

Fundamental domain-based ranking (DFI): Engineering Sciences  
Branch of science (RSI): Engineering of plant and animal resources  
Bachelor domain (DL): **ENGINEERING OF FOOD PRODUCTS**

Cod DFI:	CodRSI:	CodDL:	
20.50.150			

ci1cl1	ci1c2c3	a1a2
L	100	17

**EDUCATIONAL PLAN**  
2017 - 2021

	YEAR I										YEAR II																																							
	1st SEMESTER					2nd SEMESTER					3rd SEMESTER					4th SEMESTER																																		
1	Algebra and Geometry					Physics					Fundamentals of Electrical Engineering and Electronics					Microeconomy																																		
	L100.17.0R.F1	4	E	28	28	0	0	DF	54	L100.17.0R.F1	4	E	42	14	14	0	DF	56	L100.17.0R.S1	3	D	28	0	14	0	DS	48	L100.17.0R.C1	3	D	28	14	0	0	DC	50														
2	Mathematical Analysis					Global Food Policy and Security Strategy					Statistical Control of Food Products					Basic Operations in the Food Industry I																																		
	L100.17.0R.F2	4	E	28	28	0	0	DF	54	L100.17.0R.S2	4	E	28	14	0	0	DS	36	L100.17.0R.F2	4	D	28	14	14	0	DF	56	L100.17.0R.D2	4	E	28	14	14	0	DD	44														
3	Inorganic Chemistry					Organic Chemistry I					Organic Chemistry II					Instrumental Analytical Chemistry																																		
	L100.17.0R.F3	5	E	28	14	28	0	DF	67	L100.17.0R.F3	5	E	28	0	28	0	DF	67	L100.17.0R.F3	6	E	28	0	42	0	DF	79	L100.17.0R.F3	4	E	21	0	21	0	DF	58														
4	Computer Programming and Applications					Materials Science					Physical Chemistry I					Biochemistry																																		
	L100.17.0R.D4	6	D	28	0	42	0	DD	60	L100.17.0R.D4	4	D	28	0	28	0	DD	45	L100.17.0R.F4	6	E	35	0	28	0	DF	87	L100.17.0R.D4	2	D	28	14	0	0	DD	18														
5	General Chemistry					Fundamentals of Mechanical Engineering					Food Chemistry					Electrochemistry and Corrosion in the Food Industry																																		
	L100.17.0R.F5	5	E	28	21	14	0	DF	55	L100.17.0R.S5	3	D	28	14	0	0	DS	38	L100.17.0R.D5	4	E	28	0	28	0	DD	56	L100.17.0R.D5	3	D	28	0	28	0	DD	25														
6	Culture and Civilisation					Preservation Principles in the Food Industry					Analytical Chemistry					Physical Chemistry II																																		
	L100.17.0R.C6	2	D	14	14	0	0	DC	20	L100.17.0R.S6	2	D	28	0	21	0	DS	36	L100.17.0R.F6	3	E	28	0	28	0	DF	30	L100.17.0R.F6	6	E	35	0	28	0	DF	87														
7	Foreign Languages					General Microbiology					Microbiology of Food Products					Food Biotechnology																																		
	L100.17.0R.C7	2	D	0	28	0	0	DC	20	L100.17.0R.S7	4	E	14	0	14	0	DS	30	L100.17.0R.S7	2	D	21	0	14	0	DS	22	L100.17.0R.D7	4	E	28	0	28	0	DD	56														
8	Physical Education					Foreign Languages					Physical Education					Physical Education																																		
	L100.17.0R.C8	2	D	0	14	0	0	DC	0	L100.17.0R.C8	2	D	0	28	0	0	DC	20	L100.17.0R.C8	2	D	0	14	0	0	DC	0	L100.17.0R.C8	2	D	0	14	0	0	DC	0														
9						Physical Education										Practice (40 hours)																																		
						L100.17.0R.C9					2					D					0					14					0					0					DC					0				
10	Facultative course 1					Facultative course 2					Facultative course 3					Facultative course 4																																		
	L100.17.0R.f10-ij					L100.17.0R.f10-ij					L100.17.0R.f10-ij					L100.17.0R.f10-ij																																		
total / semester	hours:	385			VPI:	330			hours:	385			VPI:	328			hours:	392			VPI:	378			hours:	371			VPI:	338																				
	credits:	30			evaluations:	4E, 4D			8	credits:	30			evaluations:	4E, 5D			9	credits:	30			evaluations:	4E, 4D, 1C			8	credits:	30			evaluations:	4E, 4D, 1C			9														
total / week	hours:	27.5							hours:	27.5							hours:	28							hours:	26.5																								
	of which:				11	10.5			6	0	(c, s, l, p)	of which:				14	6			7.5	0	(c, s, l, p)	of which:				14	2			12	0	(c, s, l, p)	of which:				14	4			8.5	0	(c, s, l, p)						

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**FACULTATIVE DISCIPLINES**  
2017 - 2021

		YEAR I										YEAR II																													
		1st SEMESTER					2nd SEMESTER					3rd SEMESTER					4th SEMESTER																								
01		Educational Psychology										Pedagogy I					Pedagogy II					Didactics																			
		L100.17.0R.f10-01	5	E	28	28	0	0	f	70	L100.17.0R.f10-01	5	E	28	28	0	0	f	60	L100.17.0R.f10-01	5	E	28	28	0	0	f	60	L100.17.0R.f10-01	5	E	28	28	0	0	f	60				
02		Voluntary										Voluntary					Voluntary					Voluntary																			
											L100.17.0R.f10-02	2	C	0	0	28	0	f	40									L100.17.0R.f10-02	2	C	0	0	28	0	f	40					
03																						Social responsibility and civic activism																			
																				L100.17.0R.f10-03	2	E	28	28	0	0	f	40									40				
total / semes	hours:	56					VPI: 70					hours: 84					VPI: 100					hours: 56					VPI: 60					hours: 140					VPI: 140				
	credits:	5					evaluations:					credits: 7					evaluations:					credits: 5					evaluations:					credits: 9					evaluations:				
total / week	hours:	4										hours: 6										hours: 4										hours: 10									
	of which:	2 2 0 0 (c, s, l, p)					of which:					2 2 2 0 (c, s, l, p)					of which:					2 2 0 0 (c, s, l, p)					of which:					4 4 2 0 (c, s, l, p)									

**Legend**

Name of the Discipline									
Code	nc	FE	c	s	l	p	CF	VPI	

**Code** = discipline code  
**nc** = number of transferable credits  
**FE** = evaluation form  
**FE** ∈ {E, D, C, P-E, P-D}  
**E** = exam  
**D** = distributed evaluation  
**C** = colloquy  
**P - E** - autonomus project with examination like for the disciplines with exams  
**P - D** - autonomus project with examination like for the disciplines with distributed evaluation  
**c** = no. hours course/semester

**s** = no. seminar hours  
**l** = no. laboratory hours  
**p** = no. project hours  
**CF** = formative category to which the discipline belongs  
**CF** ∈ {DC, DD, DF, DS}  
**DC** - complementary discipline  
**DD** - domain discipline  
**DF** - fundamental discipline  
**DS** - specialized discipline  
**VPI** = volume of hours needed for individual preparation  
**Exemplu**

Mathematical Analysis									
Code	4	E	28	28	0	0	DF	60	

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Fundamental domain-based ranking (DFI): Engineering Sciences  
Branch of science (RSI): Engineering plant and animal resources  
Domain-based ranking (DII): Food Product Engineering  
Bachelor domain (DL): **ENGINEERING OF FOOD PRODUCTS**  
Specialization (S): **CONTROL AND EXPERTISE OF FOOD PRODUCTS**

Cod DFI	CodRSI	CodDL	CodS
20.50.30.150.30	L	101	17

EDUCATIONAL PLAN  
2017 - 2021

	YEAR III***												YEAR IV***																							
	5th SEMESTER						6th SEMESTER						7th SEMESTER						8th SEMESTER																	
1	Management						Marketing						Optional discipline discipline V						Optional discipline discipline VIII																	
	L101.17.0R.C1	2	D	14	14	0 0	DC	29	L101.17.0R.C1	2	D	14	14	0 0	DC	29	L101.17.0R.S1-ij	4	D	28	0	28	0	DS	44	L101.17.0R.S1-ij	3	E	28	0	14	0	DS	37		
2	Basic operations in the food industry 2						Equipments in the food industry						Microbiological Analysis						Food Quality Management																	
	L101.17.0R.D2	4	E	28	0	14	14	DD	60	L101.17.0R.S2	3	E	21	0	14	0	DS	47	L101.17.0R.S2	5	E	28	0	28	0	DS	54	L101.17.0R.S2	3	E	28	14	0	0	DS	58
3	Food technologies 1						Automatizations and optimizations in the food industry						Sensitive Analysis						Optional discipline discipline IX																	
	L101.17.0R.D3	4	D	28	0	28	14	DD	104	L101.17.0R.D3	4	E	35	0	35	0	DD	60	L101.17.0R.D3	5	E	28	0	28	0	DD	47	L101.17.0R.D3-ij	4	E	28	0	28	0	DD	47
4	Additives and ingredients in the food industry						Sanitary-veterinary control and food safety						Communication						Optional discipline X																	
	L101.17.0R.D4	4	E	28	0	28	0	DD	56	L101.17.0R.S4	4	E	28	0	28	0	DS	45	L101.17.0R.C4	2	D	0	14	0	0	DC	14	L101.17.0R.S4-ij	5	E	28	14	0	0	DS	56
5	Applied Biochemistry						Food technologies II						Optional discipline VI						Conducting diploma project*																	
	L101.17.0R.D5	4	E	28	0	14	0	DD	56	L101.17.0R.D5	5	D	28	0	28	14	DD	90	L101.17.0R.S5-ij	4	E	28	28	0	0	DS	55	L101.17.0R.S5	5	D	0	0	0	182	DS	98
6	Optional discipline I						Optional discipline III						Food Products Innocuity						Diploma Examination**																	
	L101.17.0R.D6-ij	4	E	28	0	28	0	DD	88	L101.17.0R.D6-ij	4	D	28	0	28	0	DD	88	L101.17.0R.S6	5	D	28	0	28	0	DS	88	L101.17.0R.6	10	E	0	0	0	0		
7	Optional discipline II						Optional discipline IV						Optional discipline VII						Facultative 8																	
	L101.17.0R.D7-ij	4	D	28	0	28	0	DD	56	L101.17.0R.D7-ij	4	E	21	0	28	0	DD	44	L101.17.0R.S7-ij	5	E	28	0	28	14	DS	90	L101.17.0R.17-ij							f	
8	Practice (120 HOURS )						Practice (120 HOURS )						Facultative 7																							
	L101.17.0R.D8	4	C	0	0	0	0	DD	2	L101.17.0R.D8	4	C	0	0	0	0	DD	2	L101.17.0R.17-ij						f											
9	Facultative 1						Facultative 2																													
	L101.17.0R.f9-ij						f		L101.17.0R.f9-ij							f																				
total/sem.	hours:	364		VPI:		451		hours:	364		VPI:		405		hours:	364		VPI:		392		hours:	364		VPI:		296									
	credits:	30		evaluation: 4E,3D,1C		8		credits:	30		evaluation 4E,3D,1C		8		credits:	30		evaluation: 4E,3D,1C		8		credits:	30		evaluation: 5 E, 1 D		6									
total/week	hours:	26						hours:	26						hours:	26						hours:	26													
	from which:	13	1	10	2	(c, s, l, p)		from which:	12.5	1	11.5	1	(c, s, l, p)		from which:	12	3	10	1	(c, s, l, p)		from which:	8	2	3	13	(c, s, l, p)									

\* duration 7 weeks x 26 hours from which 2 weeks practice x 26 hours; \*\*It consists of: a. verification of fundamental and specialized knowledge; b. support the bachelor degree.

\*\*\*The Optional discipline disciplines are chosen by students of the offer presented in the table "Optional discipline Disciplines".

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**Optional discipline DISCIPLINES  
2017 - 2021**

	YEAR III								YEAR IV																											
	5th SEMESTER				6th SEMESTER				7th SEMESTER				8th SEMESTER																							
01	Optional discipline I Applied physical chemistry				Optional discipline III Chromatographical methods of food analysis				Optional discipline V Phytosanitary control				Optional discipline VIII Genetic Modified Food Products																							
	L101.17.0R.D6-	4	E	28	0	28	0	DD	88	L101.17.0R.D6-01	4	D	28	0	28	0	DD	88	L101.17.0R.S1-ij	4	D	28	0	28	0	DS	44	L101.17.0R.S1-ij	3	E	28	0	14	0	DS	37
02	Optional discipline I Colloid Chemistry				Optional discipline III Control and analysis by chromatography				Optional discipline V Contamination Control of Food Products				Optional discipline VIII Food counterfeit control																							
	L101.17.0R.D6-	4	E	28	0	28	0	DD	88	L101.17.0R.D6-02	4	D	28	0	28	0	DD	88	L101.17.0R.S1-ij	4	D	28	0	28	0	DS	44	L101.17.0R.S1-ij	3	E	28	0	14	0	DS	37
03	Optional discipline II Chemistry of Natural Compounds				Optional discipline IV Spectroscopic methods of food product control				Optional discipline VI Legislation and Consumers Protection				Optional discipline IX Computer Assisted Design and Control																							
	L101.17.0R.D7-	4	D	28	0	28	0	DD	56	L101.17.0R.D7-03	4	E	21	0	28	0	DD	44	L101.17.0R.S5-ij	4	E	28	28	0	0	DS	55	L101.17.0R.D3-ij	4	E	28	0	28	0	DD	47
04	Optional discipline II Natural identical compounds				Optional discipline IV Control and analysis by spectrophotometric methods				Optional discipline VI International Legislation				Optional discipline IX Software for Industrial Plants Design																							
	L101.17.0R.D7-	4	D	28	0	28	0	DD	56	L101.17.0R.D7-04	4	E	21	0	28	0	DD	44	L101.17.0R.S5-ij	4	E	28	28	0	0	DS	55	L101.17.0R.D3-ij	4	E	28	0	28	0	DD	47
05									Optional discipline VII Fermentation Technology				Optional discipline X Principles of Human nutrition																							
																			L101.17.0R.S7-ij	5	E	28	0	28	14	DS	90	L101.17.0R.S4-ij	5	E	28	14	0	0	DS	56
06									Optional discipline VII Extraction Technology				Optional discipline X Functional Food																							
																			L101.17.0R.S7-ij	5	E	28	0	28	14	DS	90	L101.17.0R.S4-ij	5	E	28	14	0	0	DS	56
07																																				
08																																				
09																																				
10																																				
11																																				
12																																				

Note: From each group of Optional disciplines only a reduced number of disciplines will be activated depending on students options, number of students and financial support.

**FACULTATIVE DISCIPLINES  
2017 - 2021**

	YEAR III								YEAR IV										
	5th SEMESTER				6th SEMESTER				7th SEMESTER				8th SEMESTER						
01	PC assisted Education								Student class management										
	L101.17.0R.f9-	2	D	14	14	0	0	f	24	L101.17.0R.f9-01	3	E	14	14	0	0	f	40	
02	Pedagogic practice in the mandatory preuniversitar education 1								Pedagogic practice in the mandatory preuniversitar education 2										
	L101.17.0R.f9-	3	D	0	0	0	42	f	0	L101.17.0R.f9-02	2	D	0	0	0	36	f	0	
03									Final Exam: Nivel 1										
									L101.17.0R.f9-03	5	E	0	0	0	0	f	0		
04									Voluntary										
									L101.17.0R.f9-04	2	C	0	0	28	0	f	40		
total/sem.	hours:	70	VPI:		24		hours:	64	VPI:		40		hours:	0	VPI:		0		
	credits:	5	evaluation:				credits:	10	evaluation:				credits:	0	evaluation:				
total/week	hours:	5					hours:	7					hours:	0					
	from which:	1	1	0	3	(c, s, l, p)		from which:	1	1	2	3	(c, s, l, p)		from which:	0	0	0	0

**Legenda**

Name of the discipline								
Code	nc	FE	c	s	l	p	CF	VPI

**Code** = discipline code  
**nc** = number of transferable credits  
**FE** = evaluation form  
**FE** ∈ {E, D, C, P-E, P-D}  
**E** = exam  
**D** = distributed evaluation  
**C** = colloquy  
**P - E** = autonomus project with examination like for the disciplines with exams  
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**c** = no.hours course/semester

**s** = no. seminar hours  
**l** = no. laboratory hours  
**p** = no. project hours  
**CF** = formative category to which the discipline belongs  
**CF** ∈ {DC, DD, DF, DS}  
**DC** - Complementary discipline  
**DD** - Domain discipline  
**DF** - fundamental discipline  
**DS** - Speciality discipline  
**VPI** = volume of hours needed for individual preparation for a semester of

**Example**

Mathematical Analysis								
Code	4	E	28	28	0	0	DF	60

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