mean grade of C (Plain) at KCSE.
- (c) A candidate with a Bachelor's degree from an institution recognized by the senate.

## 2 Entry Requirements

### 2.1.KCSE Candidates

In addition to satisfying minimum university requirements, the candidate should also possess passes at C in all subjects of Option A (Mathematics, Physics, Chemistry, English/Biology/Geography/ any Group IV subject) or Option B (Mathematics, Physical Sciences, Biological Sciences, English/Geography/ any Group IV subject)

### 2.2.Other Candidates

Admission to the degree course may be granted to the following categories of candidates:

- (a) A candidate with 2 principle passes, one of which must be in Mathematics or Physics, and a subsidiary pass with a credit pass in Physics at 'O' level.

## 3 Course Outline

### Year 1 Semester 1

ICS 111	Computer Organisation
ICS 113	Programming Methodology
ICS 121	Discrete Mathematics
ICS 117	Differential and Integral Calculus
ICS 123	Fundamentals of Physics
CCS 001	Communication Skills
CCS 002	Fundamentals of Development

### Semester 2

ICS 112	Data Structure & Algorithms
ICS 114	Information Systems Analysis & Design
ICS 116	Introduction to Database Systems
ICS 118	Data Communications Principles
ICS 120	Probability & Statistics
ICS 122	Linear Algebra
ICS 124	Semiconductor Electronics
CCS 009	Elements of Economics

## Year 2

### Semester 1

ICS 211	Computer Architecture
ICS 213	Operating Systems
ICS 215	Object-Oriented Programming
ICS 217	Digital Electronics
ICS 219	Automata and Languages
ICS 221	Introduction to Artificial Intelligence
ICS 223	Software Engineering Methodologies

### Semester 2

ICS 212	Assembly Language Programming
ICS 214	Computer Systems Laboratory
ICS 216	Computer Networking Principles
ICS 218	Organizations & Management
ICS 220	Artificial Intelligence Programming
ICS 224	Operations Research
ICS 226	Project

## Year 3

### Semester 1

ICS 311	Advanced Computer Architecture
ICS 313	Object - Oriented Analysis and Design
ICS 315	Human Computer Interface
ICS 317	Management Information Systems
ICS 319	Distributed Systems
ICS 321	Advanced Database Systems
ICS 323	Foundations of Knowledge-Based Systems

## Semester 2

ICS 312	Internet Technologies and Applications
ICS 314	Computer Graphics
ICS 316	Distributed Operating Systems
ICS 318	Software Engineering Development
ICS 320	Foundations of Learning and Adaptive Systems
ICS 322	Research Methodology

## Year 4

### Semester 1

ICS 413	Network Systems Security
ICS 415	Compiler Construction
ICS 417	Information Systems and Society
	Electives Any 3 Electives approved by the School

### Semester 2

ICS 411	Computer Science Project
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## GROUP OF ELECTIVES

### Distributed Systems

ICS 431	Computer Networks Performance
ICS 432	Distributed Systems and Network programming
ICS 433	Distributed Algorithms
ICS 434	Distributed Multimedia Systems
ICS 435	Distributed Databases
ICS 436	Parallel Processing

## Artificial Intelligence

ICS 441	Knowledge Engineering and Society
ICS 442	Neural Networks
ICS 443	Natural Language Processing
ICS 444	Speech Recognition
ICS 445	Expert Systems
ICS 446	Case-based Reasoning
ICS 447	Cognitive Science

## Information Systems

ICS 461	Decision Support Systems
ICS 462	Information Systems Strategy and Organization
ICS 463	Information Systems Audit

## DEPARTMENT OF TELECOMMUNICATION AND INFORMATION TECHNOLOGY

### 1 Introduction

The Department of Telecommunication and Information Technology (IT) offers three programmes. These are Bachelor of Information Technology (BIT), Diploma in Information Technology (SEKU) and Diploma in Information Technology (KNEC). These programmes meet the growing market demand for IT specialists. The curricula reflect the latest trends in ICT that guarantee graduates who are equipped with the latest technology.

The scope of the programmes covers a range of disciplines in IT to avail a wide choice to prospective students in readiness to the array of available career opportunities.

### 1.1 Vision

Consistently offer training in current information and telecommunication technologies using leading edge approaches.

### 1.2 Mission

To become a centre of excellence in training and research of information and telecommunication technologies.

## BACHELOR OF INFORMATION TECHNOLOGY

Regulations and Syllabus for the Degree of Bachelor of Information Technology

### 1.0 Introduction

As technology advances, so too must its users adapt in order to harness the skills necessary to employ Information Technology to their advantage. The convergence of technology has created many

opportunities for the use of Information Technologies in day to day living. Organizations are increasingly adopting the use of Information Technology to enhance their productivity by automating their systems among other things. This upsurge in the use of Information Technology has created demand for personnel who are capable of managing these technologies. This program is designed to develop graduates with a broad technical understanding of systems engineering concepts, software development and a solid foundation in the technical understanding of current and emerging information technologies.

### 1.1 Justification

Today, organizations of every kind are dependent on Information Technology. They have Information Technology systems in place. These systems need to work properly, be secure, and upgraded, maintained, and replaced as appropriate. These organizations require systems specialists who are committed to solving whatever computer-related problems they might have. This program is designed to equip graduates with skills that will enable them meet these needs. With the courses offered, the graduates will become highly competitive in the job market, innovative, entrepreneurial while at the same time prepare them for research.

### 1.2 Programme Objectives

The aim of this programme is to provide students with a wide range of technical and technological skills required at the degree level. The course is intended:

- (a) To equip the students with skills required to enable them work independently as systems specialists.
- (b) To equip students with knowledge and skills to enable they manage Information Technology infrastructure in organizations.
- (c) To prepare students for research in areas of Information Technology.

### 1.3 Learning outcomes

- (a) On completion of the degree, the graduate will have a comprehensive and well founded knowledge to work as professional in areas involving the application of Information Technology. He/She will demonstrate the ability to develop and deploy computer systems in a user oriented environment, and work effectively in teams to manage Information Technology projects.
- (b) The graduate will understand professional ethics and social responsibility and communicate effectively with a wide range of audience.



- (c) In particular they will apply the core technologies from Information Technology when solving problems in such areas as System Administration, Network Administration, Database Administration and Software development.
- (d) The graduate will be able to carry out research in areas of Information Technology.
- (b) A candidate with Ordinary Diploma in Information Technology or its equivalent with, a pass at credit level from an institution recognized by the senate with a minimum mean grade of C (Plain) at KCSE.
- (c) A candidate with a Bachelor's degree from an institution recognized by the senate.

### 2 Admissions Requirements

A candidate must satisfy the university's general admission criteria.

#### 2.1 KCSE Candidates

In addition to satisfying minimum university requirements, the candidate should also possess passes at C in all subjects of Option A (Mathematics, Physics, Chemistry, English/Biology/Geography/ any Group IV subject) or Option B (Mathematics, Physical Sciences, Biological Sciences, English/Geography/ any Group IV subject)

#### 2.2 Other Candidates

Admission to the degree course may be granted to the following categories of candidates:

- (a) A candidate with 2 principal passes, one of which must be in Mathematics or Physics, and a subsidiary pass with a credit pass in Physics at 'O' level.

### 3 Credit Transfer and Exemptions

#### 3.1 Credit Transfer

Candidates from other universities recognized by the South Eastern Kenya University Senate may be considered for credit transfer based on course unit content equivalence, subject to the condition that the candidate shall have passed in similar course units at Bachelors or equivalent level. The transfer of credits shall not be more than one third (1/3) of the total prescribed credits and /or course units required for the award of Bachelor of Information Technology.

#### 3.2 Exemptions

The Senate may exempt a candidate from some courses on recommendation of the School Board provided that:

- (a) Such candidates had taken those courses in a recognized university or equivalent institution at Bachelor's level and had achieved a pass grade.

- (b) Candidates seeking such exemptions submit a duly completed senate approved form specifying the courses for which exemption is desired and attach evidence of 3.2(a) above showing contents of what was studied.
  - (c) Courses specified in 3.2(b) are to satisfy the requirements of the first year of study only. Candidates requiring exemptions from 2nd, 3rd and 4th year courses shall in the absence of credit transfer be required to sit University examinations and attain at least a pass grade, which will then be used in the degree classification.
  - (d) Course units recommended for exemption should not exceed 1/3 of the total units in the degree programme.
  - (e) A non-refundable course exemption fee as determined by the University be paid with each application for exemption.
- (c) A candidate for Bachelor of Information Technology shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
  - (d) Each student shall be required to undertake satisfactory field/industrial attachment of eight (8) weeks at the end of the third year of study.
  - (e) The second year project shall be conducted in groups and shall be equivalent to two course units while the fourth year project shall be conducted individually and shall be equivalent to four course units.

#### 4 Course Structure and Duration

- (a) The teaching period for the degree programme shall extend over a period of not less than four academic years. Each academic year shall consist of two semesters of 15 teaching weeks.
  - (b) A candidate enrolled for the degree shall satisfactorily complete the programme in a period of not more than twice the minimum
- 5.1 No candidate shall be permitted to take an examination unless he/she has satisfactorily attended two thirds of the prescribed course of study.
  - 5.2 For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the fourth year.

#### 5 Examination Regulation

The conduct of examinations shall be governed by the following regulations:

- 5.3 All examination procedures shall be governed by the following:
- (a) Each course examination shall be graded out of a total of 100%.
  - (b) The pass mark in each course examination shall be 40% and graded as follows:-

70-100%	A
60-69%	B
50-59%	C
40-49%	D
39% and below	E) FAIL
  - (c) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%. The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical /field trip reports 10%.
  - (d) Field Practice/Attachment shall be examined by a written report. The grades shall be used in the degree classification. Evaluation of the students' performance while in the field shall constitute field assessment and shall contribute 30% of the end of semester examination while the written report shall contribute 70% of the end of semester examination.
  - (d) The Research Projects shall be examined through written reports and presentations, and shall be graded to use in the degree classification. The Project in this context shall mean a computer system development work undertaken by a candidate or a group of candidates. The seminars and project proposal shall constitute 30%, the special project report shall constitute 60% and the oral presentation shall constitute 10%.
  - (e) A candidate who fails to attain the pass mark in five or six course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.
  - (f) A candidate who fails to attain the pass mark in seven or more of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
  - (g) A Candidate who repeats the year externally shall be required to pay examination and any other fees that the University may deem applicable. A candidate is required to attend classes in the failed courses and shall be required to pay the

- required tuition fees for the failed course units, examination fees, and any other necessary charges as may be determined by the University.
- (i) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board and approval by Senate, be discontinued from the degree programme.
  - (j) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.
  - (k) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 40%.
  - (l) A candidate who fails to attain the pass mark in a supplementary examination shall on recommendation of the School Board and approval by Senate be allowed to do a second supplementary examination, ONCE ONLY as long as the total of such examinations does not exceed four in number during any one sitting for that particular year.
  - (m) A candidate who fails a supplementary on a second attempt according to regulation 5.3 (l) shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
  - (n) No candidate shall be allowed to repeat any year of study more than once.
- 5.4. The final degree of Bachelor of Information Technology shall be:
- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/Attachment.
  - (b) Based on the average score of all examinations of courses taken in the entire course duration.
  - (c) Classified into First Class Honours, Second Class Honours (Upper or Lower) Division and Pass, provided that in order to qualify for the award of Honours Degree, a candidate shall not have repeated any of the years of study on academic grounds.
- 5.5 In arriving at the decision as to the degree classification for each candidate, the Faculty Board of Examiners shall have to pay regard to the overall marks obtained by the candidate and shall apply the principle that a mean score of:

70 - 100%	-	First Class Honours
60 - 69%	-	Second Class Honours (Upper Division)
50 - 59%	-	Second Class Honours (Lower Division)
40 - 49%	-	Pass.

## 6 Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## 7 Course Outline

### Year 1

#### Semester 1

CCS 001	Communication Skills
CCS 010	HIV/AIDS
BIT 101	Introduction to Computer Systems
BIT 102	Programming Methodology
BIT 103	Computer Applications
BIT 104	Database Systems
BIT 110	Discrete Mathematics

### Semester 2

CCS 009	Elements of Economics
BIT 105	Computer Organization and Architecture
BIT 106	Data Communication Principles
BIT 107	Interface Programming
BIT 108	Probability and Statistics
BIT 109	Digital Electronics

### Year 2

#### Semester 1

BIT 201	Information System Analysis and Design
BIT 202	Operating Systems
BIT 203	E-Commerce
BIT 204	Object Oriented Programming
BIT 205	Introduction to Artificial Intelligence
BIT 206	Computer Network Principles
BIT 207	Data Structures and Algorithms

#### Semester 2

BIT 208	Programming for Mobile Devices
BIT 209	Enterprise Computing
BIT 210	Computer Graphics
BIT 211	Advanced Object Oriented Programming
BIT 212	Network Design and Administration
BIT 250	Project I

### Year 3

#### Semester 1

BIT 302	Network Management
BIT 303	Web Based Programming
BIT 304	Multimedia Systems
BIT 305	Simulation and Modeling
BIT 306	Information Technology Project Management
BIT 307	Principles of Software Engineering
BPS 307	Organizational Behavior

#### Semester 2

BIT 308	Server Administration and Management
BIT 309	Research Methodology
BIT 310	Management Information Systems
BIT 311	Object Oriented Analysis and Design
BIT 312	Distributed Systems
BIT 313	Knowledge Based Systems
BIT 314	Database Administration
<b>BIT 360</b>	<b>Industrial Attachment (8 Weeks)</b>

### Year 4

#### Semester 1

BIT 401	Accounting Information Systems
BIT 402	Mobile and Wireless Networks
BIT 403	Data Mining
BIT 404	Design and Analysis of Algorithms
BIT 405	Principles and Practice of Management
BIT 450	Project II

### Semester 2

BIT 406	Human Computer Interface
BIT 407	Information Systems Security and Audit
BIT 408	Industrial Management
BIT 409	Professional Ethics in Information Technology
BIT 410	Entrepreneurship and Business Planning
BIT 450	Project II

## DIPLOMA PROGRAMMES

### DIPLOMA INFORMATION TECHNOLOGY

Regulations and Syllabus for the Diploma in information Technology

## 1 INTRODUCTION

Information Technology is the back bone of business and organizational development. It has brought a lot of opportunities and challenges in today's modern world. This programme is aimed at producing middle level Information Technology personnel equipped with knowledge and skills to manage information, information centers and information resources in an ever changing environment that is fast embracing the use of Information Technology. In this context, the programme is designed to enable the graduate to acquire the important skills

of self-directed learning, problem solving, effective communication and entrepreneurship.

### 1.1 Justification

Organizations of every kind are increasingly depending on Information Technology. In this regard they have invested in automation, modern telecommunication infrastructure and a variety of other Information Technology Systems. This proliferation has brought with it the need for maintenance and technical support. This programme has been designed with intentions of developing competitive middle level technical personnel in Information Technology, capable of serving the above need. The courses offered are highly practical in nature designed to ingrain extensive hands on skills.

### 1.2 Objectives

The objectives of this programme are to:

- (a) Develop personnel capable of installation, networking, configuration and maintenance of computer systems.
- (b) Develop personnel capable of offering technical user support in all areas of ICT.
- (c) Develop personnel capable of carrying out software development tasks.
- (d) Produce graduates with a firm foundation to progress academically to higher levels of education in Information Technology.

## 2 Entry Requirements

Candidates must satisfy the university's general admission criteria.

### 2.1 .KCSE Candidates

Mean Grade C with minimum C- in the Mathematics and Physics / Physical Sciences.

### 2.2 Other Candidates

- (a) Advanced Level Certificate: One principal passes one of which must be in Mathematics or Physics and a subsidiary pass with a Credit pass in Physics at 'O' level; or
- (b) Diploma or equivalent from a recognized institution; or
- (c) An equivalent qualification recognized by the university senate.

## 3 Credit Transfer and Exemptions

### 3.1 Credit Transfer

Candidates from other institutions recognized by Senate may be considered for credit transfer based on course unit content equivalence, subject to the condition that the candidate shall have passed in similar course units at Diploma or equivalent level. The transfer of credits shall not be more than one third (1/3) of the total

prescribed credits and /or course units required for the award of Diploma of Information Technology.

### 3.2 Exemptions

The Senate may exempt students from some courses on recommendation of the School Board provided that:

- (a) Such candidates had taken those courses in a recognized university or equivalent institution at Diploma level and had achieved a pass grade.
- (b) Candidates seeking such exemptions submit a duly completed senate approved form specifying the courses for which exemption is desired and attach evidence of 3.2(a) above showing contents of what was studied.
- (c) Course units recommended for exemption should not exceed 1/3 of the total units in the diploma programme.
- (d) A non-refundable course exemption fee as determined by the University be paid with each application for exemption.

### 4 Course Structure and Duration

- (b) The teaching period for the diploma programme shall extend over a period of not less than two academic years. Each academic year shall consist of two semesters of 15 teaching weeks.

- (c) A candidate enrolled for the diploma shall satisfactorily complete the programme in a period of not more than twice the minimum period for which he/she was registered for the degree.
- (d) A candidate for Diploma of Information Technology shall participate and complete course work and practical assignments as prescribed. Admission to the examination at the end of the semester shall be based on satisfactory completion of such requirements.
- (e) Each student shall be required to undertake satisfactory field/industrial attachment of eight (8) weeks at the end of the first semester of the second year of study.
- (f) The project shall be conducted individually and shall be equivalent to three course units.

### 5 Examination Regulations

The conduct of examinations shall be governed by the following regulations:

- 5.1 No candidate shall be permitted to sit an examination unless he/she has satisfactorily attended two-thirds of the prescribed course of study.
- 5.2 For purposes of these regulations, field practice (Attachment) shall be deemed to be part of the second year.



5.3 All examination procedures shall be governed by the following:

- (i) Each course examination shall be examined out of a total of 100%.
- (ii) The pass mark in each course examination shall be 50% and graded as follows:-

70-100%	=	Distinction
60-69%	=	Credit
50-59%	=	Pass
49% and below	=	FAIL

- (iii) Written examination in each course shall be by a 1 x 2 hour paper and shall constitute 70%.
- (iv) The Continuous Assessment Tests (CATs) shall constitute the remaining 30% which shall be divided as follows: - written CATs /term papers 20% and practical /field trip reports 10%.
- (v) Field Practice/Attachment shall be examined by a written report. The grades shall be used in the degree classification. Evaluation of the students' performance while in the field shall constitute field assessment and shall contribute 30% of the end of semester examination while the

written report shall contribute 70% of the end of semester examination.

- (vi) The Project in this context shall mean a computer system development work undertaken by a candidate.
- (vii) A candidate who fails to attain the pass mark in one third of the course units taken in any academic year shall be required to repeat the academic year of study. Candidates who repeat the year shall sit examinations in failed courses only. Candidates shall have the option to repeat the year externally, whereby they sit CATs and final examination in the failed courses without attending classes.
- (viii) A candidate who fails to attain the pass mark in more than one third of the course units taken in any year shall on recommendation of the School Board and approval by Senate be discontinued from the degree programme.
- (ix) Supplementary examinations shall be marked out of 100% but the pass grade shall be recorded as 50%.
- (x) A repeating candidate who fails to attain the pass mark in any of the failed courses shall, on recommendation of the School Board

and approval by Senate, be discontinued from the degree programme.

- (xi) In any year, a candidate who fails to attain the pass mark in four course units or less may on recommendation of the School Board and approval by Senate be allowed to sit supplementary examinations in the failed courses within three months after official release of results.

5.4 The Diploma of Information Technology shall be:-

- (a) Awarded to candidates who have completed and passed examinations in all courses of study including Field Practice/ Industrial Attachment.
- (b) Based on the average score of all examinations of courses taken in the entire course duration.
- (c) Classified into Distinction, Credit and Pass.

5.5 In arriving at the decision as to the diploma classification for each candidate, the School Board of Examiners shall consider, while observing regulation 5.4(c) above, the overall mean mark obtained by the candidate and shall apply the principle that a mean score of:-

70-100%	-	Distinction
60-69%	-	Credit
50-59%	-	Pass

## 6 Study Intermission

A student may intermit studies at any time, for good course conveyed in writing to the Academic Registrar, and may resume later after duly notifying the Academic Registrar. During the entire period of intermission the student shall be required to keep his/her registration current by paying the prescribed registration charges.

## 7 Course Outline

### Year 1 Semester 1

DIT 0101	Computer Fundamentals
DIT 0103	Introduction to Database
DIT 0105	Structured Programming Using C
DIT 0107	Computer System Support
DIT 0109	Computer Applications
LAS 001	Communication Skills
DIT 0113	System Analysis and Design

### Semester 2

DIT 0102	Digital Electronics I
DIT 0104	Structured programming Using C++
DIT 0106	Object Oriented Programming Using Java I
DIT 0108	Introduction to Networking
DIT 0110	Introduction to Financial Accounting
DIT 0112	Database Management Systems
LAS 003	Gender and HIV/AIDS

### Year 2

In year two, a student selects an area of specialization as below.

### Areas of Specialization Programming and Web Design Semester 1

DIT 0200	Project
DIT 0201	Information System Management
DIT 0203	Mobile Programming
DIT 0205	Web-based programming I
DIT 0207	Software Engineering
DIT 0209	E-Commerce
DIT 0211	Interface Programming
DIT 0250	Industrial Attachment (8 weeks)

### Semester 2

DIT 0200	Project
DIT 0202	Quantitative Techniques
DIT 0204	Entrepreneurship Skills
DIT 0206	Network Administration
DIT 0208	Web based programming II
DIT 0210	Object Oriented Programming using Java II

### Technical Support and Management Semester 1

DIT 0213	Computer Architecture I
DIT 0215	Operating Systems I
DIT 0217	Digital Electronics II
DIT 0219	Fundamentals of Data communication
DIT 0221	Advanced Computer System Support
DIT 0200	Project
DIT 0250	Industrial Attachment (8 weeks)

### Semester 2

DIT 0200	Project
DIT 0202	Quantitative Techniques
DIT 0204	Entrepreneurship Skills
DIT 0206	Network Administration
DIT 0214	Computer Architecture II
DIT 0216	Operating System II

### Publishing Design and Multi-Media

#### Semester 1

DIT 0200	Project
DIT 0201	Information Systems Management
DIT 0205	Web based Programming I
DIT 0223	Desktop Photography
DIT 0225	Computer Aided Design
DIT 0227	Computer Graphics
DIT 0229	Desktop Publishing
<b>DIT 0250</b>	<b>Industrial Attachment (8 weeks)</b>

#### Semester 2

DIT 0200	Project
DIT 0202	Quantitative Techniques
DIT 0204	Entrepreneurship Skills
DIT 0208	Web based Programming II
DIT 0212	Multimedia Applications
DIT 0218	Video Editing

### TVET PROGRAMMES

These programmes are examined by the Kenya National Examination Council.

### DIPLOMA IN INFORMATION TECHNOLOGY

#### 1 Introduction

This course is divided into three modules. Each module is terminal in nature. The course is aimed at providing the trainees with knowledge, skills and attitudes which will enable them to perform systems analysis, system design, software development tasks and administrative duties.

Module I is designed to enable the trainee become a computer operator with skills and knowledge in Operating systems, Computer Application packages and Information Systems.

Module II is designed to enable the trainee become a Computer Programmer and System analyst with skills and knowledge in Entrepreneurship Education and relevant Mathematics.

Module III is designed to enable the trainee become a System Administrator with skills and knowledge to administer various Computer Networks and management of Human Resources.

#### 1.1 General Objectives

At the end of the course, the trainee should be able to:

- (a) Operate and use computer and their peripherals devices

- (b) Acquire knowledge and skill of software design and development
- (c) Use computer software to solve management problems
- (d) Appreciate the role of Information Technology in socio-economic development.
- (e) Apply management skills in day to day activities in an organization
- (f) Acquire knowledge and skills in systems analysis and design
- (g) Apply entrepreneurial skills in Information Technology development

### 1.2 Duration of the Course

The course is designed to have a duration of 2970 hours. The course is organized in three modules. Each module takes three terms.

The pattern of attendance is left to the discretion of the institution (i.e. full time, part time)

### 2 Entry Requirements

Pass in Kenya Certificate of Secondary Education (KCSE) with an average grade of C-.

### 3 Course Outline

#### MODULE I

1. Introduction to Computer and Principles of Operating Systems
2. Computer Applications
3. Information Systems Management
4. Communications skills
5. Social Studies

#### MODULE II

1. Systems Analysis and Design
2. Programming
3. Entrepreneurship Education
4. Mathematics

#### MODULE III

1. Quantitative Methods
2. Principles and Practice of Management
3. Data Communications
4. Project

**Library**

## 1 INTRODUCTION

The library exists to support learning and research for students and staff and to the wider community for social responsibility involvement.

The library is equipped with information materials in the following disciplines,

- (a) Earth Sciences
- (b) Water Resources and Technology
- (c) Information and Communication Technology
- (d) Agriculture and Veterinary Sciences
- (e) Environmental and Natural Resources Management
- (f) Humanities and Social Sciences
- (g) Business and Economics
- (h) Engineering and Technology
- (i) Pure and Applied Sciences

## 2 LIBRARY SERVICES

### (a) Collection Development

This is the department that is concerned with acquisition and processing of print and non-print information materials. The collection of the materials is a combined effort of proposals of materials by members of faculty, students and Library staff. The collection development

policy is sensitive to acquisition of information materials that are current and selection of a state of the art information material

### (b) User Services

This section deals with the circulation of information materials which includes borrowing, reserving, holding, charging and discharging of information resources. The departments mandate is to make sure that the information resources are fairly available to users. The department also ensures that the clients are made aware of available information materials and services through a Current Awareness Services.

### (c) Digital Library

Its functions are to provide information materials and services that are in electronic form

With the changing world where information has become one of the basic need and with the at the rate at which new information is being produced as a result of Information Technology growth, For libraries to keep up to date with information, the digital library is serving as a current information alternative. It is also for access remote purposes because of e-learning and distance learning to help in access of the library without having to actually go to the library. The section has two sub-sections namely:

## Library

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### The Electronics Services

### The Audiovisuals Section

Online Journals (Link to Online Journal Resources)

- (i) Access to Global Online Research in Agriculture (AGORA)
- (ii) Online Access to Research in the Environment (OARE)
- (iii) The Essential Electronic Agricultural Library (TEEAL)
- (iv) Users can also search and download past examination papers.
- (v) Convectional Web Search and Internet Browsing

The digital library also offers our clients access terminals for internet browsing.

### E-mail Accounts Management

ICT Training and Hands-On Assistance to Users. The digital library also endeavors to strengthen the users skills to enable them exploit to the maximum the electronic information resources available. To this end, the department offers hands on training to help users in retrieval of information material.

### 3 PERIODICALS AND SPECIAL COLLECTION SECTION

This section provides the users with access to serial publications such as the paper journals, newspaper, magazines and Government Publications.

### 4 REPROGRAPHY SECTION

The library provides photocopy and printing services.

### 5 GENERAL LIBRARY RULES

- (a) Borrowing is restricted to registered members only.
- (b) Library members are responsible for loss or damage of library materials in their possession (or borrowed under their accounts). They will be required to pay for loss or damage at a cost to be determined.
- (c) Library materials are not to be taken out of the Library unless they are properly issued.
- (d) Marking defacing or mutilating of any library material(s) is prohibited.
- (e) Most of the books in the library can be borrowed but Reference books, journals etc. may only be taken out of the library with authority of the relevant head of section.



- (f) Loaned items may not be transferred from one borrower to another but must be returned to the library for re-issuing.
- (g) The University ID must be produced when borrowing and returning Library items.

## **6 LOANING POLICY**

- (a) Registered members can borrow materials as indicated:
- (b) Undergraduates: 4 Books for 2 weeks
- (c) Diploma/Certificate: 3 Books for 2 weeks
- (d) Academic Staff: 5 Books for 1 month
- (e) Non Academic staff : 2 Books for 2 weeks

## **7 CLEARANCE**

All Registered members of the Library MUST clear with the University Library at the expiry of their Membership.

## **8 COPYRIGHT**

There is a copyright protection law on most of the Library materials. Deliberate infringement on this law e.g. unauthorized copying is a criminal offence. All users of electronic information resources must abide by the terms of the appropriate licenses. However, Permissible copying limits as per Copyright Act may be made for academic purposes. All users of Library materials must observe these limits in library premises or elsewhere.

# Staff List

## ADMINISTRATION

### Vice-Chancellor

Prof. Geoffrey M. Muluvi, B.Sc. (Moi), MBA (ESAMI), Ph.D. (Dundee).

### Deputy Vice-Chancellor (Academic, Research and Student Affairs)

Prof. Zipporah Ng'ang'a, B.Sc., M.Sc. (Nairobi), Ph.D (Kenyatta), EMBA (JKUAT)

### Deputy Vice-Chancellor (Administration and Human Resource Management)

Prof. Dickson M. Nyariki, B.Sc. (Nairobi), M.Sc. (Nairobi), Ph.D. (Reading)

### Deputy Vice-Chancellor (Finance, Planning and Development)

Prof. Reuben M. Muasya, B.Sc. (Baraton), M.Phil. (Moi), Ph.D. (Wagenigen)

### Registrar (Academic and Student Affairs)

Dr. John F. Koga, B.Ed. (Nairobi), M.Sc. (Kenyatta), Ph.D. (Leeds).

### Planning and Development Registrar

Dr. Joseph K. Metet, B.Sc. (Iowa), M.Ed. (Washington), Ed.D. (Bristol).

### Administration and Human Resource Management Registrar

Prof. Mary W. Mburu, B.Sc. (Nairobi), M.Sc. (California), Ph.D. (Reading)

### Finance Officer

Mr. Lawrence M. Bokoro, BCom., MBA (Kenyatta), CPA (K), CPS (K)

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## OFFICE OF THE VICE-CHANCELLOR

### Senior Administrative Assistant

Ms. Fiona N. Micheni, B.Ed. (Kenyatta)

Mr. Collins Onsembe, B.Sc. (Kenyatta)

Mr. Alfred Mwenda, Dip. (Kabete TTI), BBA (KEMU)

### Media Technician

Ms. Lucy N. Machoya Dip. (Media Techniques, Magenta Training Institute)

\*\*\*\*\*

## Staff List

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### **ACADEMIC, RESEARCH AND STUDENT AFFAIRS DIVISION**

#### **Academic and Students Affairs Registrar's Office**

#### **SENATE AFFAIRS Deputy Registrar**

Mr. Lucas W. Kimile, B.A. (Nairobi), Dip. (HRM) (KIM), EMBA (Moi)

#### **ADMISSIONS AND STUDENT REGISTRY SECTION**

##### **Administrative Assistant**

Ms. Ann Kinya Munyai, BA.(Moi)  
Ms. Salome Syeke Mutie, BA.(Nairobi)

#### **TEACHING PROGRAMMES SECTION**

##### **Administrative Assistant**

Ms. Caroline Omoto, BBIT (Limkonkwing)

#### **EXAMINATIONS SECTION**

##### **Senior Administrative Assistant**

Ms. Lydia W. Ndung'u, B.Ed. (Kenyatta)

##### **Administrative Assistant**

Mr. Bernard Nzuve, B.Econ (Nairobi)

\*\*\*\*\*

#### **UNIVERSITY LIBRARY**

##### **University Librarian**

Ms. Nduku Charles, BLIS. (Lib.), MLIS. (Kenyatta) A.g

##### **Senior Library Assistant**

Ms. Mary M. Kimatu, BLIS. (Lib) (Kenyatta)

##### **Library Assistants**

Ms. Janet M. Mbwika, Dip. (KTTC)  
Mr. Dominic Maluki Mwaniki, Dip. Lib (Nairobi)  
Ms. Sarah Mukoya Olengo, Dip. Lib (KNEC)  
Mr. Peter Mwenda Macharia, Dip. Lib (Kenya Polytechnic)

##### **Library Attendants**

Mr. Matheaus M. Nzuki (KNEC)  
Mr. Jonathan Certificate in Lib. (IUPS) Former (Inorero)  
Mr. Alex Mutisya Certificate in Lib. (IUPS) Former (Inorero)  
Mr. Jacinta Kanini Certificate in Lib. (KNEC)

\*\*\*\*\*

## **DEAN OF STUDENTS OFFICE**

### **Dean of Students**

Dr. Eliud M. Muli, B.Sc. (Kenyatta), M.Sc. (Kenyatta), Ph.D. (Kenyatta)

### **Associate Dean of Students**

Ms. Felista Muriu, B.Env., M. Env. (Kenyatta) A.g

### **Students Counsellor**

Ms. Caroline M. Mutua, B. Psychology (Nairobi)  
Ms. Elizabeth Mbithi, B.Ed. (Moi), CPS (Part I)

### **Administrative Assistant**

Mr. Apos Lang'at, B.Com. (Kabarak)

## **Sports and Games Department**

### **Games Officer**

Mr. Johnstone K. Ndaro, B.Ed. (Kenyatta)

### **Games Assistant**

Mr. Kevin A. Otinya, Dip. (Kenyatta)

\*\*\*\*\*

## **ADMINISTRATION AND HUMAN RESOURCE MANAGEMENT DIVISION**

### **Administration and Human Resource Management Registrar's Office**

## **HUMAN RESOURCE & RECRUITMENT**

### **Assistant Registrar**

Mr. Alfred B. Mtawali B.A., (Nairobi), PGD MC (Nairobi)

### **Senior Administrative Assistant**

Mr. Morris Nzomoi, B.A. (Nairobi)

### **Administrative Assistants**

Ms. Mary Muimi B.A. (Daystar)  
Ms. Nancy A. Mbewa, B.HRM (Makerere)

### **Assistant Registry Supervisor**

Mr. Enock O. Orechi, Dip. in Archives & Records Mgt (KPUC), Dip. in HRM (Nairobi)

## Staff List

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### LEGAL OFFICE

#### Legal Officer

Ms. Robai M. Shiakhutsa, L.L.B (Nairobi), PGD . (KSL)

### CENTRAL SERVICES

#### Senior Administrative Assistant

Mr. Mavisi Kamadi M.K Imbwaga, Dip.(Laikipia TTC),MBA(IOTA),Dip.HRM (KIM),CPS (K)

### HEALTH SERVICES

#### Clinical Officer

Mr. Moses Musembi, Dip. (KMTC)

#### Nursing Officer

Ms. Irene K. Munyao, Dip. KRCHN (KMTC)

#### Technologists

Mr. Henry M. Limboro, Dip in Pharmacy (KMTC)  
Mr. Gabriel M. Munyalo, Dip in Pharmacy (KPUC)  
Mr. Cornelius Musyoka, Dip.(KMTC), B.Sc (KEMU)

### TRANSPORT SECTION

#### Transport Officer

Mr. Boniface M. Kawai, Dip.Tech. Ed. (KTTC),  
CPS (Section III)

### SECURITY SECTION

#### Senior Security Officer

Mr. Isaiah E. Maingi, Dip. Adult Educ, Mgt Dvt (KIA), ATS II

#### Investigator

Mr. Kennedy Mutukaa, Dip. Security Mgt (KICJ)

\*\*\*\*\*

### FINANCE, PLANNING AND DEVELOPMENT DIVISION

### FINANCE DEPARTMENT

#### EXPENDITURE

#### Deputy Finance Officer

Mr. Edward M. Kitati, B.Sc.,PGD.,M.Sc. (Nairobi), Cert. (Banking), CPA (K), AASK

#### Accountant Assistants

Mr. Raphael Mutiso, CPA (Part III)  
Mr. Charles Mutinda, CPA (Section IV)

### INCOME AND GRANTS

#### Senior Accountant

Mr. Moffat K. Njoroge, B.Com. (Kenyatta), MBA (CUEA), CPA (K).

### **Assistant Accountants**

Mr. Fidelis M. Katumo B.COM (Catholic)

### **Accounts Assistants**

Ms. Roselyne M. Nzuve, CPA (K) (KASNEB)

Ms. Fidelis N. Mutua, CPA (K) (Strathmore)

Ms. Risper K. Cheserek, CPA (Part II)

### **INTERNAL AUDIT SECTION**

#### **Internal Auditor**

Ms. Albina K. Meru, BBM (Moi), CPA (K), MBA (SEKU)

#### **Audit Assistants**

Ms. Miriam W. Mutinda, CPA (K)

Ms. Marylene Waweru, B.Sc. (JKUAT)

### **PROCUREMENT DEPARTMENT**

#### **Procurement Officer**

Mr. Henry Maithya, B.A. (CUEA), Dip. Supplies

Management (KNEC), MBA (SEKU)

#### **Procurement Assistants**

Mr. Antony M. Mutua, BBM (Moi)

Mr. David M. Ndunda, Dip. (KIM), BBM (Moi)

Ms. Stella Kimani, Dip. (Machakos.TTI), CPA Section I

Mr. Renson Mwambegu, Dip. CIPS(UK)

Mr. Nicholas K. Ng'ota, Dip. (Skytech Aviation Coll)

Mr. Jeremiah J. Kang'ethe, Dip. (Matuga Dvt Inst)

### **PLANNING AND DEVELOPMENT DEPARTMENT**

#### **Clerk of Works**

Eng. Jackson M. Munuve, B.Sc. (Nairobi)

#### **Maintenance Section**

Mr. Boniface K. Mwangangi, Dip. in Build. (Ramogi Advance. Institute of Science)

\*\*\*\*\*

### **CAMPUSES**

#### **MACHAKOS TOWN CAMPUS**

##### **Director**

Ms. Regina W. Wambua, B.Ed., MBA (Kenyatta)

#### **KITUI TOWN CAMPUS**

##### **Director**

Dr. Jonathan M. Mwanja, B.Ed. (Kenyatta), M.Ed. (Egerton), Ph.D (Dar es Salaam)

## Staff List

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### **Administrative Assistant**

Mr. Harrison Munuve, B.Sc. (Nairobi)

### **MTITO ANDEI CAMPUS**

#### **Director**

Dr. Matheaus K. Kauti, B.A., M.A. (Nairobi), Ph.D. (Tohoku)

### **WOTE CAMPUS**

#### **Director**

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### **Administrative Assistant**

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### **NAIROBI CAMPUS**

#### **Director**

Prof. Dorothy N. Mutisya, B.Ed. (Nairobi), M.A., Ph.D. (Kenyatta)

### **Senior Administrative Assistant**

Mr. Oscar Moseti, B.A. (Nairobi)

### **TALA CAMPUS**

#### **Coordinator**

Dr. Redempta Maithya, B.Ed. (Kenyatta), M.Ed. (Kenyatta), Ph.D. (UNISA)

### **MWINGI CAMPUS**

Coordinator

Ms. Florence N. Kioko, B.A. (Nairobi)

\*\*\*\*\*

### **DIRECTORATES**

### **BOARD OF POSTGRADUATE STUDIES**

#### **Director**

Prof. Cornelius Wanjala, B.Sc., M.Sc. (Nairobi), Ph.D. (Botswana)

### **Senior Administrative Assistant**

Ms. Christine Kwamboka B.A. (Kampala)



## **DIRECTORATE OF LINKAGES AND INTERNATIONAL PROGRAMMES**

### **Director**

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## **DIRECTORATE OF INFORMATION AND COMMUNICATION TECHNOLOGY**

### **Director**

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Mr. Tonny M. Kimanzi, HND (Computer Engineering and Networking) (Mombasa Polytechnic)

Mr. Stephen Maithya, Dip in IT (Infotech Coll Nbi)

Mr. Alex M. Wambua, Advance Dip(RICATTI)

## **DIRECTORATE OF PERFORMANCE CONTRACTING AND QMS**

### **Director**

Mr. Casper Shikali, B.Ed.(Maseno), M.Sc.(Nairobi)

### **Administrative Assistant**

Ms. Rose Musyimi, B.A. (KU) CIPS (Multimedia Univ. College), CPA (NCCK).

### **Technologist**

Mr. David Mutuvi Muli, B.Sc (Mysore), PGDE (Nairobi)

## **DIRECTORATE OF RESEARCH, INNOVATIONS AND TECHNOLOGY**

Dr. Onesmus Maweu, B.Sc (Panjab), M.Sc.(Allahabad), Ph.D(Egerton)

## **DIRECTORATE OF CATERING AND ACCOMMODATION**

Dr. Patricia N. Muendo, B.Sc., M.Sc. (Nairobi), Ph.D. (Wageningen)

### **Senior Catering Officer**

Ms. Florence Kanini Kitwa, Dip. , Higher Dip, CAM (Kenya Polytechnic)

### **Cateress**

Ms. Christine Malondo Wambua, Dip. CAM (Kenya Polytechnic), B.HHM (Moi)

### **Assistant Catering Officers**

Ms. Rose Muthami, Dip. Catering and Accommodation Management (Kenya Polytechnic)

Ms. Rabella Tunya Dip. Institutional Management Food & Beverage (KTTC),

## Staff List

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### Halls Officers

Ms. Stacy Mutuku, B.A. (Moi), MBA (SEKU)

### House Keeper

Ms. Anuciata S. Mutisya, Dip. in Leisure, Tourism & Hotel Mgt (Kampala Uni.)

\*\*\*\*\*

## SCHOOL OF AGRICULTURE AND VETERINARY SCIENCES

### Dean, School of Agriculture and Veterinary Sciences

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