BSc (HONS) AGRISCIENCE & TECHNOLOGY (with specialisation in BIOFARMING) (F/T) (A333/15)

1. **OBJECTIVES**

Agricultural production worldwide is increasingly being influenced by the imperative need to match the food requirements of the population with maintenance and improvement of environmental quality. There is a rapidly growing local and global demand for safe and healthy agricultural produce, grown with minimum external chemical inputs. In Mauritius, Government policy and vision is encouraging BioFarming practices with a view to providing its people, and the increasing tourist population with safe foods, grown in accordance with the principles of natural farming, with minimum dependence on synthetic fertilisers, pesticides and plant growth enhancers.

This programme aims to equip students with an understanding of the concept and principles of biofarming, and the scientific skills and knowledge of natural crop and livestock production practices required for graduates to contribute to the development of a biofarming culture in the country.

On successful completion of this programme, learners will be able to:

- Demonstrate knowledge of conventional agricultural practices and their environmental implications;
- Demonstrate knowledge of the concept and principles of biofarming;
- Demonstrate understanding of the practices and techniques of natural crop and livestock production;
- Apply relevant knowledge, skills and technology of biofarming to the farming community and other stakeholders.

2. GENERAL ENTRY REQUIREMENTS

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

3. PROGRAMME REQUIREMENTS

- SC : Credit in Mathematics and Chemistry
- 2 GCE 'A' Level : Passes in any of the following (Agriculture, Physics, Chemistry, Biology, Botany, Zoology, Environmental Studies, and other allied science subjects).

4. **PROGRAMME DURATION**

		Normal (Years)	Maximum (Years)
	Degree	3	5
5.	CREDITS PER YEAR :	Minimum 18 credits Maximum 48 credits	subject to Regulation 4

6. MINIMUM CREDITS REQUIRED FOR THE AWARD OF UNDERGRADUATE DEGREE: 104

BREAKDOWN AS FOLLOWS

	Credits from	
	Core Taught Modules	Project
Degree	95	9

The module Practical Training – AGRI 2000 and the module Scientific Communication – AGRI 2261(1) must be completed satisfactorily for the award of the degree.

Students may exit with a:

- Certificate after having earned 30 credits in core modules.
- Diploma after having earned 60 credits in core modules.

7. Assessment

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 2-3 hour duration, carrying a weighting of 70%, and Continuous Assessment carrying 30% of total marks for AGRI modules. Continuous Assessment will be based on laboratory/field works, and/or assignments, <u>and should include at least 1 class test</u>. Written examinations for all AGRI modules will normally be carried out at the end of the academic year.

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

All students should keep a portfolio of all coursework for their respective programme of studies and same should be made available upon request, to the Faculty/Centre Examination Office. In case students fail to submit the Portfolio to the External Examiners through the Faculty/Centre Examination Office, a penalty of 10% on all Continuous Assessment marks obtained shall apply.

Modules will carry the weightings of 1, 3 or 5 depending on their status (Introductory, Intermediate or Advanced). Weighting for a particular module is indicated within parentheses in the module code. Each module will carry credits in the range of 3 to 6. Project – AGRI 3000Y(5) will carry 9 credits.

Assessment of the module AGRI 2000 - Practical Training will be based on the On-site Supervisor's Evaluation and the Student's Portfolio. For satisfactory completion of the Practical Training, a minimum of 40% should be attained.

Assessment of the modules Scientific Communication (AGRI 2261) (1) and Occupational Safety and Health (AGRI 1100) (1) will be based on continuous assessment of students throughout the module and/or submission of a portfolio. For satisfactory completion of the module, a minimum of 40% should be attained in each.

Students who do not have SC level pass in Biology will be required to follow the module "Structure and Function of Multicellular Organisms and Ecosystems" in the first semester of the first year of the programme of study. Assessment will be based on a Written Examination carrying a weighting of 70%, and Continuous Assessment carrying 30% of total marks. The module carries no credits. For satisfactory completion of the module, a minimum of 40% should be attained, otherwise student will have to retake the module.

8. Submission Deadlines for Dissertation:

- First Draft: by last week day of February of the Academic Year.
- Final Copy: three copies of the dissertation (2 spiral-bound copies and 1 soft copy in a single PDF text file on electronic storage media) should be submitted to the Faculty/Centre Registry and in addition, a soft copy of the dissertation in a single PDF text file should be uploaded on the *"Turnitin" Platform"*, in the final assignment submission link indicated by the Programme/Project Coordinator. All of the above should be submitted not later than the last week day of March of the academic year by 4.00 p.m. at latest.
- Failure to submit the Project/Dissertation through the Turnitin Platform will deem to be unreceivable.

9. List of Modules

CORE MODULES

Code	Module Name	<u>Hr / Yr</u>	<u>Credits</u>
		L+P	
AGRI 1018Y(1)	Agricultural Chemistry and Soil Science	45+60	5
AGRI 1034Y(1)	Animal Production: Principles and Techniques	30+30	3
AGRI 1035Y(1)	Agronomy and Horticultural Crop Production I	45+60	5
AGRI 1047Y(1)	Microbiology and Genetics	60+60	6
AGRI 1064Y(1)	Agrometeorology and Climate Change	45+0	3
AGRI 1071Y(1)	Data Handling and Research Methodology	30+30	3
AGRI 1078Y(1)	Economics for Agricultural Managers	45+0	3
AGRI 1100 (1)	Occupational Safety and Health	15+0	1
AGRI 1000	Structure and Function of Multicellular Organisms	-	-
	and Ecosystems*		
AGRI 2088Y(3)	Biochemistry and Biotechnology	60+60	6
AGRI 2156Y(3)	Agricultural Engineering Principles	60+45	5
AGRI 2092Y(3)	Animal Production and Science I	60+60	6
AGRI 2112Y(3)	Experimental Designs and Sampling Techniques	30+30	3
AGRI 2089Y(3)	Pests, Diseases and Weeds Control	45+60	5
AGRI 2093Y(3)	Botany and Crop Physiology	60+45	5
AGRI 2118Y (3)	Science and Technology of Foods	45+30	4
AGRI 2172Y(5)	Principles of Biofarming	45+0	3
AGRI 2173Y(5)	Economics, Marketing, Management and Extension	45+30	4
	in Biofarming		
AGRI 2261(1)	Scientific Communication	15+0	1
AGRI 2000	Practical Training		
AGRI 3000Y(5)	Project	-	9
AGRI 3148Y(5)	Soil Health and Fertility Management in Biofarming	45+30	4
AGRI 3150Y(5)	Pest Management in Biofarming	45+30	4
AGRI 3151Y(5)	Disease and Weed Management in Biofarming	45+30	4
AGRI 3152Y (5)	Sustainable Technologies for Crop Production	45+30	4
AGRI 3156Y (5)	Bio-Farming for Safe and Sustainable Animal Food	45+30	4
	Production		
AGRI 3157Y(5)	Biofarmed Products, Entrepreneurship and Small	45+30	4
	Business Management		

10. Programme Plan - BSc (Hons) Agriscience and Technology (with Specialisation in Biofarming)

YEAR 1

CORE MODULES			
Code	Module Name	<u>Hr / Yr</u>	Credits
		L+P	
AGRI 1018Y(1)	Agricultural Chemistry and Soil Science	45+60	5
AGRI 1034Y(1)	Animal Production: Principles and Techniques	30+30	3
AGRI 1035Y(1)	Agronomy and Horticultural Crop Production I	45+60	5
AGRI 1047Y(1)	Microbiology and Genetics	60+60	6
AGRI 1064Y(1)	Agrometeorology and Climate Change	45+0	3
AGRI 1071Y(1)	Data Handling and Research Methodology	30+30	3
AGRI 1078Y(1)	Economics for Agricultural Managers	45+0	3
AGRI 1100 (1)	Occupational Safety and Health	15+0	1
			29
AGRI 1000	Structure and Function of Multicellular Organisms	-	-
	and Ecosystems*		

*Only for students not having SC level pass in Biology

YEAR 2

CORE MODULES

Code	Module Name	Hr / Yr	Credits
		L+P	
AGRI 2088Y(3)	Biochemistry and Biotechnology	60+60	6
AGRI 2156Y(3)	Agricultural Engineering Principles	60+45	5
AGRI 2092Y(3)	Animal Production and Science I	60+60	6
AGRI 2112Y(3)	Experimental Designs and Sampling Techniques	30+30	3
AGRI 2089Y(3)	Pests, Diseases and Weeds Control	45+60	5
AGRI 2093Y(3)	Botany and Crop Physiology	60+45	5
AGRI 2118Y (3)	Science and Technology of Foods	45+30	4
AGRI 2172Y(5)	Principles of Biofarming	45+0	3
AGRI 2173Y(5)	Economics, Marketing, Management and Extension	45+30	4
	in Biofarming		
AGRI 2261(1)	Scientific Communication	15+0	1
AGRI 2000	Practical Training	-	-
			42

AGRI 2000 - Practical Training can be done at the end of Year 1 or Year 2.

AGRI 2261(1) - Scientific Communication will be done in Semester 2 in Year 2.

YEAR 3

CORE MODULES

Code	Module Name	<u>Hr / Yr</u>	Credits
		L+P	
AGRI 3000Y(5)	Project	-	9
AGRI 3148Y(5)	Soil Health and Fertility Management in Biofarming	45+30	4
AGRI 3150Y(5)	Pest Management in Biofarming	45+30	4
AGRI 3151Y(5)	Disease and Weed Management in Biofarming	45+30	4
AGRI 3152Y (5)	Sustainable Technologies for Crop Production	45+30	4
AGRI 3156Y (5)	Bio-Farming for Safe and Sustainable Animal Food	45+30	4
	Production		
AGRI 3157Y(5)	Biofarmed Products, Entrepreneurship and Small	45+30	4
	Business Management		
			33

Total Number of Credits = 104