



## Faculty of Petroleum Refining and Petrochemistry

### Study Program: Advanced Technologies for Petroleum Processing

Study period: 1,5 years Master of Science  
 Academic year structure: 2 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)

#### 1<sup>st</sup> YEAR

No	Course	1 <sup>st</sup> Semester					2 <sup>nd</sup> Semester				
		C	S	L	P	ECTS	C	S	L	P	ECTS
1	Modern technologies for petroleum processing	3	-	3		6					
2	Thermal integration, energy efficiency, and utility systems	3	2		-	6					
3	Thermal integration, energy efficiency, and utility systems - project		-		2	3					
4	Lubricants and additives	3	-	2	0	5					
5	Project management in chemical industry	3	-	2	-	6					
	Raw materials and products in petroleum refining industry	3	-	2	-						
6	Research practice 1	-	-		-	4					
7	Modern analytic methods in the petroleum oil industry						2	-	2	-	4
8	Non-conventional separation processes						2	-	2	1	
9	Modern technologies in petrochemistry						3	-	2	-	5
10	Process modeling, simulation and optimization of chemical processes						2	3	-	-	5
11	3-D design of the installations from chemical industry						3	-	2		6
	Technologies for alternative fuels manufacturing										
12	Research practice 2						-	-		-	4

#### 2<sup>nd</sup> YEAR

No	Course	1 <sup>st</sup> Semester					
		C	S	L	P	ECTS	
13	Computer assisted design	3	-	1	3	6	
14	Bioresources	3	-	2		5	
15	Advanced control systems for chemical processes	3	-	3	-	5	
16	Risk engineering in petroleum processing industry	2	-	-	2	3	
17	Ethics and academic integrity	2	1	-	-	4	
18	Dissertation project industrial training	4 weeks x 30 hours/week					7