

**SOKOINE UNIVERSITY OF  
AGRICULTURE**



**APPLICATIONS FOR ADMISSION INTO HIGHER DEGREES**

Applications are hereby invited for admission to Higher Degrees at SUA for the academic year 2010/2011. Candidates for PhD may apply and be admitted at anytime of the year. Candidates for Masters' Degree programmes are admitted once every year for an academic year that starts in September of each year. The deadline for this round of applications for Masters Degree programmes will be the 15<sup>th</sup> March, 2010. Successful candidates will be informed by June, 2010 and will be expected to be ready to embark on studies in September, 2010. Candidates meeting the prescribed minimum qualifications are invited to apply for admission. The following are the Masters Degrees programmes tenable at Sokoine University of Agriculture (SUA).

**1. MASTER DEGREE PROGRAMMES**

**1.1 FACULTY OF AGRICULTURE**

**1.1.1 Master of Science in Crop Science (MSc. Crop Science)**

The programme offers training in Agronomy, Physiology, Crop Improvement, Crop Protection, Horticulture, Biotechnology and Seed technology. It is designed to equip graduates with knowledge and skills in Crop Science with emphasis in research, entrepreneurship, extension and integration of basic and applied knowledge. Eligible candidates should be holders of a degree in Agriculture General, Horticulture or Agronomy.

**1.1.2 Master of Science in Agricultural Education & Extension (MSc. Agric. Educ. & Ext.)**

The Programme specializes in Rural Sociology, Agricultural Extension, Administration Management, Adult and Non-formal Education, Survey Methods and Comparative Extension Systems. It is designed to train Agricultural Officers in planning and management of Agricultural projects and extension services and Agricultural Educators for planning and curriculum development and execution.

**1.1.3 Master of Science in Agricultural Economics (MSc. Agric. Econ.)**

Training under this programme provides opportunity for specialization in Farm Management and Production Economics, Agricultural Marketing, Food and Agricultural Policy Analysis, Development and Planning and Resource Economics.

**1.1.4 Master of Business Administration (Agribusiness): (MBA (Agribusiness))**

The programme is conducted through course work and an internship leading to examinable research paper. It is designed to develop professionals equipped with managerial and administrative skills and knowledge in agricultural related businesses including marketing, management, finance, trading and general business administration. Candidates lacking in agricultural and related disciplines shall be required to take prescribed courses in agricultural sciences as core courses.

#### **1.1.5 Master of Business Administration (Evening Programme)**

The programme is designed to develop professionals possessing varied backgrounds, to acquire knowledge and skills of business. It is a comprehensive programme packaged into seven modules, i.e., Basic Theory; Quantitative module, Economics and Management; Marketing and Entrepreneurship; Finance and Accounting; Agribusiness; and Research Paper/dissertation. Teaching times are: 5.00 pm to 9.00 pm for week days and 8.30 am to 12.30 pm for Saturdays.

#### **1.1.6 Master of Science in Agricultural and Applied Economics (MSc. Agric. & Appl. Econ.)**

The programme equips professionals with knowledge and skills essential for transforming the agro-food sectors and rural economies of Eastern, Central and Southern Africa in an environmentally sustainable fashion. The professionals will be capable to address the challenges posed by far reaching changes in global and local economies, technology, and marketing by adapting the advanced knowledge and methods to the particular institutional, political and economic circumstance of the region.

#### **1.1.7 Postgraduate Diploma in Agricultural Economics**

The main objective of the programme is to orient graduates from various disciplines to appreciate and apply economic principles and tools of economic analysis. The programme will also help to improve the position of non-economic graduates in pursuing further studies in economics and related studies.

#### **1.1.8 Master of Science in Agricultural Engineering (MSc. Agric. Engineering)**

The programme offers training in Land and Water Planning, Irrigation and Storage, Agricultural Mechanization, Crop processing and Engineering for Livestock Products.

#### **1.1.9 Master of Science in Irrigation Engineering and Management (MSc. Irrig. Engineering)**

This programme consists of specialized studies encompassing Irrigation Systems, Drainage and Land Reclamation, Rain Water Harvesting, Soil Plant Relations, Business Studies. The programme is open to candidates with background in Agricultural, Civil (water resources), Environmental Engineering and hydrology.

**1.1.10 Master of Science in Land Use Planning and Management (MSc. Land Use Plan. & Mgt.)**

The programme offers training encompassing Soil Genesis, Survey and Land Evaluation, Soil and Water Conservation, Principles of Land Use Planning, GIS, Remote Sensing and Geomorphology. The programme is open to applicants with training in Soil Science, Agriculture, Agricultural Engineering, Range Management, Physical Geograpghy, Forestry and Environmental Science.

**1.1.11 Master of Science in Soil Science and Land Management (MSc. Soil Sci. & Land Mgt.)**

This is a training programme in Land Resources Inventory, Soil and Water Resource Management, Soil Fertility, Evaluation and Management, Soil Physics and Agricultural Meteorology, Soil Chemistry and Clay Mineralogy, Soil Microbiology and Biochemistry, Plant Nutrition and Environment Pollution.

**1.1.12 Master of Science in Tropical Animal Production (MSc. Trop. Anim. Production)**

Encompasses training in Animal Breeding, Animal Nutrition, Animal Physiology, Range and Pasture Management, Animal Production, Dairy Technology and Meat Science. The programme puts emphasis on the new frontiers of knowledge such as Biotechnology, genetic engineering and computer application.

**1.1.13 Master of Science in Food Science (MSc. Food Sci.)**

The programme offers training in Food Chemistry, Food Microbiology, Food Biotechnology, Food Processing and Nutrition, Technology of Specific Food Products, Food Hygiene, Quality Control and Legislation, Food Packaging, Transportation and Marketing. Eligible candidates should be holders of a degree in Food Science, Food technology and Nutrition, Chemical and Process Engineering and related fields.

**1.1.14 Master of Science in Human Nutrition (MSc. Human Nutrition)**

Major areas of study include; Body Composition and Energy Balance, Nutritional Epidemiology, Nutritional Anthropology, Nutrition and Diseases, Food Security, Maternal and Child Nutrition, Community Nutrition Assessment, Micro-nutrient Nutrition and Nutritional Biochemistry. Graduates of the programme are expected to undertake advanced research and planning for implementation of nutrition improvement at all levels.

**1.2 FACULTY OF FORESTRY AND NATURE CONSERVATION**

### **1.2.1 Master of Science in Forestry (MSc. Forestry)**

The programme is designed to train professionals in the management of forest resources and wood based industries, training and research institutions. It offers specializations in Forest Biology, Forest Economics, Mensuration and Management, Forest Engineering Technology, Wood and Non Wood Products Utilization.

### **1.2.2 Master of Science in Management of Natural Resources for Sustainable Agriculture (MSc. MNRSA)**

This programme offers training in holistic approach in Natural Resources Management, Conservation Biology, Farming Systems Analysis, Social Anthropology, Statistical Analysis and Computer Science. Candidates eligible for admission to this programme shall hold University degrees from any discipline of study as stipulated under minimum general admission requirements.

### **1.2.3 Master of Science in Wildlife Management (MSc. Wildlife Management)**

The programme trains professionals in the management and administration of wildlife resources. It encompasses subjects in Wildlife resource assessment, management of protected areas, care, handling and transportation of wildlife, economics of wildlife as an enterprise, ecology and conservation practices. Eligible candidates should hold a degree in Wildlife Management, Veterinary Medicine and allied biological sciences.

## **1.3 FACULTY OF VETERINARY MEDICINE**

### **1.3.1 Master of Veterinary Medicine (MVM)**

The programme offers specializations in the fields of Veterinary Science including Anatomy, Microbiology, Parasitology, Veterinary Medicine, Public Health, Pathology, Physiology, Biochemistry, Pharmacology and Toxicology, Surgery, Obstetrics and Reproduction. It is designed to train graduates, for professional positions in all disciplines of Veterinary Science.

### **1.3.2 Master of Preventive Veterinary Medicine (MPVM)**

This is a programme by coursework and a limited research assignment leading to production of an examinable research paper. The course is a comprehensive programme for Veterinarians wishing to specialize in the various aspects of Preventive Veterinary Medicine with particular emphasis to Animal Health challenges of Sub Saharan Africa. The objective is to equip veterinarians with disease control strategies including herd health programmes. Eligible candidates are holders of Bachelor of Veterinary Medicine.

### **1.3.3 Master of Science in Anatomy (MSc. Anatomy)**

The programme is designed to train anatomists required to serve in veterinary, medical, wildlife and other biomedical settings. These will be

exposed to the study of structural biology, anatomical techniques and recent advances in anatomy. Eligible candidates must have University Degree in Veterinary Medicine/Science with an average of B grade or above in morphology related subjects or Medicine, Dental or Nursing or Honours degree in Biological Sciences; Wildlife, or Zoology or Advanced diploma (First Class) in Anatomy, Biotechnology, Biology, Zoology or other qualifications in life sciences or biomedical discipline from recognized institution.

#### **1.3.4 Master of Science in Applied Cell Biology (MSc. Appl. Cell Biol.)**

The programme offers high technology practical knowledge required in development and manufacture of biological products through cell bioengineering for improvement of human life and to stimulate scientific and economic development. Admission qualifications include: University Degree in Biological sciences, Medicine, Dental or Nursing from a recognized institution with a credit or distinction in at least 4 subjects related to cell biology or advanced diploma in Biochemistry, Biotechnology, Biology, Chemistry, Pharmacy, or other qualifications in health sciences or biomedical discipline, from a recognized institution.

#### **1.3.5 Master of Science in Comparative Animal Physiology (MSc. Comp. Animal Physiol.)**

The programme focuses on the scientific study of function, morphology, regulation, intercellular communication and dynamics within vertebrates with comparative applications to Homo sapiens and its relatives. Eligible candidates are holders of University Degree in Biological sciences, Medicine, Dental or Nursing from recognized institution with a credit or distinction in Physiology, Anatomy or at least 2 subjects related to Physiology or advanced diploma in Physiology, Wildlife, Biology, Chemistry, Pharmacy, or other qualifications in health sciences or biomedical disciplines.

#### **1.3.6 Master of Science in Biochemistry (MSc. Biochem.)**

The programme aims impart skills in integrating knowledge of biosciences at molecular level, analyzing the molecular mechanisms in humans and other mammals and identifying economic biochemistry uses. Applicants should hold a University Degree in Biological sciences, Medicine, Dental or Nursing with a Credit or distinction in at least 4 subjects related to biochemistry or Advanced Diploma in Biochemistry, Biotechnology, Biology, Chemistry, Pharmacy or other qualifications in health sciences or biomedical discipline.

#### **1.3.7 Master of Science in Clinical Chemistry (MSc. Clin. Chem.)**

The objective of the degree programme is to enable candidates to integrate and apply clinical chemistry expertise to problem identification and solving in society, research and development. Entry qualifications are; University Degree in Veterinary Medicine, Medicine, Dental or Nursing from recognized institutions with a Credit or distinction in at least 4 subjects related to clinical chemistry or Advanced Diploma (First Class) in Laboratory Sciences, Biochemistry, Biotechnology, Biology,

Chemistry, Pharmacy, or other qualifications in health sciences or biomedical disciplines.

**1.3.8 Master of Science in Pharmacology (MSc. Pharm.)**

The training programme encompasses the broad study of drugs, analytical techniques and recent advances and research in pharmacology. Applicants should be holders of Bachelor of Veterinary Medicine, Doctor of Medicine, Pharmacy, Nursing, Laboratory Sciences and Biotechnology from recognized institutions with at least a credit in pharmacology.

**1.3.9 Master of Science in Applied Toxicology (MSc. Appl. Toxicol.)**

The degree programme is designed to produce experts in environmental, eco-, occupational, industrial and regulatory toxicology. Applicants should be holders of Bachelor of Veterinary Medicine, Pharmacy, Nursing or Doctor of Medicine from recognized institutions with at least a credit in pharmacology or toxicology.

**1.3.10 Master of Science in Applied Microbiology (MSc. Appl. Microbiol.)**

The object of this programme is to impart advanced level knowledge in the fields of microbiology. Applicants should be holders of University Degree in biological sciences; Veterinary, Medical, Dental or Nursing Degree with a credit or distinction in at least 4 subjects related to microbiology or Advanced diploma in Microbiology, Biotechnology, Biology, Chemistry, Pharmacy, or other qualifications in health sciences or biomedical disciplines.

**1.3.11 Master of Science in Molecular Biology and Biotechnology (MSc. Mol. Biol. & Biotech.)**

The objective of the programme is to impart competence in molecular biology and biotechnology for better scientific research, disease diagnosis, development of biological products and forensic practices. Eligible applicants are holders of honours Degree in biological sciences; Animal Science, Veterinary, Medical, Dental, Pharmacy, Nursing, Medical laboratory technology or equivalent with a credit or distinction in molecular biology and/or biotechnology.

**1.3.12 Master of Science in Parasitology (MSc. Parasitology)**

This programme focuses on recognition and application of scientific knowledge in understanding the relationship between parasites, hosts, environment and diseases. Applicants should hold University Degree in Veterinary Medicine/Science, Medicine, Dental, Nursing, Wildlife, Zoology with an average of B grade or above in parasitological related subjects or First Class Advanced diploma in Anatomy, Biotechnology, Biology, Zoology or other qualifications in life sciences or biomedical disciplines.

**1.3.13 Master of Science in Public Health and Food Safety (MSc. Public Health and Food Safety)**

This degree programme focuses on imparting competence in food safety analysis, zoonotic diseases, food-borne diseases surveillance, determining disease trends, formulation and implementation of policies and programmes for safeguarding human health. Entry qualifications include; Bachelor's Degree in Veterinary Medicine, Doctor of Medicine or Dentistry with at least a credit in public health or related subjects, an upper Second Class Degree in Nursing, Pharmacy, Food Science and Technology, Home Economics and Human Nutrition or Public Health.

#### **1.3.14 Master of Science in Epidemiology (MSc. Epidemiology)**

The programme is designed to train specialist Epidemiologists in the fields of Veterinary, Medical, Food and Agricultural, wildlife and environmental sciences. Entry qualifications include; a Bachelor's degree of Veterinary Medicine, Doctor of Medicine, Food Science & Technology, Home Economics and Human Nutrition, Environmental Science and Management or other branches of biological sciences with at least a credit in epidemiology, mathematical and/or statistics.

#### **1.3.15 Master of Veterinary Pathology (M. Vet. Path.)**

Training under the programme focuses on imparting advanced knowledge in understanding morphological changes brought about by diseases, skills in diagnosis and their application in research and training. Entry qualifications include possession of Bachelor of Veterinary Medicine degree or the equivalent. In addition, the applicant must have at least a credit in Veterinary Anatomy and Veterinary Pathology.

#### **1.3.16 Master of Science in Clinical Pathology (MSc. Clinical Pathology)**

The programme aims to impart specialized skills to graduates in applying appropriate laboratory tests and make accurate interpretation of results. Eligible candidates are holders of Bachelor of Veterinary Medicine/Science degree or equivalent biomedical or bioveterinary qualification. In addition, the applicant must have at least a credit in Pathology and any two of the following: Physiology, Biochemistry and Microbiology.

#### **1.3.17 Master of Veterinary Surgery (M. Vet. Surg.)**

The programme is designed to train specialist surgeons to cater for a wide range of patients in the fields of Veterinary surgery, animal science and wildlife health. Entry qualifications are a University Degree in Veterinary Medicine or Veterinary Science from recognized institutions with distinction or credit in veterinary surgery.

#### **1.3.18 Master Science in Applied Veterinary Anesthesiology (MSc. Appl. Vet. Anaesth.)**

This programme provide training on the art and practice of anesthesia emplacing on anaesthetizing and re-awakening of patients and on minimizing the physiological impact of surgery or any clinical works or stressful manipulations and re-establishment of homeostasis. Eligible

candidates are holders of a University Degree in Veterinary Medicine or Veterinary Science from recognized institutions with distinction or Credit in Veterinary Surgery, Physiology or Pharmacology.

### **1.3.19 Master of Science in Animal Reproduction and Biotechnology (MSc. Animal Repr. Biotech.)**

Training under the programme encompasses knowledge and understanding of the bases of reproductive biotechnologies, cellular structure and molecular events regulating processes in reproduction, structure and functions of organs of the reproductive system. Eligible applicants should hold a University Degree in Veterinary Medicine or Veterinary Science with credit or above in reproduction related subjects or honours degree in Biological Sciences; Wildlife, Zoology or Advanced diploma (First Class) in Physiology, Biotechnology, Biology, Zoology or other qualifications in life sciences or biomedical discipline.

## **1.4 DEVELOPMENT STUDIES INSTITUTE**

### **Master of Arts in Rural Development (MARD)**

The programme provides training in the analysis of issues in the theory and practice of agricultural and rural development. It offers specialization in the areas of Population and Development, Gender and Development and Political Economy of Agrarian Change. Candidates eligible for admission to this programme shall hold University degrees or equivalent qualifications from any discipline of study as further stipulated under the minimum general admission requirements.

## **2. PhD DEGREE PROGRAMMES**

PhD degree programmes are offered in all Faculties/Institutes. Applications are invited from suitably qualified applicants. Applications for PhD by research only are received throughout the year and studies can commence at any time of the year once admission is granted. PhD programmes by Coursework and Research are advertised and applications received for admission at specific times of the year.

## **3. GENERAL MINIMUM ADMISSION QUALIFICATIONS**

### **3.1 MASTERS DEGREES**

A candidate for admission to the Master's Degree of Sokoine University of Agriculture shall either hold a relevant honours degree (First class or Second Class) of Sokoine University of Agriculture or a qualification from an approved institution of higher learning, deemed to be equivalent to an honours degree of Sokoine University of Agriculture.

- 3.1.1. Candidates who hold unclassified degrees (e.g. BVM) should have a credit or a distinction in the subject of intended Master's degree. Candidates wishing to pursue the Master of Preventive Medicine degree shall be required to have at least a credit in any five subjects of the BVM degree or its equivalent.
- 3.1.2 Candidates with pass degree may also be considered for admission if their undergraduate performance in the proposed subject of study was a B Grade average or above and they have satisfied their relevant Faculty/Institute that they have exhibited Academic potential through extensive field work, subsequent research experience and/or additional training.
- 3.1.3 With the exception of the MPVM and MBA (Agribusiness) which are one year and one and half years degree programmes respectively, all other Masters degrees are tenable for two years for full time students and three years for part time students. In the case of full time students, the first year is for coursework, while the second year is for research and dissertation write up.

### **3.2 PhD DEGREE PROGRAMMES**

- 3.2.1 Applicants for PhD programmes should possess a good Masters degree in the relevant field from a recognized University.

### **4. APPLICATION FORMS**

Application forms can be requested from the undersigned or downloaded from our website: [http://www.suanet.ac.tz/postgraduate studies](http://www.suanet.ac.tz/postgraduate_studies). Such dully-filled forms can be returned physically or mailed to the undersigned not later than 15<sup>th</sup> March, 2010 together with a Money order of Shs.20,000/=( 40\$ for foreigners) as application fee.

In all programmes, female applicants are encouraged to apply.

### **5. SUCCESSFUL APPLICANTS**

Successful applicants will be informed towards the end of June 2009.

For further information, please contact:

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