## BACHELOR PROGRAM IN BIOTECHNOLOGY

## Number of credits required: 130

Semester	Code	Subject	Number o credit
1		Core subjects	13
(17 credits)		Fundamental principles of Marxism-Leninism 1	2
		Foreign Language 1	3
		Algebra B	2
		General Chemistry	3
		General Informatics	3
		Physical Education 1	2
		Military education and training 1	3
		Elective subjects	4
		Communication Skills	2
-		Fundamentals of Psychology	2
		Fundamentals of Vietnamese Culture	2
-		Fundamentals of Legislation	2
-		Writing Documents in Vietnamese	2
		Introduction to Psychology	2
2		Core subjects	18
(18 credits)		Fundamental principles of Marxism-Leninism 2	3
-		Foreign Language 2	4
-		Analysis B	3
-		General Physics B	3
-		General Biology	2
-		Analytical Chemistry	3
-		Physical Education 2&3	4
		Military education and training 2	3
3		Core subjects	14
(16 credits)		Ho Chi Minh's Ideology	2
-		Probability and Statistics	3
-		Cytology	3
		Genetics	2
		Biochemistry	4
		Military education and training 3	2

	Elective subjects	2
	Organic Chemistry	2
	Physical and Colloidal Chemistry	2
4	Core subjects	14
(16 credits)	Revolutionary strategies of Vietnam Communist Party	3
	Microbiology	4
	Plant Physiology	4
	Human and Animal Physiology	3
	Elective subjects	2
	Principles in creature classification	2
	Physical biology	2
5	Core subjects	15
(17 credits)	Management Theory	2
	Molecular Biology	4
	Research Methodology	2
	Biotechnology Equipment and Processes	3
	Immunology	4
	Elective subjects	2
	Biological Safety	2
	Marketing of biotechnology products	2
6	Core subjects	15
(18 credits)	Microbiological Technology	4
	Animal Biotechnology	4
	Plant Biotechnology	4
	Gene Technology	3
	Elective subjects	3
	Bioinformatics	3
	Biodiversity	3
7	Core subjects	12
(18 credits)	Enzyme - Protein Engineering	3
	Fermentation Technology	3
	Marine Biopolymers	3
	Mushroom Culture Technique	3
	Elective subjects group 1	6
	Probiotic Technology	2
	Marine Biotechnology	2

	Food Flavors and Colors Production Technology	2
	Production of Plant Secondary Metabolites	2
	Biotechnology for Food Preservation and Processing	2
	Environmental Biotechnology	2
8	Core subjects	4
(10 credits)	Field Trips (12 weeks)	4
	Core subjects group 2	6
	Virology	3
	Fishery Pathology	3
	Vaccine Production Technology	3
	Antibiotic and Vitamin Production Technology	3

Note: Students who have enough conditions and can receive a final thesis will not study subjects in the 8th semester.