

Department of Biofunctional Science and Technology (Master's Program)

Segment	Credit		Registration and Requirement
	Research for Academic Degree Dissertation *	8 1 · 2	○Registration
	Science Seminar (A) (Note ¹) *	2 1 · 2	
Basic subjects	Science and Engineering Ethics	1 1 or 2	1 Compulsory 10 Credits * No need to register by the students.
	General Biosphere Science (1)	2 1 or 2	
	General Biosphere Science (2)	2 1 or 2	
	Graduate general education subjects (Basic) (Note ²) Select 1 subject from ①-④ above	1 or 2 1 or 2	
	Applied Immunology	1 1 or 2	● 1 subject from the basic subjects 1 or 2 credits
	Molecular Immunology	1 1 or 2	
	Plant Molecular Bioscience	1 1 or 2	※ Excess credits over 1 obtained from the basic subjects can be counted as those of the optional subjects
	Structure and Function of Proteins-II	1 1 or 2	
	Gene Regulation (Note ³)	1 1 or 2	From the Core Subjects
	Molecular Cell Science A	1 1 or 2	
	Molecular Cell Science B	1 1 or 2	● Exercise designated by the Academic Supervisor 2 Credits
	Ecological Chemistry	1 1 or 2	
	Bioactive Natural Products II	1 1 or 2	● Practice designated by the Academic Supervisor (Experiment/Practice) 1 Credit
	Biomolecular Science A	1 1 or 2	
	Biomolecular Science B	1 1 or 2	● Other Core subjects than those above 8 Credits
	Exercises in Molecular and Applied Biosciences (A)	2 1 or 2	
	Practice in Molecular and Applied Biosciences	1 1 or 2	※ Excess credits over eight obtained from the core subjects can be counted as those of the optional subjects.
	Glycobiology and Glycotechnology	1 1 or 2	
	Aquatic Toxicology	1 1 or 2	3 Optional 8 Credits or more
	Function of Livestock Food Product	1 1 or 2	
	Biochemistry of Animal Foods II	1 1 or 2	Should be selected from list of class subjects in this Graduate School.
	Food Biophysics I	1 1 or 2	
	Food Physical Chemistry II	1 1 or 2	
	Food Engineering	1 1 or 2	
	Food Process Engineering	1 1 or 2	
	Microbiology for Food Safety II	1 1 or 2	
	Foodborne Pathogenic Genetics	1 1 or 2	
	Health and Nutrition Science	1 1 or 2	
	Biochemical and Molecular Nutrition	1 1 or 2	
	Environmental and Biomass Technology II	1 1 or 2	
	Microbial Engineering on Brewing II	1 1 or 2	
	Practical Exercises in Application of Brewing Resources	1 1 or 2	
	Exercises in Food Science and Biofunctions (A)	2 1 or 2	
	Practice in Food Science and Biofunctions	1 1 or 2	

Compulsory but optional

Core subjects

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Optional	Exercises in Applied Immunology	1	1 or 2	
	Immunobiology	1	1 or 2	
	Structure and Function of Proteins-I	1	1 or 2	
	Basic Molecular Biology (Note ³)	1	1 or 2	
	Applied Microbiology	1	1 or 2	
	Applied Microbiology Seminar	1	1 or 2	
	Exercises in Ecological Chemistry	1	1 or 2	
	Bioactive Natural Products I	1	1 or 2	
	General Molecular Genetics	1	1 or 2	
	Practical Molecular Genetics	1	1 or 2	
	Aquatic Bioresource Chemistry	1	1 or 2	
	Hygienic Chemistry of Sea Food	1	1 or 2	
	Exercises in Function of Livestock Food Product	1	1 or 2	
	Biochemistry of Animal Foods I	1	1 or 2	
	Food Biophysics II	1	1 or 2	
	Food Physical Chemistry I	1	1 or 2	
	Exercise in Food Process Engineering	1	1 or 2	
	Process Engineering	1	1 or 2	
	Microbiology for Food Safety I	1	1 or 2	
	Exercises in Foodborne Pathogenic Genetics	1	1 or 2	
	Nutritional Biochemistry	1	1 or 2	
	Nutri-genomics	1	1 or 2	
	Microbial Engineering on Brewing I	1	1 or 2	
Environmental and Biomass Technology I	1	1 or 2		
Application of Brewing Resources	1	1 or 2		

Note¹ See details in "Notes on Course Registration (1)".

Note² Select 1 subject in the lists of the "Graduate general education subjects (Basic)".

Note³ These lectures will not be offered after 2015 academic year.