

**CHEMISTRY AND ENGINEERING OF ORGANIC SUBSTANCES,
PETROCHEMISTRY AND CARBOCHEMISTRY**

Year: I

Semester: I

Nr. crt.	Discipline		hrs/week				Indiv. study	ECT S	Evaluation
	Name	Cod	C	S	L	P			
Compulsory Disciplines (O)									
1	Mathematics	UPB.11.F.01.O.001	3	2	0	0		6	E
2	Analytical chemistry	UPB.11.D.01.O.002	3	0	4	0		7	E
3	Inorganic chemistry	UPB.11.D.01.O.003	3	2	2	0		7	E
4	Computing and graphical design	UPB.11.F.01.O.004	2	0	2	0		5	E
5	Micro & macroeconomy	UPB.11.C.01.O.005	2	1	0	0		3	V
TOTAL Compulsory Disciplines (O)			13	5	8			28	4E+V
Optional Disciplines (A)									
6	Foreign language I	UPB.11.C.01.A.006	0	2	0	0		2	V
TOTAL optional disciplines (A)			0	2	0	0		2	
TOTAL compulsory disciplines (O) and optional (A)			13	7	8		13	30	4E+2V
TOTAL hrs/week			28						
Facultative disciplines (L)									
7	Chemistry Fundamentals	UPB.11.F.01.L.007	0	2				2	V
8	Physical Education	UPB.11.C.01.L.008	0	1	0	0		1	V
9	Physics Fundamentals	UPB.11.F.01.L.009	0	2				1	V
10	Mathematics fundamentals	UPB.11.F.01.L.010	0	2				1	V
TOTAL facultative disciplines (L)			0	7	0	0		5	4V

Year : I

Semester: II

Nr. crt.	Discipline		hrs/week				Indiv. study	ECT S	Evaluation
	Name	Cod	C	S	L	P			
Compulsory Disciplines (O)									
11	Mathematics	UPB.11.F.02.O.011	3	1	0	0		5	E
12	Instrumental analysis	UPB.11.D.02.O.012	3	0	4	0		7	E
13	Inorganic chemistry	UPB.11.D.02.O.013	3	0	2	0		5	E
14	Physics I	UPB.11.F.02.O.014	2	1	0	0		4	E
15	Transitional metals	UPB.11.F.02.O.015	2	1	0	0		4	E
16	Elements of mechanics and mechanical engineering	UPB.11.D.02.O.016	2	1	0	0		3	V
TOTAL Compulsory Disciplines (O)			15	4	6	0		26	5E+V
Optional disciplines (A)									
17	Computing and graphical design	UPB.11.F.02.A.017	0	0	3	0		2	V
TOTAL optional disciplines (A)			0	0	3	0		4	V
TOTAL compulsory disciplines (O) and optional (A)			15	4	9			30	
TOTAL hrs/ week			28						
Facultative disciplines (L)									
18	European Integration Concepts	UPB.11.C.02.L.018	1	1				2	V
19	Pedagogy I	UPB.11.C.02.L.019	2	2				5	E
20	Physical Education	UPB.11.C.02.L.020	0	1	0	0		1	V
TOTAL facultative disciplines (L)			3	4				8	1E+2V

Year:II**Semester: I**

Nr. crt.	Discipline		Hrs/week				Indiv. study	ECTS	Evaluation	
	Name	Cod	C	S	L	P				
Compulsory Disciplines (O)										
1	Physics II	UPB.11.F.03.O.001	2	1	0	0		4	E	
2	Organic chemistry	UPB.11.F.03.O.002	2	2	0	0		5	E	
3	Physical chemistry	UPB.11.D.03.O.003	3	0	4	0		7	E	
4	Ecology and sustainable development	UPB.11.D.03.O.004	3	0	3	0		6	E	
5	Fundamentals of electrical engineering and electronics	UPB.11.D.03.O.005	2	0	0	0		2	V	
6	Management	UPB.11.D.03.O.006	1	1	0	0		2	V	
7	Communication techniques	UPB.11.F.03.O.007	1	1	0	0		2	V	
TOTAL Compulsory Disciplines (O)			14	5	7	0		28	4E+3V	
Optional disciplines (A)										
8	Optional discipline I	UPB.11.F.03.A.008	2	0	0	0		2	V	
TOTAL optional disciplines (A)										
TOTAL compulsory disciplines (O) and optional (A)			16	5	7	0		30	4E+4V	
TOTAL hrs/week			28							
Facultative disciplines (L)										
9	Pedagogy II	UPB.11.C.03.L.009	2	2	0	0		5	E	
10	Physical Education III	UPB.11.C.03.L.010		1	0	0		1	V	
TOTAL facultative disciplines (L)			2	3	0	0		6	1E+1V	

Year:II**Semester: II**

Nr. crt.	Discipline		Hrs/week				Indiv. study	ECTS	Evaluation	
	Name	Cod	C	S	L	P				
Compulsory Disciplines (O)										
11	Organic chemistry	UPB.11.D.04.O.011	2	2	3			7	E+V	
12	Physical chemistry	UPB.11.D.04.O.012	2	0	2	0		5	E	
13	Chemical engineering	UPB.11.D.04.O.013	3	0	2	0		6	E	
14	Materials science I- inorganic materials	UPB.11.D.04.O.014	3	0	2	0		5	E	
15	Materials science II - organic materials and composites	UPB.11.D.04.O.015	3	0	2	0		5	E	
TOTAL Compulsory Disciplines (O)			13	2	11	0		28	5E+V	
Optional disciplines (A)										
16	Optional discipline II	UPB.11.F.04.O.016	2	0	0	0		2	V	
TOTAL optional disciplines (A)			2					2		
TOTAL compulsory disciplines (O) and optional (A)			15	2	0	0		30	5E+2V	
TOTAL hrs/week			27							
Facultative disciplines (L)										
17	Methods of Teaching Specialized Matters	UPB.11.C.04.L.017	2	2				5	E	
18	Physical Education III	UPB.11.C.04.L.018	0	1	0	0		1	V	
TOTAL facultative disciplines (L)			2	2				6	1E+1V	

Year:III

Semester: I

Nr. crt.	Disciplines		Hrs/week				Indiv. study	ECTS	Evaluation
	Name	Cod	C	S	L	P			
Compulsory Disciplines (O)									
1	Organic chemistry	UPB.11.D.05.O.301	2	0	3			5	E
2	Physical chemistry	UPB.11.D.05.O.302	2	0	2	0		4	E
3	Unit operations in process industries	UPB.11.D.05.O.303	3	0	2	0		5	E
4	Electrochemistry	UPB.11.D.05.O.304	2		3	0		5	E
5	Instrumental analysis in organic chemistry	UPB.11.S.05.O.305	2	0	3	0		5	E
6	Biochemistry	UPB.11.F.05.O.306	2	0	0	0		3	V
TOTAL Compulsory Disciplines (O)			13		13	0		27	5E+V
7	Industrial management	UPB.11.D.05.A.307	1	0	1	0		3	V
TOTAL compulsory disciplines (O) and optional (A)			14	0	14	1		30	5E+2V
TOTAL hrs/ week..... 27									
Facultative disciplines (L)									
8	Computer aided training I	UPB.11.D.05.L.308	0	0	2	0		2	V
9	Teaching practice in preuniversity education I	UPB.11.C.05.L.309	0	0	0	3			
10	Computer aided training II	UPB.11.C.05.L.310	1	2	0	0		4	V
TOTAL facultative disciplines (L)			1	2	2	3		6	2V

Year:III

Semester: II

Nr. crt.	Discipline		Hrs/week				Indiv. study	ECTS	Evaluation
	Name	Cod	C	S	L	P			
Compulsory Disciplines (O)									
11	Unit operations in process industries	UPB.11.D.06.O.311	2	0	2	1		4	E+P
12	Organic chemistry	UPB.11.S.06.O.312	2	0	3	0		4	E
13	Organic technology	UPB.11.S.06.O.313	3	0	2	0		4	E
14	Processes and products from petrochemistry and carbochemistry	UPB.11.S.06.O.314	2	0	2			4	E
15	Catalysis and catalysts	UPB.11.D.06.O.315	2	0	2			3	E
16	Practical training	UPB.11.D.06.O.316	0	0	0	0		6	V
TOTAL Compulsory Disciplines (O)			11	0	11	1		25	5E+V+P
Optional disciplines (A)									
17	Corrosion	UPB.11.D.06.A.317	1	0	1	0		2	V
18	Optional I	UPB.11.S.06.A.318	2	0	1	0		3	V
TOTAL optional disciplines (A)			3		2			5	2V
TOTAL compulsory disciplines (O) and optional (A)			14		12	1	13	30	5E+3V+P
TOTAL hrs/week 28									
Facultative disciplines (L)									
19	Computer aided training	UPB.11.D.06.L.319	0	0	2	0		2	V
20	Teaching practice in preuniversity education II	UPB.11.C.06.L.320	0	0	0	3		3	V
21	Classroom management	UPB.11.C.06.L.321	1	1	0	0		3	E
TOTAL facultative disciplines (L)			1	4				10	E+2V

Year:IV

Semester: I

Nr. crt.	Discipline		hrs/week				Indiv. study	ECTS	Evaluation
	Name	Cod	C	S	L	P			
Compulsory Disciplines (O)									
1	Chemical reactors	UPB.11.F.07.O.301	2	0	2			4	E
2	Chemistry and technology of dyes	UPB.11.S.07.O.302	2	0	3	1		5	E+P
3	Chemistry and technology of drugs	UPB.11.S.07.O.303	2	0	0	0		3	E

4	Chemistry and technology of active surface agents	UPB.11.S.07.O.304	2	0	2	0		4	E
5	Organic technology	UPB.11.S.07.O.305	3	0	2	1		6	E+P
6	Probability , statistics and design of experiments	UPB.11.S.07.O.306	1	1	0	0		2	V
TOTAL Compulsory Disciplines (O)			12	1	9	2		24	5E+2P+V
Optional disciplines (A)									
7	Optional II	UPB.11.S.07.A.307	1	1	0			3	V
8	Optional III	UPB.11.S.07.A.308	1	1	0			3	V
TOTAL optional disciplines (A)			2	2	0			6	2V
TOTAL compulsory disciplines (O) and optional (A)			14	3	9	2		30	5E+2P+2V
TOTAL hrs/ week						28			
Facultative disciplines (L)									
9	Computer aided training III	UPB.11.D.07.L.309	0	0	2	0		2	V
10	Marketing	UPB.11.D.06.L.310	1	1	0	0		2	V
11	Optimizations in the chemical industry	UPB.11.D.06.L.311	1	1				2	V
TOTAL facultative disciplines (L)			2	2	2			6	3V

Year:IV

Semester: II

Nr. crt.	Discipline		Hrs/week				Indiv. study	ECTS	Evaluation
	Name	Cod	C	S	L	P			
Compulsory Disciplines (O)									
12	Chemical reactors	UPB.11.S.08.O.312	1	0	0	1		2	E+P
13	Chemistry and technology of dyes	UPB.11.S.08.O.313	2	0	2			4	E
14	Chemistry and technology of drugs	UPB.11.S.08.O.314	2		3	0		5	E
15	Chemistry and technology of pesticides	UPB.11.S.08.O.315	2	0	3	0		5	V
16	Depolution in organic and petrochemical industries	UPB.11.S.08.O.316	2	0	0	0		2	E
17	Natural dyes	UPB.11.S.08.O.317	1	0	0	0		2	V
18	License/diploma project	UPB.11.S.08.O.318			4			6	V
TOTAL Compulsory Disciplines (O)			10	0	12	1		24	4E+3V+P
Optional disciplines (A)									
19	Basic Cosmetics	UPB.11.S.08.A.319	1	1	0	0		2	V
20	Varnishes and paints	UPB.11.S.08.A.320	2		1			4	V
TOTAL optional disciplines (A)			3	1	1			6	2V
TOTAL compulsory disciplines (O) and optional (A)			10	2	7	7		30	7V
TOTAL hrs/ week						28			
Facultative disciplines (L)									
21	Computer aided training IV	UPB.11.D.08.L.321	0	0	2	0		2	V
TOTAL facultative disciplines (L)			0	0	2			2	1V