

BSC (HONS) AGRISCIENCE AND TECHNOLOGY (TOP-UP) (MAURITIUS) (A321)

1. CONTEXT AND OBJECTIVES

Context

The changing socio-economic pattern of Mauritius has led to an increasing demand for agricultural produce of good quality. We have to increase production to keep pace with the consumer ever increasing demand for food and at the same time produce quality and safe foods and to be food secure. Agricultural production is now increasingly being characterised by the use of modern technology. It is the Government policy and vision for the future to adopt a technology-based approach to render the local agricultural sector more productive, resource-efficient, service-oriented, sustainable and competitive without compromising the environmental and ethical standards demanded by society.

The further development of agriculture and its related industries is challenging and requires appropriate knowledge, skills and technology concepts to keep pace with the latest technological developments in that sector. This has led to the need for well-trained agricultural scientists who have the technical and practical skills in addition to in-depth knowledge of the science to meet these new challenges facing the Mauritian agriculture.

Objectives

This programme aims to equip and empower graduates with the skills and knowledge to design solutions towards a more sustainable crop and livestock production and enhanced food security in Mauritius. Students will be exposed to the knowledge and application of concepts, tools and techniques in the management of small and medium agribusinesses. With regard to the generic skills, students will have the opportunity to acquire qualities and transferable skills such as numeracy, written and oral communication skills, information retrieval and team working skills necessary for employment.

Career Opportunities

This programme is being run to upgrade knowledge of in-service staff of the various agricultural institutions in Mauritius with a broad spectrum of scientific, technical and managerial skills needed to contribute to the future success of Agriculture. In this way, this programme will also prepare the students in securing long-term food security to reduce imports and sustain the transformation of the agricultural production systems in the island.

2. LEARNING OUTCOMES

- Explain the scientific, economic, environmental and business principles underpinning agricultural productivity and production;
- Identify and evaluate appropriate agricultural techniques in the crop and animal sectors to enhance efficiency of production and secure long-term food security;
- Identify and solve technological problems encountered in current crop and livestock production systems;
- Manage agricultural enterprises and identify new ventures in the agricultural sector;

- Evaluate the wider consequences of agricultural activities and promote sustainable agricultural practices;
- Transfer relevant knowledge, skills and technology concepts to the producers and to support innovation;
- Design, plan and carry out research in the various fields of agriculture;
- Use appropriate scientific and statistical methods and evaluations for decision making in various sectors of agriculture; and
- Demonstrate use of written and oral communication skills and use of online resources.

3. **TEACHING AND LEARNING METHODS**

Modules shall be taught over 10 weeks and shall include 3 hours of contact per week, involve 6 hours of self-study per week and 9 hours of other learning activities per week for each semester. The 30 hours of contact shall include class hours, tutorials and practicals.

This programme is taught through lectures, tutorials, online activities, laboratory and farm practical classes, farm visits and student-led seminars. It will also include self-study learning (e.g., directed learning, student group work, preparation of reports, case studies) and other learning activities (e.g., self-independent learning individual reading, use of the library, online learning, preparing for exams).

4. **ENTRY REQUIREMENTS**

General Requirements

In accordance with General Entry Requirements for Admission to the University for Undergraduate Degrees.

Programme Requirements

A Diploma in Agriculture or related fields or any alternate qualifications acceptable to the University Senate.

5. **PROGRAMME DURATION**

	Normal (Years)	Maximum (Years)
Degree	2	4

6 **MINIMUM LEARNER-CENTRED CREDIT SYSTEM (LCCS) REQUIRED:-**

Minimum and Maximum number of LCCS Credits per Semester:

Minimum 12 LCCS Credits per Year subject to Section 3.4 of the UoM Regulations
Maximum 96 LCCS Credits per Year subject to Section 3.4 of the UoM Regulations

Total Number of LCCS Credits required to earn the award is 92.

7. ASSESSMENT AND DEADLINES

The achievement of the modules learning outcomes will be assessed through a variety of methods (e.g., exams, class tests, reports, field visits). Each module will be assessed over 100 marks (*i.e.* expressed as %) with details as follows (unless otherwise specified).

Assessment will be based on a written examination of 2 - 2½ hours duration, carrying a weighting of 60%, and Continuous Assessment carrying 40% of total marks, except for the module 'Agribusiness Enterprise Development' which will be assessed as follows: 50% exams and 50% continuous assessment (presentation of business plan in front of a panel consisting of a known entrepreneur and a representative of a commercial bank). Continuous Assessment will be based on Class/Laboratory/Field Visits/Case Studies, and /or Assignments, and should include at least one Class Test per module. The 'Scientific Communication' module will be assessed solely by continuous assessment in the form of either a portfolio and/or reports and/or class tests. Assessment of the module AGRI 4009(5) - 'Work Ethics and Culture' will be based on submission of either a report or portfolio, and a minimum of 40% should be attained for satisfactory completion of module.

An overall total of 40% for combined Continuous Assessment and Written Examination components would be required to pass a module, without minimum thresholds within individual Continuous Assessment and Written Examination.

Modules will carry Learner-Centred credits (LCCS) in the range of 2 to 8 except for the dissertation which carries 18 LCCS.

A final year dissertation (8,000 – 12,000 words) should be submitted to the Faculty Registry as per the deadline stated in the latest Regulations for Undergraduate Programmes.

8 LIST OF MODULES

Code	Module Name	Contact Hours (L*/T*/P*)	Self-Study Hours	Other Learning Hours	LCCS Credits
AGRI 3109 Y(5)	Field Experimentation and Sampling Techniques	30	60	90	6
AGRI 3110 Y(5)	Sustainable Pest, Disease and Weed Management	40	80	120	8
AGRI 3111 Y(5)	Agribusiness Enterprise Development	40	80	120	8
AGRI 3112 Y(5)	Sustainable Fruit and Nursery Stock Production	40	80	120	8
AGRI 3113 Y(5)	Sustainable Animal Production	40	80	120	8
AGRI 2261 Y(1)	Scientific Communication	10	20	30	2
AGRI 3132 Y(5)	Agrifood Value Chain Analysis	30	60	90	6
AGRI 4003 Y(5)	Food Safety Management and Post-harvest Technology	40	80	120	8
AGRI 4004 Y(5)	Animal Health Management and Biosecurity	40	80	120	8
AGRI 4005 Y(5)	Sheltered Farming and Soilless Culture	40	80	120	8
AGRI 4006 Y(5)	Irrigation Systems	20	40	60	4
AGRI 4009 Y(5)	Work Ethics and Culture*	15			
AGRI 3000 Y(5)	Project/Dissertation				18
GRAND TOTAL		385	740	1110	92

*Semester 2

9 PROGRAMME PLAN

YEAR 1

Code	Module Name	Contact Hours	LCCS Credits
AGRI 3109 Y(5)	Field Experimentation and Sampling Techniques	30	6
AGRI 3110 Y(5)	Sustainable Pest, Disease and Weed Management	40	8
AGRI 3111 Y(5)	Agribusiness Enterprise Development	40	8
AGRI 3112 Y(5)	Sustainable Fruit and Nursery Stock Production	40	8
AGRI 3113 Y(5)	Sustainable Animal Production	40	8
AGRI 2261 Y(1)	Scientific Communication	10	2
SUB TOTAL		200	40

YEAR 2

<u>Code</u>	<u>Module Name</u>	<u>Contact Hours</u>	<u>LCCS credits</u>
AGRI 3132 Y(5)	Agri-food Value Chain Analysis	30	6
AGRI 4003 Y(5)	Food Safety Management and Post-harvest Technology	40	8
AGRI 4004 Y(5)	Animal Health Management and Biosecurity	40	8
AGRI 4005 Y(5)	Sheltered Farming and Soilless Culture	40	8
AGRI 4006 Y(5)	Irrigation Systems	20	4
AGRI 4009 (5)	Work Ethics and Culture*	15	
AGRI 3000Y(5)	Project		18
SUB TOTAL		180	52

*Semester 2

