



Faculty of Petroleum Refining and Petrochemistry

Study Program: Safety and Food Control

Study period: 4 years Bachelor
 Academic year structure: 2 semesters (14 weeks per semester)
 Examination sessions: winter session (January/February)
 summer session (June/July)
 Total ECTS: 240 (+4)

Courses per year (C-course, S-seminar, L-Laboratory, P-project)

1st YEAR

No	Course	1 st Semester					2 nd Semester				
		C	S	L	P	ECTS	C	S	L	P	ECTS
1	Linear algebra, analytical and differential geometry	3	2	-	-	6					
2	Chemistry 1	4	-	2	-	7					
3	Analytical chemistry and instrumental analysis 1	2	-	2	-	6					
4	Computer Programming and Programming Languages	2	-	2	-	4					
5	Physics 1	2	-	2	-	5					
6	Physical education and sport 1	-	1	-	-	1					
7	Foreign Languages 1	-	2	-	-	2					
8	Mathematical Analysis						2	3	-	-	7
9	Chemistry 2						2	-	2	-	6
10	Analytical chemistry and instrumental analysis 2						2	-	3	-	5
11	General Economics						2	1	-	-	3
12	Physical education and sport 2						-	1	-	-	1
13	Computer aided graphics						-	2	-	-	2
14	Physics 2						2	-	2	-	5
15	Foreign Languages 2						-	2	-	-	2

2nd YEAR

No	Course	1 st Semester					2 nd Semester				
		C	S	L	P	ECTS	C	S	L	P	ECTS
1	Organic chemistry 1	3	-	3	-	8					
2	Applied physical chemistry 1	2	1	2	-	6					
3	Analytical chemistry and instrumental analysis 3	2	-	2	-	5					
4	Elements of mechanical engineering 1	2	-	2	-	4					
5	Elements of mechanical engineering 2 - project	-	-	-	1	2					



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6	Electrical engineering and electronics	2	-	1	-	3					
7	Physical education and sport 3	-	1	-	-	1					
8	Foreign Languages 3	-	2	-	-	2					
9	Organic chemistry 2						3	-	3	-	6
10	Applied physical chemistry 2						3	-	2	-	5
11	Numerical methods						2	-	2	-	4
12	Industrial catalysis and catalysts						2	-	2	-	4
13	Physical education and sport 4						-	1	-	-	1
14	Strength of materials						2	-	2	-	5
15	Foreign Languages 4						-	2	-	-	2
16	Industrial Training 1 (3 weeks x 30 hours)						-	-	-	-	4

3rd YEAR

No	Course	1 st Semester					2 nd Semester				
		C	S	L	P	ECTS	C	S	L	P	ECTS
1	Organic chemistry 3	2	-	2	-	4					
2	General food technologies 1	3	-	2	-	6					
3	Fluid Dynamics	2	-	2	-	5					
4	Chromatographic and electrophoretic methods of food analysis	2	-	2	-	4					
5	Mass transfer processes	4	-	2	-	6					
6	Food biochemistry	3	-	2	-	5					
7	Toxicology						2	-	2	-	3
8	Transfer phenomena and unit operations 1						2	-	2	-	4
9	Quality control of food products						4	-	2	-	6
10	General food technologies 2						3	-	2	-	5
11	General food technologies 3 - project						-	-	-	1	2
12	Spectrophotometric methods of food analysis						2	-	2	-	3
13	Process control in the Chemical Industry 1						2	-	2	-	3
14	Industrial Training 2 (3 weeks x 30 hours)						-	-	-	-	4

4th YEAR

No	Course	1 st Semester					2 nd Semester				
		C	S	L	P	ECTS	C	S	L	P	ECTS
1	Optimization of technological processes	3	-	3	-	7					



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2	Transfer phenomena and unit operations 2	2	-	2	-	4					
3	Transfer phenomena and unit operations 3 - project	-	-	-	1	2					
4	Food safety and traceability in the food chain	3	-	2	-	6					
5	Structural analysis in organic chemistry	2	-	2	-	4					
6	Food quality management	2	1	-	-	3					
7	Process control in the Chemical Industry 2	2	-	2	-	4					
8	Membrane techniques in food analysis						3	-	2	-	5
9	Food pollution						2	-	2	-	4
10	Food polymer packaging						3	-	1	-	4
11	A. Biochemical technologies A. Authentication and detection of food counterfeits						3	-	2	1	6
12	B. Synthetic products for the food industry B. Semi-synthetic products for the food industry						3	-	2	-	5
13	Elaboration of Diploma Project						-	-	-	4	4
14	Diploma project industrial training (2 weeks)						-	-	-	-	2