

Study programme: BIOTECHNOLOGIES FOR FOOD INDUSTRY

Duration: 4 years

Title obtained: engineer

CURRICULUM

Valid for 2018-2022

1st year - 2018-2019

Nr. Crt.	DISCIPLINE	Type	Semester I 25hours/week					Semester II 25hours/week.					TOTAL CREDITS/YEAR
			No. hours/week.					No. hours/week.					
			C	S/Pr	L	Credit	V	C	S/Pr	L	Credit	V	
1. MANDATORY DISCIPLINES													
1	Mathematic and biostatistics	F	2	2		5	E	2	2		4	VP	9
2	Biophysics	F	2	2		5	E						5
3	General microbiology	F	2		2	5	E	2		2	5	E	10
4	Chemistry	F	2		2	5	E	2		2	4	E	9
5	Celular biology	F	2		2	5	VP						5
6	Computer using	F	1		2	3	VP	1		2	3	VP	6
7	Analytical chemistry and instrumental analysis	D						2		2	5	E	5
8	Ecology and environmental protection	F						2		2	5	E	5
9	Practice (1 week x 30 hours/week.)	S									2	C	2
2. OPTIONAL DISCIPLINES													
10	Foreign languages (English/French)	C		2		2	C		2		2	C	4
3. FACULTATIVE													
11	Physical education (Sport)* (admis/respins)	C			1	1	VP			1	1	VP	2

*Mandatory 4 semesters, with 4 credits

Study programme: BIOTECHNOLOGIES FOR FOOD INDUSTRY

Duration: 4 years
Title obtained: engineer

CURRICULUM

2nd year - 2019-2020

Nr. Crt.	DISCIPLINE	Type	Semester I 25hours/week					Semester II 25hours/week.					TOTAL CREDITS/YEAR
			No. hours/week.					No. hours/week.					
			C	S/Pr	L	Credit	V	C	S/Pr	L	Credit	V	
1. DISCIPLINE OBLIGATORII													
1	Biochemistry	F	2		2	5	E	2		2	4	E	9
2	Genetics	F	2		2	5	E						5
3	General biotechnology and biotechnological instalations	D	2		2	5	E	2	2		4	VP	9
4	Nutrition and diet	D	2	2		4	VP						4
5	Basis of engineering	D	1	1		3	E						3
6	Molecular biology	D						2		2	4	E	4
7	Cells and tissues cultures	D						2		2	4	E	4
8	General enzimology	F						2		2	5	E	5
9	Toxicology	D	1		1	3	VP						3
10	Practice (3 weeks x 30 hours/week)	S									3	C	3
2. OPTIONAL DISCIPLINES													
11	Vegetal physiology and botany	F	2		2	3	VP	2		2	4	VP	7
	Animal physiology and anatomy	F	2		2		VP	2		2		VP	
12	Foreign languages (English/French)	C		2		2	C		2		2	C	4
3. DISCIPLINE FACULTATIVE													
13	Physical education (Sport)* (admis/respins)	C			1	1	VP			1	1	VP	2

*Mandatory 4 semesters, with 4 credits

Study programme: BIOTECHNOLOGIES FOR FOOD INDUSTRY

Duration: 4 years
Title obtained: engineer

DEAN,
Prof.dr. Calina Petruta CORNEA

Programme Responsible,
prof.dr.Popa Mona

CURRICULUM

3rd year - 2020-2021

Nr. Crt.	DISCIPLINE	Type	Semester I 25hours/week					Semester II 25hours/week.					TOTAL CREDITS/YEAR
			No. hours/week.					No. hours/week.					
			C	S/Pr	L	Credit	V	C	S/Pr	L	Credit	V	
1. MANDATORY DISCIPLINES													
1	Food biotechnologies	S	2		2	4	E	2		2	4	E	8
2	Genetic engineering	D	2		2	5	E						5
3	Genetically modified organisms	D						2		2	4	E	4
4	Food microbiology	S	2		2	4	VP						4
5	Special enzymology	D	2		2	5	E						5
6	Vegetal and animal raw materials for food industry	S	2		2	4	E						4
7	Food chemistry	S	2		2	4	VP						4
8	Refrigeration technologies	D						2	2		4	VP	4
9	Experimental technique	D						2	2		4	VP	4
10	Processing technologies of vegetal and animal origin raw materials	S						2		2	4	E	4
11	Food safety	S	2	2		4	VP						4
12	Practice (3 weeks x 30 hours/week)	S									3	C	3
2. OPTIONAL DISCIPLINES													
13	Biotechnology of enzymes and proteins	S						2		2	4	E	4
	Industrial biotechnology	S						2	2	E			
14	Applied informatics in biotechnologies	S						1	2		3	VP	3
	Modelling of biotechnological processes	S						1	2	VP			
3. FACULTATIVE DISCIPLINES													
15	Foreign languages	C		2		2	C		2		2	C	4
16	Extraction technologies in food industry	S	2		2	2	VP						2

Study programme: BIOTECHNOLOGIES FOR FOOD INDUSTRY

Duration: 4 years

Title obtained: engineer

CURRICULUM

4th year - 2021-2022

Nr. Crt.	DISCIPLINE	Type	Semester I 25hours/week					Semester II 25hours/week.					TOTAL CREDITS/YEAR
			No. hours/week.					No. hours/week.					
			C	S/Pr	L	Credit	V	C	S/Pr	L	Credit	V	
1. MANDATORY DISCIPLINES													
1	Design of biotechnological installations	S	2	2		5	E						5
2	Fermentative products technology	S	2		2	4	E						4
3	Conditioning and preservation of biotechnological products	D	2		2	4	E	2		2	4	E	8
4	Control and examination of biotechnological products	D	2		2	5	VP						5
5	Additives and ingredients for food industry	S	2		2	4	E						4
6	Accountancy and financial-economic analysis	C	2	2		4	VP						4
7	Recycling biotechnologies of the waste products	D						2		2	4	E	4
8	Biotechnological legislation and bioethics	D						2	1		2	VP	2
9	Biotechnological products management and marketing	D						2	2		3	E	3
10	Quality management	D						2	2		3	VP	3
11	Practice (4 weeks x 30 hours/week) for diploma project elaboration	S									8	C	8
2. OPTIONAL DISCIPLINES													
12	Agri food products industrialization	S	2		2	4	VP	2		2	3	VP	7
	Food industry byproducts valorification	S	2		2		VP	2		2		VP	
13	Biotechnologies for starter culture obtaining for food industry	S						1		2	3	E	3
	Colorants, aromas and vitamins obtaining using biotechnologies	S						1		2	3	E	3
3. FACULTATIVE													
14	Foreign languages	C		2		2	C		2		2	C	4
15	Food hygiene management	S						2	2		2	C	2
16	Passing the diploma exam										10		10

Legend: F – fundamental; S- speciality; D- domain; C- complementary; E- exam; VP- ongoing verification, C- colloquy.