

Master of Science in Aquaculture and Fisheries Science

DEPARTMENT OF AQUACULTURE AND FISHERIES SCIENCE

www.luanar.ac.mw/aquafish

PROGRAMME DESCRIPTION

The MSc in Aquaculture and Fisheries Science emphasizes sustainable aquatic production and encompasses topics such as aquaculture systems, fish nutrition, genetics, disease management, and environmental impact assessment. Graduates are prepared to tackle industry challenges, including food security, sustainability, and economic development.

CAREER PROSPECTS:

Aquaculture farm manager, fisheries biologist, environmental scientist, aquaculture extension officer, and aquaculture policy analyst

PROGRAMME STRUCTURE

The program includes both coursework and research components. In the first and second semesters of the first year, all students complete a set of common courses. Additionally, each student selects two elective courses, subject to approval by their major supervisor, based on their research area. The second year of the program is dedicated to research, data analysis, thesis writing, and final examinations.



PROGRAMME COURSES

Year 1 Courses

#	Course Code	Course Name Course	Type
	SEMESTER I COURSES		
1	AFS 71101	Aquaculture and Fisheries Seminar I	Core
2	AFS 71102	Biostatistics & Research methods	Core
3	AFS 71103	Fish Nutrition & Feed Technology	Core
4	AFS 71104	Project Development and Management	Core
5	AFS 71105	Aquaculture Production Systems and Engineering	Elective
6	AFS 71106	Fish Bioinformatics	Elective
7	AFS 71107	Fish Breeding and Hatchery Management	Elective
8	AFS 71108	Fish Health, Welfare Management and Biosecurity	Elective
9	AFS 71109	Fish Physiology & Bioenergetics	Elective
10	AFS 71110	Fish Processing and Quality Management	Elective
11	AFS 71111	Fisheries and Aquaculture Policy and Planning	Elective
12	FOR75106	Geographic Information System Applications in Natural Resources Management	Elective
13	AFS 71113	Integrated Agriculture and Aquaculture Systems	Elective
14	AFS 71114	Integrated Coastal Resource Management	Elective
15	AFS 71115	Limnology and Oceanography	Elective
16	AFS 71116	Sustainable Fisheries and Ecosystems Management	Elective
	SEMESTER II COURSES		
1	AFS 71201	Aquaculture and Fisheries Seminar II	Core
2	AFS 71202	Stock Assessment and Fisheries Management	Core
3	AFS 71203	Fish Molecular Biology and Genomics	Core
4	AFS 71204	Biotechnology Applications in Aquaculture	Elective
5	AFS 71205	Data Science in Fisheries	Elective
6	AFS 71206	Fish Biodiversity and Conservation	Elective
7	AFS 71207	Fish Population Dynamics, Stock Assessment and Ecosystems	Elective
8	AFS 71208	Fish Taxonomy and Systematics	Elective
9	AFS 71209	Fisheries and Aquaculture Business Management	Elective
10	AFS 71210	Fisheries & Natural Resource Economics	Elective
11	AFS 71211	Fisheries Bio-economics, Theory Modeling and Management	Elective
12	AFS 71212	Fisheries Ecology	Elective
13	AFS 71213	Fisheries Value Chains and Marketing	Elective
14	AFS 71214	Fish Population Genetics	Elective
15	AFS 71215	Water Quality Analysis and Management	Elective

Year 2 Courses

#	Course Code	Course Name Course	Type
1	AFS 72198	Research Progress 1	Core

Fees Structure

MSc (International)

Category	Item	Year I ($)	Year 2 ($)	Total ($)
Administra-tive Fees	Application	20.00		20
	Registration	25.00	25.00	75
	Library	100.00	100.00	300
	Medical	245.00	245.00	735
	Examination	65.00	65.00	195
	Sub-Total	455.00	435.00	1325
Tuition fees	Tuition Fee (Average of Local and regional Universities)	2,619.00	2,619.00	5,238.00
	External and Internal examiner's fees and postage	250.00	250.00	500.00
	Supervisory Fees	250.00	250.00	500.00
	Sub-Total	**3,574.00**	**3724.00**	**7,088.00**
Research cost	Research	2,200.00	2,200.00	4,400.00
Student Welfare (7)	Settling-in allowance	95.00		95.00
	Setting-out allowance		95.00	95.00
	Holiday Allowance	60.00	60.00	120.00
	Personal Allowance	2,835.00	2,835.00	5,670.00
	Sub-Total	2,990.00	2,990.00	5,980.00
	GRAND TOTAL	**9,244.00**	**9,224.00**	**18,468.00**

MSc (Local)

Category	Item	Year I ($)	Year 2 ($)	Total ($)
Administrative Fees	Application	20		20
	Registration	25	25	50
	Library	100	100	200
	Medical	245	245	490
	Examination	65	65	130
	Sub-Total	455	435	890
	Tuition Fee (Average of Local and regional Universities)	1,545.00	1,565.00	3,110.00
	External and Internal examiners fees and postage	250	250	500.00
	Supervisory Fees	250	250	500.00
	Sub-Total	2,500.00	2,500.00	5,000.00
Research costs	Research	2,200.00	2,200.00	4,400.oo
Student Welfare	Settling-in allowance	95		95.00
	Settling-out allowance		95	95.00
	Holiday Allowance	60	60	120.00
	Personal Allowance	2,835.00	2,835.00	5,670.00
	Sub-Total	2,990.00	2,990.00	5,980.00

ENTRY REQUIREMENTS:

Candidates to be considered for recruitment into the MSc in Aquaculture and Fisheries Science must have a minimum of a Bachelor of Science degree in Aquaculture, Fisheries Science, Animal/ Veterinary Science, or other relevant biological sciences, with at least a credit pass. Those with a relevant Bachelor's degree with a mere pass but long working experience in aquaculture and fisheries or related fields may also be considered.

CURRICULUM DELIVERY:

The curriculum will be delivered using a blended learning approach, combining face-to-face instruction with online teaching through platforms such as MOODLE and other platforms recommended by the University.

LOCATION OF PROGRAM:

LUANAR Bunda College

TECHNIQUES OF DELIVERY:

Various teaching methods will be used, including lectures, demonstrations, research activities, seminars, field excursions, and any other methods recommended by the university. Students will engage in practical exercises as outlined in the course syllabus, which will be conducted in both dry and wet laboratories on campus, as well as at the Fish Farm facilities. Additionally, students will participate in field practicals at farmers' fields and other government or private facilities.



a University with endless possibilities

Africa Center of Excellence in Aquaculture and Fisheries Science – LUANAR

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