



Faculty of Petroleum Refining and Petrochemistry

Study Program: Chemical Engineering for Refineries and Petrochemistry

Study period: 1.5 years Master
 Academic year structure: 3 semesters (14 weeks per semester)
 Examination sessions: winter session (January/February)
 summer session (June/July)
 Total ECTS: 90

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	Raw materials and products in the petroleum refining industry	3	-	3	-	6					
2	Modern technologies for petroleum refining	3	-	3	-	8					
3	Lubricants and additives	3	-	2	-	6					
4	Technologies for alternative fuels manufacturing	3	-	2	-	6					
	Non-conventional separation processes										
5	Professional practice 1	-	-	-	-	4					
6	Petrochemicals and fine chemicals synthesis						3	-	2	-	6
7	Modern analytic methods in the oil refining industry						2	-	2	-	4
8	Process modeling, simulation and optimization						2	2	-	-	5
9	Thermal integration, energy efficiency, and utility systems						3	2	-	1	6
10	Bio-resources						2	-	2	-	5
	Risk engineering in petroleum processing industry										
11	Professional practice 2						-	-	-	-	4



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2nd YEAR

No	Course	1 st Semester				
		C	S	L	P	ECTS
1	Chemical plant design and economics	3	-	2	2	5
2	Project management in the chemical industry	2	-	1	1	4
3	Dynamic simulation and advanced control systems for chemical processes	3	-	2	-	5
4	3D plant design in the chemical industry	3	-	2	2	5
5	Ethics and academic integrity	2	1	-	-	4
6	Practice for elaboration of dissertation	4 weeks x 30 hours per week				7