

Study programme Kalakasvatus/Aquaculture (462)

Master's studies

2016/2017. study year

Eesti Maaülikool

Institute of Veterinary Medicine and Animal Sciences

614 Master's study (3+2), ISCED-97 level 5A2

Broad group of studies: Agriculture, forestry, fisheries and veterinary

Field of study: Fisheries

Group of curricula: Fisheries

Study programme group: Agriculture, forestry and fisheries

Language of instruction: Estonian

Other languages needed for achieving learning outcomes: English

Form of study: regular studies

Nominal length of studies: 2 years

Credit points: 120 ECTS

Degree to be awarded: põllumajandusteaduse magister (kalakasvatus)

Degree to be awarded (in English): Master of Science in Agriculture

Document issued at graduation: Diploma

Confirmation date at EMU Council 14.02.2002

Closing date at EMU Council 01.11.2019

Right to conduct studies in this study programme group termless

Added to ministry's registry on 25.08.2002

Head of curriculum: Katrin Kaldre (28.04.2014 -)

Admission requirements:

bakalaureusekraad (Bachelor's degree), *rakenduskõrgharidusõppe diplom* (Diploma of Professional Higher Education) or corresponding qualification.

Curriculum objectives:

The programme is designed to provide in-depth knowledge of aquaculture technology, the genetics, breeding, feeding and keeping of fish, essential methods in aquaculture research as well as management and entrepreneurship training, including product quality and marketing issues for students who want to pursue a career in the aquaculture sector.

Graduates of the Master's programme are prepared to take the responsibility related to working as an aquaculture specialist in state or private enterprises and in local and international organisations in the public sector, are ready to continue studies in the doctoral level, and value the ethical aspects and social role of their speciality.

Learning outcomes:

The graduate:

- 1) has a systematic understanding and in-depth knowledge of aquaculture (fish farming);
- 2) is able to apply the obtained knowledge and essential research methods for problem solving in the specialist area;
- 3) possesses knowledge and skills to deal with the reproduction, feeding, keeping, health care and biosafety of fish and other aquatic animals as well as the marketing of aquaculture products;
- 4) has the knowledge and skills necessary to establish, manage and appraise aquaculture enterprises

and systems, including basic knowledge of accounting and financial reporting as well as human resources management;

5) is proficient in aquaculture terminology in at least one foreign language;

6) demonstrates competent use of specialist computer software;

7) is capable of analysis and written expression of his/her research results in the context of general knowledge, and defend these at a public presentation;

8) knows the general principles of research ethics, and is able to distinguish scientific facts and theories from pseudoscientific beliefs;

9) is prepared for holding positions that require professional competence, initiative, responsibility, and leadership and teamwork skills.

Brief description of curriculum:

120 ECTS credits (speciality module 83 ECTS credits, optional subjects 7 ECTS credits, Master thesis 30 ECTS credits)

Requirements for finishing the curricula:

Students have to pass all compulsory courses and defend the Master's thesis.

1. Speciality Module		83 ECTS
VL.1196	Biosecurity in aquaculture	2 ECTS
KE.0023	Estonian orthography and wording	2 ECTS
MS.0062	Enterprise management (general course)	3 ECTS
PK.0427	Hydrochemistry	4 ECTS
VL.1194	Integrated aquaculture and agriculture	3 ECTS
VL.0271	Microbiology of fish and fish products	3 ECTS
VL.1197	Molecular ecology and genomics of fish	4 ECTS
VL.0440	Course paper in aquaculture	4 ECTS
VL.1192	Fish restocking	2 ECTS
VL.0435	Design of experiments and statistical data analysis	5 ECTS
VL.0253	Environmental chemistry	3 ECTS
VL.0514	Quality management	4 ECTS
VL.0501	Methods of analysis in animal genetics	3 ECTS
MI.0149	Land and water law	2 ECTS
MS.0020	Fundamentals of pedagogical psychology	3 ECTS
PK.0117	Introduction to the environmental legislation	3 ECTS
VL.0360	Practical research work	8 ECTS
VL.0386	Academic writing	2 ECTS
VL.0738	Basics of food legislation	4 ECTS
MS.0079	Marketing with fundamentals of agricultural marketing	4 ECTS
VL.1195	Research in aquaculture and fisheries II	2 ECTS
MI.0655	Water use in pisciculture	4 ECTS
PK.1209	Ecotoxicology of water bodies	3 ECTS
VL.1193	Aquaculture Technologies	6 ECTS
3. Elective and Optional Subjects		7 ECTS
4. Master Thesis		30 ECTS
VL.1098	Master's thesis	30 ECTS