

UNDERGRADUATE STUDY – 1st YEAR

1st Semester

No. crt.	Subject		Hours/week				PC	Evaluation
	Subject	Code	C	S	L	P		
Mandatory subjects (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	Computers and graphics	UPB.11.F.01.O.004	2	0	2	0	5	E
5	Micro and macroeconomics	UPB.11.C.01.O.005	2	1	0	0	3	V
TOTAL mandatory subjects (O)			13	5	8	0	28	
Optional subjects (A)								
6	Foreign language1/Foreign language2	UPB.11.C.01.O.006	0	2	0	0	2	V
TOTAL optional subjects (A)			0	2	0	0		
TOTAL mandatory subjects(O) and optional subjects (A)			13	7	8	0	30	
TOTAL hours/week			28					
Facultative subjects (L)								
7	Chemistry fundaments	UPB.11.F.01.L.007	0	2	0	0	2	V
8	Sports	UPB.11.F.01.L.008	0	1	0	0	1	V
9	Physics fundaments	UPB.11.F.01.L.009	0	2	0	0	1	V
10	Mathematics fundaments	UPB.11.F.01.L.010	0	2	0	0	1	V
TOTAL facultative subjects (L)			0	7	0	0	5	

2nd Semester

No. crt.	Subject		Hours/week				PC	Evaluation
	Subject	Code	C	S	L	P		
Mandatory subjects (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	Mechanics fundaments and mechanical engineering	UPB.11.D.02.O.016	2	1	0	0	3	V
TOTAL mandatory subjects (O)			15	4	6	0	28	
Optional subjects (A)								
17	Computers and graphics	UPB.11.F.02.O.017	0	0	3	0	2	V
	Applied informatics							
TOTAL optional subjects (A)			0	0	3	0	2	
TOTAL mandatory subjects (O) and optional subjects (A)			15	4	9	0	30	
TOTAL hours/week			28					
Facultative subjects (L)								
18	Sports	UPB.11.C.02.L.017	0	1	0	0	1	V
19	Pedagogy I	UPB.11.U.02.L.019	2	2	0	0	5	E
TOTAL facultative subjects (L)			2	3	0	0	6	

UNDERGRADUATE STUDY – 2nd YEAR

1st Semester

No. crt.	Subject		Hours/week				PC	Evaluation
	Subject	Code	C	S	L	P		
Mandatory subjects (O)								
1	Physics II	UPB.11.F.03.O.001	2	1	0	0	4	E
2	Organic chemistry I	UPB.11.F.03.O.002	2	2	0	0	5	E
3	Physical chemistry I	UPB.11.F.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	Fundaments 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 skills	UPB.11.C.03.O.007	1	1	0	0	2	V
TOTAL mandatory subjects (O)			14	5	7	0	28	
Optional subjects (A)								
8	Optional subject I (Organometallic compounds/Chromatographical methods for quality control/ Chemical sensors and biosensors)	UPB.11.F.03.O.008	2	0	0	0	2	V
TOTAL optional subjects (A)			2	0	0	0	2	
TOTAL mandatory subjects (O) and optional subjects (A)			16	5	7	0	30	
TOTAL hours/week			28					
Facultative subjects (L)								
9	Pedagogy II	UPB.11.U.03.L.009	0	0	2	0	5	E
10	Sports	UPB.11.C.03.L.010	0	1	0	0	1	V
TOTAL facultative subjects (L)			0	1	2	0	6	

2nd Semester

No. crt.	Subject		Hours/week				PC	Evaluation
	Subject	Code	C	S	L	P		
Mandatory subjects (O)								
10	Organic chemistry II	UPB.11.D.04.O.010	2	2	3	0	7	E+V
11	Physical chemistry II	UPB.11.D.04.O.011	2	0	2	0	5	E
12	Basics of chemical engineering	UPB.11.D.04.O.012	3	0	2	0	6	E
13	Materials science I – Inorganic materials	UPB.11.D.04.O.013	3	0	2	0	5	E
14	Materials science II – Organic and composite materials	UPB.11.D.04.O.014	3	0	2	0	5	E
TOTAL mandatory subjects (O)			13	2	11	0	28	
Optional subjects (A)								
15	Optional subject II (Colloidal phenomena/Applied coordinative chemistry/Physico-chemical properties of materials)	UPB.11.F.04.O.015	2	0	0	0	2	V
TOTAL optional subjects (A)			2	0	0	0	2	
TOTAL mandatory subjects (O) and optional subjects (A)			15	2	11	0	30	
TOTAL hours/week			28					
Facultative subjects (L)								
16	Didactic methodology	UPB.11.U.04.L.016	2	2	0	0	5	E
17	Sports	UPB.11.C.04.L.017	0	1	0	0	1	V
TOTAL facultative subjects (L)			2	3	0	0	6	

UNDERGRADUATE STUDY – 3rd YEAR

1st Semester

No. crt.	Subject		Hours/week				PC	Evaluation
	Subject	Code	C	S	L	P		
Mandatory subjects (O)								
1	Organic chemistry III	UPB.11.F.05.O.701	2	0	3	0	5	E
2	Physical chemistry III	UPB.11.D.05.O.702	2	0	2	0	4	E
3	Unit operations for process industries	UPB.11.D.05.O.703	3	0	2	0	5	E
4	Electrochemistry	UPB.11.D.05.O.704	2	0	3	0	5	E
5	Polymer synthesis	UPB.11.S.05.O.705	2	0	2	0	5	E
6	Polymer physics	UPB.11.S.05.O.706	2	0	1	0	4	V
TOTAL mandatory subjects (O)			13	0	13	0	28	
Optional subjects (A)								
7	Industrial management	UPB.11.D.05.O.707	1	1	0	0	2	V
	Marketing		1	1	0	0		
TOTAL optional subjects (A)			1	1	0	0	0	
TOTAL mandatory subjects (O) and optional subjects (A)			14	0	14	0	30	
TOTAL hours/week			28					
Facultative subjects (L)								
8	Computers	UPB.11.T.05.L.708	0	0	2	0	2	V
9	Pedagogy training in high schools (compulsory)	UPB.11.U.05.L.709	0	3	0	0	2	V
TOTAL facultative subjects (L)			0	3	2	0	4	

2nd Semester

No. crt.	Subject		Hours/week				PC	Evaluation
	Subject	Code	C	S	L	P		
Mandatory subjects (O)								
10	Organic chemistry IV	UPB.11.D.06.O.710	2	0	2	0	4	E
11	Unitary operations for process industries	UPB.11.D.06.O.711	2	0	2	1	4	E
12	Polymer physics	UPB.11.S.06.O.712	2	0	2	0	4	E
13	Synthesis of Plastic Materials	UPB.11.S.06.O.713	2	0	2	0	4	E
14	Chemistry of macromolecular compounds	UPB.11.S.06.O.714	3	1	3	0	4	E
15	Technological training - 12 weeks	UPB.11.D.06.O.715	0	0	0	0	6	V
TOTAL mandatory subjects (O)			11	1	11	1	28	
Optional subjects (A)								
16	Optional subject I (Polymeric packaging for dentistry)	UPB.11.S.06.O.716	2	0	0	0	2	
17	Corrosion and anti-corrosive protection	UPB.11.D.06.O.717	1	0	1	0	2	V
	Fuel cells		1	0	1	0		
TOTAL optional subjects (A)			3	0	1	0	2	
TOTAL mandatory subjects (O) and mandatory subjects (A)			14	1	12	1	30	
TOTAL hours/week			28					
Facultative subjects (L)								
18	Computers	UPB.11.T.06.L.718	0	0	2	0	2	V
19	Pedagogy training in high schools (compulsory)	UPB.11.U.06.L.719	0	3	0	0	2	V
TOTAL facultative subjects (L)			0	3	2	0	4	

UNDERGRADUATE STUDY – 4th YEAR

1st Semester

No. crt.	Subject		Hours/week				PC	Evaluation
	Subject	Code	C	S	L	P		
Mandatory subjects (O)								
1	Chemical reactors	UPB.11.S.07.O.701	2	0	2	1	6	E
2	Chemistry of macromolecular compounds	UPB.11.S.07.O.702	3	1	3	0	8	E
3	Technology for fibers' synthesis	UPB.11.S.07.O.703	2	0	2	0	6	E
5	Biopolymers and biocomposites	UPB.11.S.07.O.704	2	0	1	0	4	E
TOTAL mandatory subjects (O)			11	1	10	1	24	
Optional subjects (A)								
6	Optional subject II (Polymeric materials for optics and microelectronics/Liquid crystals)	UPB.11.S.07.O.705	2	0	0	0	2	V
7	Polymers for medical devices	UPB.11.S.07.O.706	2	0	1	0	4	V
	Polymeric drug delivery systems							
TOTAL optional subjects (A)			4	0	1	0	6	
TOTAL mandatory subjects (O) and optional subjects (A)			14	1	12	1	30	
TOTAL hours/week			28					
Facultative subjects (L)								
8	Marketing	UPB.11.E.07.L.707	1	1	0	0	2	V
9	Optimizations in chemical industry	UPB.11.T.07.L.708	1	1	0	0	2	V
TOTAL facultative subjects (L)			2	2	0	0	4	

2nd Semester

No. crt.	Subject		Hours/week				PC	Evaluation
	Subject	Code	C	S	L	P		
Mandatory subjects (O)								
10	Technology for elastomers' synthesis	UPB.11.S.08.O.709	2	0	0	1	3	E
11	Biopolymers and biocomposites	UPB.11.S.08.O.710	2	0	1	0	3	E
12	Tehnologia prelucrării polimerilor	UPB.11.S.08.O.711	3	0	3	1	7	E
13	Adhesives, lacquers and dyes	UPB.11.S.08.O.712	2	0	1	0	3	E
14	Recovery and recycling of polymeric materials	UPB.11.S.08.O.713	2	0	1	0	4	E
15	Bachelor project	UPB.11.S.08.O.714	0	0	4	0	5	V
TOTAL mandatory subjects (O)			11	0	10	2	25	
Optional subjects (A)								
16	Optional subject III (Polymeric nanocomposites/Modern syntheses of elastomers)	UPB.11.S.08.O.715	1	0	1	0	2	V
17	Additives for polymeric materials industry	UPB.11.S.08.O.716	2	0	1	0	3	V
	Soft implants engineering							
TOTAL optional subjects (A)			3	0	2	0	5	
TOTAL mandatory subjects (O) and optional subjects (A)			14	0	12	2	30	
TOTAL hours/week			28					
Facultative subjects (L)								
TOTAL facultative subjects (L)			0	0	0	0	0	