

BSc (Hons) Agriscience and Aquaculture Technology – A331

1. Objectives

Government policy and vision for the development of the Ocean Economy includes the growth of aquaculture as a strong segment of this new sector of the economy. Aquaculture has a key place in Government's Roadmap for the Ocean Economy. The Mauritian Seafood Hub is already a vibrant and growing sector of the economy. Mauritius has an Exclusive Economic Zone of 1.9 million sq km, with an additional 396,000 sq km jointly shared with the Republic of Seychelles, and which has the potential to contribute immensely to the national economy. It is the Government policy and vision for the future to adopt a technology-based approach to render food production a service-oriented, sustainable and competitive activity which responds to the food safety, environmental and ethical standards demanded by society. Furthermore, the changing socio-economic pattern of Mauritius has led to an increasing demand for novel and/or animal-based foods, as well as ornamental products such as pearls, aquarium fish, molluscs, etc.

This programme aims to give students a good understanding of the general scientific aspects of agricultural production, and to equip them with a broad spectrum of scientific, technical, managerial and business skills needed to contribute to the development and enhancement of aquaculture in Mauritius.

On completion of this programme, learners will:

- acquire knowledge and appreciation of the characteristics and dynamics of agricultural, freshwater and marine ecosystems;
- obtain knowledge and skills of the scientific aspects of agricultural production;
- obtain knowledge and skills of aquaculture technologies;
- acquire knowledge and skills in the setting up and management of aquaculture of seaweed, fish, crustacean, echinoderm, molluscan, and reptilian species for commercial purposes (as food, feed, ornamentals, pharmaceuticals, agrochemicals, etc);
- develop the ability to transfer relevant knowledge and skills of appropriate terrestrial and aquatic agricultural practices to the farming community and to other stakeholders.

2. General Entry Requirements

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

3. Programme Requirements

Cambridge School Certificate/ 'O' Level: Credit in Mathematics and Chemistry.

At least 2 GCE 'A' Level passes in any of the following subjects (Physics, Chemistry, Biology, Botany, Zoology, Environmental Studies, Agriculture and any other related field).

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 Award of Undergraduate Degree: 108

Breakdown as follows:

	Credits from	
	Core Taught Modules	Project
Degree	99	9

The module Practical Training – AGRI 2000 and the module Scientific Communication Skills & Methods – AGRI 2130(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, and should include at least 1 class test. 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.

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 and a minimum of 40% should be attained.

Assessment of the module Scientific Communication Skills & Methods – AGRI 2130(1) will be based on continuous assessment of students throughout the module and/or submission of a portfolio and a minimum of 40% should be attained.

Submission Deadlines for Dissertation:

- First Draft: By last week day of February of the Academic Year.
- Final Copy: Three copies of the dissertation (two spiral-bound copies and one 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.

8. List of Modules

CORE MODULES

<u>Code</u>	<u>Module Name</u>	<u>Hr / Yr</u>	<u>Credits</u>
		<u>L+P</u>	
AGRI 1018Y(1)	Agricultural Chemistry and Soil Science	45+60	5
AGRI 1034Y(1)	Animal Production: Principles and Techniques	30+30	3
AGRI 1050Y(1)	Crop Production: Science and Technology	60+60	6
AGRI 1094Y(1)	Introduction to Agricultural Economics, Management, Marketing, Extension and Systems	75+30	6
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 1073Y(1)	Botany and Plant Physiology	60+45	5
AGRI 1100 (1)	Occupational Safety and Health	15+0	1
AGRI 2089Y(3)	Pests, Diseases and Weeds Control	45+60	5
AGRI 2092Y(3)	Animal Production and Science I	60+60	6
AGRI 2112Y(3)	Experimental Designs and Sampling Techniques	30+30	3
AGRI 2118Y(3)	Science and Technology of Foods	45+30	4
AGRI 2033Y(5)	Freshwater and Coastal Ecology	60+60	6
AGRI 2165Y(5)	Introduction to Aquaculture	60+60	6
AGRI 2166Y(5)	Aquatic Biogeochemistry	30+30	3
AGRI 2000	Practical Training	-	-
AGRI 2130 (1)	Scientific Communication Skills & Methods	15+0	1
AGRI 3000Y(5)	Project	-	9
AGRI 3140Y(5)	Geomatics	30+30	3
AGRI 3141Y(5)	Freshwater and Marine Aquaculture Technology	60+60	6
AGRI 3142Y(5)	Environmental Assessment and Legislation in Aquaculture	75+30	6
AGRI 3043Y(5)	Aquaculture Products, Entrepreneurship and Small Business Management	60+60	6
Total Number of Credits = 108			

AGRI 2000 - Practical Training can be done in either Year 1 or Year 2.

AGRI 2130(1) - Scientific Communication Skills and Methods will be done in Semester 2 in Year 2.

9. Programme Plan - BSc (Hons) Agriscience and Aquaculture Technology

YEAR 1

CORE MODULES

<u>Code</u>	<u>Module Name</u>	<u>Hr / Yr</u>	<u>Credits</u>
		<u>L+P</u>	
AGRI 1018Y(1)	Agricultural Chemistry and Soil Science	45+60	5
AGRI 1034Y(1)	Animal Production: Principles and Techniques	30+30	3
AGRI 1050Y(1)	Crop Production: Science and Technology	60+60	6
AGRI 1094Y(1)	Introduction to Agricultural Economics, Management, Marketing, Extension and Systems	75+30	6
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 1073Y(1)	Botany and Plant Physiology	60+45	5
AGRI 1100 (1)	Occupational Safety and Health	15+0	1
			38

YEAR 2**CORE MODULES**

<u>Code</u>	<u>Module Name</u>	<u>Hr / Yr</u>	<u>Credits</u>
		<u>L+P</u>	
AGRI 2026Y(3)	Biotechnology	60+60	6
AGRI 2089Y(3)	Pests, Diseases and Weeds Control	45+60	5
AGRI 2092Y(3)	Animal Production and Science I	60+60	6
AGRI 2112Y(3)	Experimental Designs and Sampling Techniques	30+30	3
AGRI 2118Y(3)	Science and Technology of Foods	45+30	4
AGRI 2033Y(5)	Freshwater and Coastal Ecology	60+60	6
AGRI 2165Y(5)	Introduction to Aquaculture	60+60	6
AGRI 2166Y(5)	Aquatic Biogeochemistry	30+30	3
AGRI 2000	Practical Training	-	-
AGRI 2130 (1)	Scientific Communication Skills & Methods	15+0	1
			40

AGRI 2000 - Practical Training can be done in either Year 1 or Year 2.

AGRI 2130(1) - Scientific Communication Skills and Methods will be done in Semester 2 in Year 2.

YEAR 3**CORE MODULES**

<u>Code</u>	<u>Module Name</u>	<u>Hr / Yr</u>	<u>Credits</u>
		<u>L+P</u>	
AGRI 3000Y(5)	Project	-	9
AGRI 3140Y(5)	Geomatics	30+30	3
AGRI 3141Y(5)	Freshwater and Marine Aquaculture Technology	60+60	6
AGRI 3142Y(5)	Environmental Assessment and Legislation in Aquaculture	75+30	6
AGRI 3043Y(5)	Aquaculture Products, Entrepreneurship and Small Business Management	60+60	6
			30

Total Number of Credits = 108