



Fakultet for biovitenskap

**Master in
Aquaculture
(M-AA)**

Admissions 2022

Master in Aquaculture (M-AA)

A master's degree is awarded on 120 credits. Equivalent of two years full study. Students who lack knowledge about general aquaculture from their bachelor's degree need to take AQX251 in the master's degree. To obtain a master's degree in Aquaculture, the following is required:

- Minimum 30 credits courses at 300-level
- Compulsory courses at 300-level
- Optional courses at 200 or 300 level
- A compulsory master thesis of 60 or 30 credits

Compulsory courses:

Code	Name	ECTS	Period
AQX251	Sustainability and welfare in aquaculture	5	August
BIO314	Fish physiology	5	Autumn
AQX300	Applied Aquaculture	10	Spring

Master thesis 60 ECTS or

Master thesis 30 ECTS + optional courses

Study plan examples

Year	Semester	5 ECTS	5 ECTS	5 ECTS	5 ECTS	5 ECTS	5 ECTS
2	June						
	Spring	Master thesis					
	January						
	Autumn	Master thesis or courses if 30 ECTS thesis					
	August						
1	June						
	Spring		AQX300				
	January						
	Autumn		BIO314				
	August	AQX251					

Optional courses from the three specializations area:

- **Production Biology**
 - Select courses in nutrition/feeding, genomics/breeding and welfare/behavior
- **Management and Farming Technology**
 - Select courses in economy, management, leadership and farming technology (RAS)
- **Feed Technology and nutrition**
 - Selected courses in nutrition and feed technology

Production biology

Code	Name	ECTS	Period
AQB250 ¹⁾	Sustainable aquaculture – breeding and genetics	5	Autumn
AQX250 ¹⁾	Genomics to improve sustainability of aquaculture	5	Autumn
AQN350	Aquaculture Nutrition	10	Autumn
AQN351	Sustainable ingredients in aquafeeds	5	Autumn
BIN300	Statistical Genomics	10	Spring
BIN301	Genomic and pedigree-based prediction of genetic value	10	Autumn
BIN302	High throughput phenotyping for precision farming	10	Autumn
BIO315	Behavioral biology in fishes	5	January
BIO322	Molecular Genomics	10	Autumn
HFA300*	Animal Breeding Plans*	10	Spring
HFA304	Theory and Application of Inbreeding Management*	10	June + August
HFE303	Nutrition and Optimisation of Diets for Monogastric Animals	10	Autumn
HFE314	Experimental animal nutrition and physiology	10	Spring

* Prerequisites HFA200

¹⁾ Overlap of 2 credits between AQB250 and AQX250

Management and Farming Technology

Code	Name	ECTS	Period
AQP211	Production technology in aquaculture	10	January + Spring
AQT251	Laboratory course in international aquaculture	5	Autumn
AQT254	Basic Aquaculture Engineering	5	Autumn
AQP350	Planning and Design of Intensive Fish Farms	10	Spring
ECN230	International Economics	10	Autumn
	Special syllabus	10	All

Feed Technology and nutrition

Code	Name	ECTS	Period
AQN350	Aquaculture Nutrition	10	Autumn
AQN351	Sustainable ingredients in aquafeeds	5	Autumn
HFE303	Nutrition and Optimisation of Diets for Monogastric Animals	10	Autumn
HFE305	Feed Manufacturing Technology	10	Aug + Autumn
HFE306	Advanced Feed Manufacturing Technology	5	January
HFE308	Optimization of Feed Processing for Different Animal Species	10	Spring
HFE310	Management of Production, Risk and Innovation in Feed Production	10	Spring
HFE314	Experimental animal nutrition and physiology	10	Spring
MVI261	Heat Engineering I	5	Autumn
MVI310	Macronutrients, Their Structure and Functionality	10	Autumn

General courses for all specializations

Code	Name	ECTS	Period
BINT302	Internship Aquaculture	5-15	All
KJM220	Vannkjemi (Norwegian) - NYTT	10	Autumn
MTH300	E-learning Course: Planning and Scientific Writing of a Master's Thesis in Natural Sciences	5	Autumn
NATF240	Fish Ecology and Management (Norwegian)	10	Spring
SDG300	Sustainable development goals in plant and animal food systems	5	January
STIN300	Statistical Programming in R	5	January