## BRIEF DESCRIPTION OF THE FACULTY

### **DEPARTMENTS**

The Faculty of Agriculture Environment and Food Systems comprises 5 teaching departments and 2 non-teaching as follows:

## **Teaching units**

- 1 Agricultural Business Development and Economics
- 2 Plant Production Sciences and Technologies
- 3 Livestock Sciences
- 4 Soil Science and Environment
- 5 Agricultural and Biosystems Engineering

#### Non-teaching units

- 1 Agribusiness and Continuing Education Directorate
- 2 Institute of Environment Climate and Sustainable Development

#### **DEPARTMENTAL PROGRAMS**

# 1 DEPARTMENT OF AGRICULTURAL BUSINESS DEVELOPMENT AND ECONOMICS

## A) UNDERGRADUATE PROGRAMS

- 1 Bachelor of Science Hons Degree in Agricultural and Natural Resource Economics
- 2 Bachelor of Science Hons Degree in Agricultural Development and Communication Systems
- 3 Bachelor of Science Hons Degree in Agricultural Informatics
- Bachelor of Science Hons Degree in Value Chain Development and Agricultural Marketing

# B) TAUGHT MASTERS PROGRAMS

- 1 Master of Science Degree in Agricultural Administration Policy and Trade
- 2 Master of Science Degree in Agricultural and Applied Economics
- 3 Master of Science Degree in Agricultural Informatics and Data Analytics

# C) POSTGRADUATE PROGRAMS BY RESEARCH

- 1 Master of Philosophy in Agriculture
- 2 Doctor of Philosophy in Agriculture

# D) RESEARCH GROUPS IN THE DEPARTMENT

1 Agricultural Management Information Systems for Improved Agricultural Growth

## 2 DEPARTMENT OF PLANT PRODUCTION SCIENCES AND TECHNOLOGIES

- A) UNDERGRADUATE PROGRAMS
- 1 Bachelor of Science Hons Degree in Crop Improvement and Seed Systems
- 2 Bachelor of Science Hons Degree in Horticulture and Plantation Sciences
- 3 Bachelor of Science Hons Degree in Plant Production Science & Technology

# B) TAUGHT MASTERS PROGRAMS

- 1 Master of Science Degree in Crop Protection and PostHarvest Technology
- 2 Master of Science Degree in Horticulture
- 3 Master of Science Degree in Insect Science and Food Systems
- 4 Master of Science Degree in Plant Breeding and Biotechnology
- 5 Master of Science Degree in Plant Production Systems Design and Agronomy

## C) POSTGRADUATE PROGRAMS BY RESEARCH

1 Master of Philosophy in Agriculture

- 2 Doctor of Philosophy in Agriculture
- D) RESEARCH GROUPS IN THE DEPARTMENT
- 1 Sustainable Seed and Cropping Systems

## 3 DEPARTMENT OF LIVESTOCK SCIENCES

- A) UNDERGRADUATE PROGRAMS
- 1 BSc Hons Livestock Improvement and Genetic Conservation
- 2 BSc Hons Livestock Production and Nutrition Sciences
- 3 BSc Hons Meat and Dairy Sciences Technology
- 4 BSc Hons Rangeland Science and Livestock Production Ecology
- B) TAUGHT MASTERS PROGRAMS
- 1 MSc Animal Breeding and Biotechnology
- 2 MSc Animal Nutrition and Feed Production Systems
- 3 MSc Dairy Science and Technology
- C) POSTGRADUATE PROGRAMS BY RESEARCH
- 1 Master of Philosophy in Agriculture
- 2 Doctor of Philosophy in Agriculture
- D) RESEARCH GROUPS IN THE DEPARTMENT
- 1 Sustainable Livestock Systems

## 4 DEPARTMENT OF SOIL SCIENCE & ENVIRONMENT

- A) UNDERGRADUATE PROGRAMS
- 1 Bachelor of Science Honours Degree in Soil Science & Land Management (4 years)
- 2 Bachelor of Science Honours Degree in Water & Waste Management Systems (4 years)
- 3 Bachelor of Science Honours Degree in Agricultural & Environmental Monitoring Systems (4 years))
- Bachelor of Science Honours Degree in Climate Science Resilience & Livelihoods (4 years)
- 5 Bachelor of Science Honours Degree in Applied Environmental Sciences & Technology (4 years)
- B) TAUGHT MASTERS PROGRAMS
- 1 Master of Science in Climate Change and Food Systems (2 years)
- 2 Master of Science in Agricultural Chemicals Development and Production Systems (2 years)
- 3 Master of Science in Industrial Ecology and Environmental Management (2 years)
- 4 Master of Science in Soil Fertility and Plant Nutrition (2 years)
- 5 MSc. in Soil Science and Production Ecology (2 years)
- C) POSTGRADUATE PROGRAMS BY RESEARCH
- 1 Master of Philosophy in Agriculture
- 2 Doctor of Philosophy in Agriculture
- D) RESEARCH GROUPS IN THE DEPARTMENT
- 1 Soil Productivity and Agro-systems Development
- 2 Climate Change and Adaptation

# 5 DEPARTMENT OF AGRICULTURAL AND BIOSYSTEMS ENGINEERING

- A) UNDERGRADUATE PROGRAMS (4 YEARS)
- 1 BSc Hons Agricultural Equipment Design and Manufacturing Systems
- 2 BSc Hons Agricultural Processing Plant Design and Systems Engineering
- 3 BSc Hons Food Engineering
- 4 BSc Hons Water Resources and Irrigation Engineering
- B) TAUGHT MASTERS PROGRAMS (2 YEARS)
- 1 MSc Environmental Systems Engineering
- 2 MSc Food Processing Systems and Technology
- 3 MSc Irrigation Systems Engineering
- 4 MSc Agricultural Equipment Manufacturing Systems
- C) POSTGRADUATE PROGRAMS BY RESEARCH (2-4 YEARS)
- 1 Master of Philosophy in Agriculture
- 2 Doctor of Philosophy in Agriculture
- D) RESEARCH GROUPS IN THE DEPARTMENT
- 1 Postharvest Systems and Agroprocessing
- 2 Agricultural Mechanisation
- 3 Agricultural Water Management

## UNIVERSITY OF ZIMBABWE AGRO-INDUSTRIAL PARK

The University of Zimbabwe Agro-Industrial Parks (UZ-AIP) is an arm of the Faculty of Agriculture, Environment and Food Systems:

- That adds value to agricultural commodities by processing and manufacturing them into finished products, which are marketable, usable, storable and/or consumable
- Is an integrated agribusiness model that combines an agro-production unit, an agro-processing unit and a supermarket to capitalize on raw material availability, operational synergies and economies of scale for optimal income generation and supply of goods and services into the economy in line with Education 5.0.
- That aims to achieve sustainable transformation of agricultural value-chains.

The agro-production unit comprises of both crop and livestock enterprises:

- Field crops grown include maize, soya beans, sugar beans, rice
- Horticultural crops (potatoes, cabbages, chillies, tomatoes, broccoli, carrots, onions, pepper, etc.)
- The livestock section comprises of beef cattle, dairy cattle, piggery and poultry enterprises.

The agro-processing unit encompasses a variety of agro-industrial processes such as grain milling, oil processing and bakery, dairy and feed processing, which utilize crop and livestock raw materials from the Agro-production unit.

The UZ-AIP Supermarket is the marketing outlet, which sells fresh and agro-processed products from the Park.

The general objective of the UZ-AIP is to support agro-industrial transformation through demonstrating a model vertically integrated production, processing, and marketing agribusiness entity. It seeks to achieve this through common facility or service centre that offers logistical support, capacity building, business incubation, R&D, and technology transfer under common facilities.

In the context of Education 5.0, the Park:

- Seeks to boost value chain upgrading through product transformation (value addition) and differentiation, supplying the local market with high quality products, creating employment, and developing local SME agribusinesses
- Provides common facilities and services and fosters value-chain linkages that help in enhancing the competitiveness of farmers, SMEs and industries in the Zimbabwe
- Acts as a centre of learning, capacity building, growth and innovation to these entities by supporting their growth through demonstrating a more sustainable development model.