Research Master's Programs (with preparation of a thesis):

Academic Programme Title	University compulsory requirements	Faculty compulsory requirements	Compulsory program requirements		Optional Program Requirements	Total credit hours
			Coursec	Graduation project		
Aquaculture	2	4	12	10	12	40
Aquatic products Processing & Preservation	2	4	12	10	12	40
Aquaculture Biotechnology	2	4	12	10	12	40

Study plan for university requirements

Credit hours	Hourse				Course name	Course code
	Total	Lab	Practical	lecture		
Compulsory courses						*2 Credit hours*
2	2	0	0	2	Scientific Research Ethics	900201

Study plan for college requirements

Research master's requirements

Credit hours	Hourse				Course name	Course code
	Total	Lab	Practical	lecture		
Compulsory courses						*4 Credit hours*
2	3	0	2	1	Advanced search methods	110202
2	3	0	2	1	Experimental Design - Advanced	110203

Study plan for Research Master's Programs

1- Aquaculture :

Course title	lecture	Practical	Credit hours	Course code
Master's degree - compulsory courses				
Physiology of aquatic animals	2	2	3	**111201**
Aquaculture Nutrition – advanced	2	2	3	**111202**
Genetic and Breeding of Aquatic Animals	2	2	3	**111203**
Fish diseases - Advanced	2	2	3	**111204**
Master's degree - elective courses (select 4 courses)				
Crustacean Nutrition	2	2	3	**111205**
Feed Additives for aquaculture	2	2	3	**111206**
Metabolism in Aquaculture	2	2	3	**111207**
Minerals and Vitamins of Aquaculture Nutrition	2	2	3	**111208**
Fish Reproduction physiology	2	2	3	**111209**
Physiology of Marine Larviculture	2	2	3	**111210**
Marine fish hatcheries	2	2	3	**111211**
Natural food production	2	2	3	**111212**
Viral diseases of Crustacean	2	2	3	**111213**
Safe use of wastewater In aquaculture	2	2	3	**111214**
Genetic Engineering	2	2	3	**112206**
Nanobiology	2	2	3	**112210**
Beneficial Microorganisms applications in Aquaculture	2	2	3	**112220**

2- Aquatic products Processing & Preservation

Course title	lecture	Practical	Credit hours	Course code
Master's degree - compulsory courses				
Seafoods processing technology - advanced	2	2	3	**112201**
Biochemistry - advanced	2	2	3	**112202**
Quality control of fisheries products- advanced	2	2	3	**112203**
Microbiology of fisheries products	2	2	3	**112204**
Master's degree - elective courses (select 4 courses)				
Extraction methods of active principals	2	2	3	**112209**
Nanobiology	2	2	3	**112210**
Additives and preservatives	2	2	3	**112211**
Quality control in food processing	2	2	3	**112212**
Contamination of aquatic products	2	2	3	**112213**
Canning technology	2	2	3	**112214**
Packaging technology	2	2	3	**112215**
Biosafety of aquatic products	2	2	3	**112216**
Organic Physical and sensorial properties of fish	2	2	3	**112217**

3- Aquaculture Biotechnology

Course title	lecture	Practical	Credit hours	Course code
Master's degree - compulsory courses				
Aquaculture biotechnology	2	2	3	**112205**
Genetic Engineering	2	2	3	**112206**
Food and bioenergy	2	2	3	**112207**
Microbial physiology	2	2	3	**112208**
Master's degree - elective courses (select 4 courses)				
Environmental biotechnology	2	2	3	**112218**
Nanobiology	2	2	3	**112210**
Cell biology and genetics	2	2	3	**112219**
Beneficial Microorganisms applications in Aquaculture	2	2	3	**112220**
Aquatic Biotechnology	2	2	3	**112221**
DNA and genetic analysis	2	2	3	**112222**
Food biotechnology - advanced	2	2	3	**112223**
Bioethics	2	2	3	**112224**