

CURRICULA "Environmental engineering in chemical and petrochemical industries" 2017-2018

First year

First Semester

Nr.	Discipline		Hours/week				PC	Evaluation
	Name	Code	C	S	L	P		
<b>Compulsory disciplines (O)</b>								
1	Mathematics I	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 I	UPB.11.D.01.O.003	3	2	2	0	7	E
4	Computers and industrial graphics	UPB.11.F.01.O.004	2	0	2	0	5	E
5	Micro and macroeconomy	UPB.11.C.01.O.005	2	1	0	0	3	V
<b>TOTAL compulsory disciplines (O)</b>			<b>13</b>	<b>5</b>	<b>8</b>	<b>0</b>	<b>28</b>	
<b>Optional disciplines (A)</b>								
6	Foreign language I /Foreign language II	UPB.11.C.01.O.006	0	2	0	0	2	V
<b>TOTAL optional disciplines (A)</b>			<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>	
<b>TOTAL compulsory (O) and optional (A) disciplines</b>			<b>13</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>30</b>	
<b>TOTAL ore pe săptămână</b>			<b>28</b>					
<b>Facultative disciplines (L)</b>								
7	Basics in Chemistry	UPB.11.F.01.L.007	0	2	0	0	2	V
8	Sport	UPB.11.C.01.L.008	0	1	0	0	1	V
9	Basics in Physics	UPB.11.F.01.L.009	0	2	0	0	1	V
10	Basics in Mathematics	UPB.11.F.01.L.010	0	2	0	0	1	V
<b>TOTAL Facultative disciplines (L)</b>			<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>5</b>	

First year

Semester II

Nr.	Discipline		Hours/week				PC	Evaluation
	Name	Code	C	S	L	P		
<b>Compulsory disciplines (O)</b>								
11	Mathematics II	UPB.11.F.02.O.011	3	1	0	0	5	E
12	Instrumental analytical techniques	UPB.11.D.02.O.012	3	0	4	0	7	E
13	Inorganic chemistry II	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	Chemistry of transition metals	UPB. 11.F.02.O.015	2	1	0	0	4	E
16	Elements in mechanical engineering	UPB.11.D.02.O.016	2	1	0	0	3	V
<b>TOTAL compulsory disciplines(O)</b>			<b>15</b>	<b>4</b>	<b>6</b>	<b>0</b>	<b>28</b>	
<b>Optional disciplines (A)</b>								
17	Computers and industrial graphics/Computers science	UPB.11.F.02.O.017	0	0	3	0	2	V
<b>TOTAL optional disciplines (A)</b>			<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2</b>	
<b>TOTAL compulsory (O) and optional (A) disciplines</b>			<b>15</b>	<b>4</b>	<b>9</b>	<b>0</b>	<b>30</b>	
<b>TOTAL ore pe săptămână</b>			<b>28</b>					
<b>Facultative disciplines (L)</b>								
18	Pedagogy I	UPB.11.F.02.L.018	2	2	0	0	5	E
19	Sport	UPB.11.C.02.L.019	0	1	0	0	1	V
<b>TOTAL facultative disciplines (L)</b>			<b>2</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>	

Year: II

Semester: I

Nr.	Discipline		hours/week				PC	Evaluati on
	Name	Cod	C	S	L	P		
<b>Compulsory disciplines (O)</b>								
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.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	Basics in 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	Technics in communication	UPB.11.C.03.O.007	1	1	0	0	2	V
<b>TOTAL compulsory disciplines (O)</b>			14	5	7	0	28	
<b>Optional disciplines (A)</b>								
8	Optional discipline I	UPB.11.F.03.O.008	2	0	0	0	2	V
<b>TOTAL optional disciplines (A)</b>			2	0	0	0	2	
<b>TOTAL compulsory (O) and optional(A) disciplines</b>			16	5	7	0	30	
<b>TOTAL ore pe săptămână</b>							28	
<b>Facultative disciplines (L)</b>								
9	Pedagogy II	UPB.11.U.03.L.009	0	0	2	0	2	V
10	Sport	UPB.11.C.03.L.010	0	1	0	0	1	V
<b>TOTAL facultative disciplines (L)</b>			0	1	2	0	3	

Year: II

Semester: II

Nr.	Discipline		hours/week				PC	Evaluati ion
	Name	Code	C	S	L	P		
<b>Compulsory disciplines (O)</b>								
11	Organic chemistry	UPB.11.D.04.O.011	2	2	3	0	7	E+V
12	Physical chemistry	UPB.11.D.04.O.012	2	0	2	0	5	E
13	Basics in 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
<b>TOTAL compulsory disciplines(O)</b>			13	2	11	0	28	
<b>Optional disciplines (A)</b>								
16	Optional discipline II	UPB.11.F.04.O.016	2	0	0	0	2	V
<b>TOTAL optional disciplines (A)</b>			2	0	0	0	2	
<b>TOTAL compulsory (O) and optional (A) disciplines</b>			15	2	11	0	30	
<b>TOTAL ore pe săptămână</b>							28	
<b>Facultative disciplines (L)</b>								
17	Methodics of teaching specialized matters	UPB.11.U.04.L.017	2	2	0	0	5	E
18	Sport	UPB.11.C.04.L.018	0	1	0	0	1	V
<b>TOTAL facultative disciplines (L)</b>			2	3	0	0	6	

Year: III Semester: I

Nr.	Discipline		hours/week				PC	evaluation
	Name	Code	C	S	L	P		
<b>Compulsory disciplines (O)</b>								
1	Organic chemistry	UPB.11.F.05.O.101	2	0	2	0	5	E
2	Physical chemistry	UPB.11.F.05.O.102	2	0	2	0	4	E
3	Chemical technologies I	UPB.11.T.05.O.103	3	0	3	0	7	E
4	Electrochemistry	UPB.11.F.05.O.104	3	0	3	0	6	E
5	Unit operations in process industries	UPB.11.T.05.O.105	3	0	2	0	6	E
<b>TOTAL Compulsory disciplines (O)</b>			13	0	12	0	28	
<b>Optional disciplines (A)</b>								
6	Industrial management	UPB.11.E.05.O.106	1	0	1	0	2	V
<b>TOTAL optional industry (A)</b>			1	0	1	0	2	
<b>TOTAL compulsory (O) and optional (A) disciplines</b>			14	0	14	0	30	
<b>TOTAL hours /week</b>			<b>28</b>					
<b>Facultative disciplines (L)</b>								
7	Computer aide training	UPB.11.T.05.L.107	0	0	2	0	2	V
8	Teaching practice in pre-university education	UPB.11.U.05.L.108	0	0	3	0	3	V
9	Computer aides process engineering	UPB.11.U.05.L.109	1	1	0	0	2	V
<b>TOTAL facultative disciplines (L)</b>			1	1	5	0	7	

Year: III Semester: II

Nr.	Discipline		hours/week				PC	evaluation
	Name	Code	C	S	L	P		
<b>Compulsory disciplines (O)</b>								
10	Unit operations in process industries	UPB.11.T.06.O.110	2	0	2	1	4	E
11	Chemical technologies II	UPB.11.T.06.O.111	2	0	3	0	4	E
12	Environmental chemistry	UPB.11.S.06.O.112	2	0	2	0	3	E
13	Fate of pollutants in environment	UPB.11.S.06.O.113	2	0	2	0	4	E
14	Monitoring of environmental quality	UPB.11.S.06.O.114	2	0	2	0	3	V
15	Practical training -12 weeks.	UPB.11.T.06.O.115	0	0	0	0	6	V
<b>TOTAL compulsory disciplines (O)</b>			12	0	13	1	28	
<b>Optional disciplines (A)</b>								
16	Optional I (Ecotoxicology)/ Ecosystems management )	UPB.11.S.06.O.116	2	0	2	0	4	E
17	Optional II (Environmental management systems) / (Hazardous substances and their characterization)	UPB.11.S.06.O.117	2	0	0	0	2	V
<b>TOTAL optional disciplines (A)</b>			2	0	0	0	2	
<b>TOTAL compulsory (O) and optional (A) disciplines</b>			14	0	13	1	30	
<b>TOTAL hours /week</b>			<b>28</b>					
<b>Facultative disciplines (L)</b>								
18	Classroom management	UPB.11.T.06.O.118	1	1	0	0	3	V
19	Teaching practice (in high school, secondary, tertiary)	UPB.11.U.06.O.119	0	0	3	0	3	V

<b>TOTAL Facultative disciplines(L)</b>	1	1	3	0	6	
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<b>TOTAL facultative disciplines (L)</b>	0	0	2	0	2	
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