

LIST OF SUBJECTS FOR PROGRAM OF MASTER IN FOOD TECHNOLOGY

CONTENTS	CODE	SUBJECTS	CREDITS	VOLUME
SUBJECTS FOR BOTH DIRECTION				
General subject	SS6011	Philosophy	2	2(1,5-0-1-8)
Compulsory subjects (12 CRE)	BF6211	Food Structure	3	3(3-0-0-6)
	BF6212	Food Flavour	3	3(2-0-2-6)
	BF6114	Experimental data analysis	2	2(1,5-1-0-4)
	BF6213	Food Quality Standardized	2	2(1,5-1-0-4)
	BF6214	Food Toxins	2	2(1,5-1-0-4)
SUBJECTS FOR MASTER OF ENGINEERING				
Selective subjects (12/ 18 CRE)	BF6215	Food preservation	2	2(1,5-1-0-4)
	BF6216	Application of thermo-technique in Food Technology	2	2(2-0-0-4)
	BF6122	Product Innovation	2	2(1,5-1-0-4)
	BF6217	Fermentation Engineering	2	2(1,5-1-0-4)
	BF6124	Bioactive Natural compounds	2	2(1,5-0-1-4)
	BF6218	Gene Modified Food	2	2(1,5-1-0-4)
	BF6219	Kinetics of Bio-food Processing	2	2(1,5-1-0-4)
	BF6220	Food Sensory Properties	2	2(1,5-1-0-4)
	BF6221	Functional Food	2	2(1,5-1-0-4)
		Selective	7	
Thesis	BF6201	Final Thesis	8	8(0-2-6-20)
SUBJECTS FOR MASTER OF SCIENCE				

Compulsory subjects (6CRE)	BF6219	Kinetics of Bio-food Processing	2	2(1,5-1-0-4)
	BF6220	Food Sensory Properties	2	2(1,5-1-0-4)
	BF6221	Functional Food	2	2(1,5-1-0-4)
Selective subjects (6/ 12 CRE)	BF6217	Fermentation Engineering	2	2(1,5-1-0-4)
	BF6124	Bioactive Natural compounds	2	2(1,5-1-0-4)
	BF6218	Gene Modified Food	2	2(1,5-1-0-4)
	BF6215	Food preservation	2	2(2-0-0-4)
	BF6216	Application of thermo-technique in Food Technology	2	2(2-0-0-4)
	BF6122	Product Innovation	2	2(1,5-1-0-4)
Thesis	BF6202	Final Thesis	15	15(0-0-20-30)

Brief description of subjects in program of Master in food technology

BF6211 Food Structure 3(3-0-0-6)

It consists of 2 part: Introduction and analysis and functional characteristic of high molecular portion of Food and rheology properties of foods and Theory, procedure of the method for Food construction by manner of thermo mechanic, thermal , chemical and enzym.

BF6212 Food Flavour 3(2-0-2-6)

General characteristic of Food Flavor, formation principles of food flavor by different methods: biosynthesis, direct and indirect enzyme reactions and heating process, relation between different compounds in Food products, key odor compounds of materials, in process products and final products. Regulation of food flavor is also presented.

BF6114 Experimental data analysis 2(1,5-1-0-4)

Assistance in choosing calculation method appropriated in particular experiment of a research. Provide skill and technique in writing a research report and article.

BF6213 Food Quality Standardized

Provide knowledge of current regulation about Food Quality Standardization, applying in food processing. Provide direct and indirect method in documentation procedure for regulation formation.

BF6214 Food Toxins 2(1,5-1-0-4)

Provide toxins originated from nature, microorganism, residues in plantation and livestock farm. Toxins formed during processing preservation time. Effect of that toxins on human health.

BF6215 Food preservation 2(1,5-1-0-4)

Basics and causes of changes in quality of materials and foods; principles and methods of food preservation.

BF6216 Application of thermo-technique in Food Technology 2(2-0-0-4)

Provide the basic knowledge on: Principles and practices of effective cooling systems, Basics and principles of solvent-crystallized concentration method and Basics and principles of some drying systems for high-value food.

BF6217 Fermentation Engineering 2(1,5-1-0-4)

The credit consists of 7 chapters of Fermentation Engineering generality; Gene and the application in producing; Fermentation equipment; Fermentation preparation; Fermentation realization, monitoring and controlling, Downstreaming; and common problem in industrial scale.

BF6218 Gene Modified Food 2(1,5-1-0-4)

Principle knowledge on gene and gene structure. General methods of gene technique. Gene modified methods and gene modified food. Identification of GMF by molecular technique. Safety of GMF.

BF6219 Kinetics of Bio-food Processing 2(1,5-1-0-4)

Introduction of biofood process, the principles in microorganism kinetic and their application in intermittent, continuous, semi continuous fermentation. The principles in kinetic modelization.

BF6220 Food Sensory Properties 2(1,5-1-0-4)

Provide profound knowledge of food sensory properties including taste, odor, color, Anticipate in further research of food technology in formation of sensory properties.

BF6221 Functional Food 2(1,5-1-0-4)

Functional food: Definition, Functional properties of the products originated from nature. Probiotic, prebiotic and their effect on human being health. Extraction and application of natural compounds. Technology of some functional food.

BF6122 Product Innovation 2(1,5-1-0-4)

The role of Food innovation and the principle factors on Food innovation. Propose basic procedure from idea for innovation to final product created and product marketing. Solid Food innovation is also presented for development and management of new products.

BF 6124 Bioactive Natural compounds 2(1,5-1-0-4)

Groups of natural compounds include polyphenols, terpenoid, carotenoid, alkaloid, and lectin. Exploitation methods and method for determining bioactivity, application in biotechnology, food technology, pharmacy and medicine.