

## Animal and Poultry Production 1-Animal Production

Code number	Courses	Hours Weekly		Credit Hours
		Lectures	Applications	
<b>Decisions mandatory for the Master</b>				
2706805	Advanced Animal breeding	2	2	3
2706808	Statistical analysis	2	2	3
2706816	Energy metabolism in farm animals	2	2	3
2706817	Physiology of animal cells	2	2	3
<b>Decisions of the mandatory PhD</b>				
2706809	Statistical and experimental design	2	2	3
2706813	Maikarobilojy rumen	2	2	3
2706815	Hormones in Animal nutrition	2	2	3
2706821	Advanced reproductive physiology	2	2	3
2706828	Biotechnology in animal breeding	2	2	3
<b>Decisions of the optional MSc and PhD</b>				
2706801	Advanced sheep production	2	2	3
2706802	Nutrition and toxins	2	2	3
2706803	Advanced dairy cattle	2	2	3
2706804	Blood physiology	2	2	3
2706806	Advanced wool production and technology	2	2	3
2706807	Advanced meat production	2	2	3
2706810	Genetic parameters in animal breeding	2	2	3
2706811	Advanced endocrinology	2	2	3
2706812	Environmental physiology	2	2	3
2706814	Vitamins and minerals	2	2	3
2706818	Advanced nervous system	2	2	3
2706819	Advanced digestive physiology	2	2	3
2706820	Advanced milk secretion	2	2	3
2706822	Advanced reproductive physiology	2	2	3
2706823	Feasibility study for animal production projects	2	2	3
2706824	Camels production	2	2	3
2706825	Raising and production of Perissodactyla	2	2	3
2706826	Technology of skins production in farm animal	2	2	3
2706827	Animal production systems	2	2	3
2706829	Data base of animal production	2	2	3
2706830	Advanced special study	2	2	3
2706831	Technology of processing of production of animal feeds	2	2	3
2706832	Dairy animals nutrition	2	2	3

2706833	Meat animals nutrition	2	2	3
2706834	Sheep and goats nutrition	2	2	3
2706835	Camels nutrition	2	2	3
2706836	Embryology	2	2	3
2706836	Artificial insemination and embryos transfer	2	2	3
2706837	Immunology	2	2	3
2706701	Research	2	2	3
2706701	Discussion	2	2	3

## 2-Poultry production

Code number	Courses	Hours Weekly		Credit Hours
		Lectures	Applications	
<b>Decisions mandatory for the Master</b>				
2706839	Advanced poultry Nutrition	2	2	3
2706845	Advanced Avain Physiology	2	2	3
2706848	Advanced poultry breeding	2	2	3
2706874	Data management and Experimental Analysis	2	2	3
<b>Decisions of the mandatory PhD</b>				
2706841	Application of biotechnology in poultry field	2	2	3
2706844	Experimental Design	2	2	3
2706846	Poultry feedstuffs	2	2	3
2706847	Nutrient requirments of Poultry	2	2	3
2706882	Avian hormones	2	2	3
<b>Decisions of the optional MSc and PhD</b>				
2706838	special study Advanced	2	2	3
2706840	Advanced poultry genetics	2	2	3
2706842	Advanced selection	2	2	3
2706843	Advanced Genetic improvement	2	2	3
2706849	Comparison Animal Nutrition	2	2	3
2706850	Carbohydrate metabolism	2	2	3
2706851	Metabolism of Protein and Amino Acids	2	2	3
2706852	Fat Metabolism	2	2	3
2706853	Energy metabolism	2	2	3
2706854	Mineral metabolism	2	2	3
2706855	Vitamin metabolism	2	2	3
2706856	Nutrition of laying and breeding hens	2	2	3
2706857	Broiler nutrition	2	2	3
2706858	Rabbit nutrition	2	2	3
2706859	Turkeys, quail, and waterfowl nutrition	2	2	3
2706860	Ostrich Nutrition	2	2	3
2706861	Nutritional and Non-nutritional feed additives	2	2	3
2706862	Poultry production in hot and semi hot regions	2	2	3
2706863	Feasibility study and poultry farming	2	2	3
2706864	Advanced Meat Production	2	2	3
2706865	Advanced Egg Production	2	2	3
2706866	Advanced Egg Production	2	2	3

2706867	Advanced Waterfowl Production	2	2	3
2706868	Husbandry and Production of Ostrich	2	2	3
2706869	Turkey Husbandry and production	2	2	3
2706870	Quail production and raising husbandry	2	2	3
2706871	Husbandry and production of pigeon	2	2	3
2706872	Advanced Meat Production	2	2	3
2706873	Fertilely and hatchability	2	2	3
2706874	Rabbit Production and Husbandry	2	2	3
2706875	Advanced Avain Physiology	2	2	3
2706876	Adadvanced Avain endocrinology	2	2	3
2706877	Reproductive physiology and egg production	2	2	3
2706878	Blood Physology in Poultry	2	2	3
2706879	Avain embology	2	2	3
2706880	Physology of digestion in Poultry	2	2	3
2706881	Avain immunity	2	2	3
2706883	Physology of adapation in Poultry	2	2	3
2706884	Internet and E-learning in Animal Production fields	2	2	3
2706701	Research	2	2	3
2706701	Discussion	2	2	3

### 3-Fish production

Code number	Courses	Hours Weekly		Credit Hours
		Lectures	Applications	
<b>Decisions mandatory for the Master</b>				
2705886	Advanced - fish and shellfish physiology	2	2	3
2705889	Advanced - fish and shellfish nutrition	2	2	3
2705896	Advanced - Fish breeding	2	2	3
2705901	Aquatic environment	2	2	3
<b>Decisions of the mandatory PhD</b>				
2705887	Advanced - fish and shellfish endocrine gland physiology	2	2	3
2705890	Nutritional metabolism in fish and shellfish	2	2	3
2705900	Technology and Biotechnology for fish hatchery and culture.	2	2	3
2705895	Techniques of natural feeds production for fish	2	2	3
2705899	Advanced - fish and shellfish nutrition	2	2	3
<b>Decisions of the optional MSc and PhD</b>				
2705885	Special studies	2	2	3
2705888	Advanced - physiology of immunity in fish and Shellfish	2	2	3
2705891	Energy and Fish & Shellfish Nutrition	2	2	3
2705892	Nutrition, Toxicity and Fish & Shellfish Health	2	2	3
2705893	Data managment and sastatical analyses	2	2	3
2705894	Statistical methods and Experimental disign	2	2	3
2705897	Fish Selection	2	2	3
2705898	Fish adaptation	2	2	3
2705902	Fish Farming and aquaculture systems	2	2	3
2705902	Intensive production of worm water fish	2	2	3
2705903	Intensive production of worm water fish in desert	2	2	3
2705904	Techniques of industrial feeds production for fish	2	2	3
2705905	Warm water fish and shellfish	2	2	3

2705906	Fish resources and administration development	2	2	3
2705907	Vitamins and minerals and fish nutrition	2	2	3
2705908	Fish diseases	2	2	3
2705909	Economics of fish and shellfish production	2	2	3
2705910	fish and shellfish marketing	2	2	3
2705911	Economics of fish and shell fish marketing	2	2	3
2705912	Special studies	2	2	3
2706701	Research	2	2	3
2706701	Discussion	2	2	3