

CURRICULA
University year

Period of study: 4 years

Type of education: training day

Specialisation: Environmental and protection engineering in industry

Diplomat engineer

No.	Disciplines	Discipline code	Semester I : 14 weeks						Semester II: 14 weeks						Total		
			C	S	L	P	Verification Forms	Credits transfer	C	S	L	P	Verification Forms	Credits transfer	Hours	Credits transfer	
COMPULSORY DISCIPLINES																	
1.	Linear algebra and analytical and differential geometry	UN2DF1O1	2	1			E1	3								42	3
2.	Calculus	UN2DF12O2	2	1			V1	3	2	1			E2	3	84	6	
3.	Descriptive and inphographic geometry	UN2DF1O3	2	1			E1	3							42	3	
4.	Physics	UN2DF2O4							2		1		E2	3	42	3	
5.	General and inorganic chemistry	UN2DF12O5	2		1		V1	3	2		1		E2	3	84	6	
6.	Plants Biology	UN2DF2O6							2				V2	2	28	2	
7.	Atmosphere dynamics and air pollution	UN2DID2O7							2		2		E2	4	56	4	
8.	Environmental geology	UN2DID1O8	2		1		E1	4							42	4	
9.	Mineralogy, petrography	UN2DF1O9	3		2		E1	5							70	5	
10.	Computers	UN2DF2O10							2		1		V2	3	42	3	
11.	Geomorpholgy	UN2DF12O11	2				V1	2	2		1		E2	3	70	5	
12.	Fluids mechanics	UN2DID2O12	2		1		E1	3							42	3	
13.	Sports	UN2DC12O13		1				1		1			V2 (A/R)	2	28	3	
14.	Practice (3 weeks)	UN2DID2O14											V2	6	84	6	
15.	Foreign language (English, French, German, Russian)	UN2DC12O15		2			V1	2		2			V2	2	56	4	
TOTAL COMPULSORY DISCIPLINES			17	6	5		5E/4V	29	14	4	6		5E/5V	31	812	60	
FACULTATIVE DISCIPLINES																	
1.	European culture and civilization	UN2DC1F1	2	2			E1	5							56		
2.	Informatics history	UN2DC2F2							2	2			E2	5	56		
TOTAL FACULTATIVE DISCIPLINES			2	2			1E		2	2			1E		112		

TOTAL CREDITS TRANSFER: 60

CURRICULA
University year II

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No.	Disciplines	Discipline code	Semester III 14 weeks						Semester IV 14 weeks						Total	
			C	S	L	P	Verification Forms	Credits transfer	C	S	L	P	Verification Forms	Credits transfer	Hours	Credits transfer
COMPULSORY DISCIPLINES																
16	Special mathematics and numerical methods	UN2DF3O16	2	1			E3	3							42	3
17	Environmental chemistry	UN2DID3O17	2		1		E3	3							42	3
18	Animal biology	UN2DF3O18	2				V3	2							28	2
19	Environmental microbiology	UN2DID3O19	2		1		E3	3							42	3
20	Electrotechnics, Electrical machines and Electronics	UN2DID3O20	2		1		V3	3							42	3
21	Unitary operations in industrial technologies	UN2DID3O21	2				V3	2	2			V4	2	56	4	
22	Thermotechnics and thermal machines	UN2DID3O22							2		1	E4	3	42	3	
23	Fundamentals of environmental protection and engineering	UN2DS4O23	3		1		E3	4						56	4	
24	Soil mechanics	UN2DID4O24							2		1	E4	3	42	3	
25	Vibrations, sonic and radioactive pollution	UN2DID4O25	1				V3	2	1			V4	2	28	4	
26	Applied and General ecology	UN2DID4O26							3		1	E4	4	56	4	
27	Meteorology and climatology	UN2DID4O27							2		2	E4	4	56	4	
28	Pedology	UN2DID4O28							3		2	E4	4	70	4	
29	Topography, mapping	UN2DID4O29	2		1		V3	3						42	3	
30	Sports	UN2DC34O30		1				1		1		V4 (A/R)	2	28	3	
31	Practice (3 weeks)	UN2DID4O31										V4	6	84	6	
32	Foreign language (English, French, German, Russian)	UN2DC34L33		2			V3	2		2		V4	2	56	4	
	TOTAL COMPULSORY DISCIPLINES		18	4	5		4E/6V	28	15	3	7	5E/5V	32	812	60	
FACULTATIVES DISCIPLINE																
3.	Global problems of the world	UN2DC3F3	2	2			E3	5						56		
4.	Tourism and environment	UN2DC4F4							2	2		E4	5	56		
	TOTAL FACULTATIVES DISCIPLINE		2	2			1E		2	2		1E		112		

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University year III

Period of study: 4 years

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Specialisation: Environmental and protection engineering in industry

Diplomat engineer

No.	Disciplines	Discipline code	Semester V 14 weeks					Semester VI 14 weeks					Total			
			C	S	L	P	Verification Forms	Credits transfer	C	S	L	P	Verification Forms	Credits transfer	hours	Credites transfer
COMPULSORY DISCIPLINES																
32	Technics to identifying environmental pollutants	UN2DS56O32	2		1		E5	3	2		1		E6	3	84	6
33	Protection and environmental engineering mining industry	UN2DS56O33	2		1		E5	3	2		1		E6	3	84	6
34	Protection and environmental engineering metallurgy industry	UN2DS6O34							2		1		E6	3	42	3
35	Hydrogeology and groundwaters engineering	UN2DID5O35	2		2		E5	4							56	4
36	Ecotoxicology	UN2DID5O36	2		1		E5	3							42	3
37	Hidrotechnical planning and water management	UN2DID5O37	2		1		E5	3							42	3
38	Technologies of soil depollution	UN2DS5O38	2		2		E5	5							56	5
39	Environmental protection legislation	UN2DS6O39							2		1		E6	3	42	3
40	Recycling, industrial waste processing and deposition	UN2DS6O40							3		1	1	E6	6	70	6
41	Practice (3 weeks)	UN2DS6O41											V6	6	84	6
	TOTAL COMPULSORY DISCIPLINES		12		8		6E	21	11		5	1	5E/1V	24	602	45
Optional disciplines (Semester V will choose 3 of the 6 optional disciplines, necessary to achieve 12 credits) (Semester VI will choose 2 of the 4 optional disciplines, necessary 6 credits)																
1	Environmental geochemistry	UN2DS5L1	2		1		V5	3							42	3
2	Demography and environment	UN2DS5L2	2	1			V5	3							42	3
3	Sampling science and environmental statistics	UN2DID5L3							2		1		V6	3	42	3
4	Technologies, pollutants and environmental protection in energetic industry and building materials	UN2DS5L4	2		1		V5	3							42	3
5	Environment quality, epidemiology and public health	UN2DID5L5							2	1			V6	3	42	3
6	Politics and environmental strategies	UN2DID5L6	2	1			V5	3							42	3
7	Working security and health protection	UN2DID6L7	2	1			V5	3							42	3
8	Securing of mining perimetres	UN2DS6L8	2	1			V5	3							42	3
9	Cadastre and land planning	UN2DS6L9							2	1			V6	3	42	3
10	Construction and land planning	UN2DS6L10							2	1			V6	3	42	3
	TOTAL OPTIONAL DISCIPLINES		8	1	2		3V	9	4	2			4V	6	210	15
	TOTAL COMPULSORY + OPTIONAL DISCIPLINES		16	1	9		6E/3V	27	17	2	6	1	5E/3V	35	812	60
FACULTATIVES DISCIPLINE																
5.	Elements of micro- and macro- economy	UN2DC5F5	2	1			C5	4							42	
6.	Renewable energy and energy recovery	UN2DC6F6								2	1		C6	4	42	
	TOTAL FACULTATIVES DISCIPLINE		2	1			1C			2	1		1C		84	

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CURRICULA
University year IV

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No.	Discipline	Discipline code	Semester VII 14 weeks						Semester VIII 14 weeks						Total	
			C	S	L	P	Verification Forms	Credites transfer	C	S	L	P	Verification Forms	Credites transfer	Heures	Credites transfer
COMPULSORY DISCIPLINES																
42	Technics, technologies, gaseous depollution equipments	UN2DS7O42							3		1	1	E8/P8	5	70	5
43	Technics, technologies and waste depollution equipments	UN2DS7O43							3		1	1	E8/P8	5	70	5
44	Biotechnologies in Environmental protection	UN2DS7O44							2		1		E8	3	42	3
45	Ecologic Management	UN2DID7O45	2	1			E7	3							42	3
46	Impact assesement, impact studies and environmental balance	UN2DS8O46	3	1		2	E7/P7	6							84	6
47	Applied informatics in Environmental engineering	UN2DS8O47									4		E8	4	56	4
48	Environmental monitoring and control	UN2DS8O48	2	1			E8	3							42	3
49	Risk assesement and hazards study	UN2DS8O49	2	1		2	E7/P7	5							84	5
50	Diploma project preparation 3 weeks	UN2DS8O50												5	84	5
	TOTAL COMPULSORY DISCIPLINES		9	4	0	4	4E/2P	17	8	0	7	2	4E/2P	9	574	39
Optionale discipline Semester VII will choose 3 of the 6 optional disciplines, necessary to achieve 12 credits) (Semester VIII will choose 3 of the 4 optional disciplines, necessary 9 credits)																
11	Technologies, pollutants and environmental protection in chemical industry	UN2DS7O11	2		1		V7	4							42	4
12	Treatment and depositing of municipal waste	UN2DS7O12	2		1		V7	4							42	4
13	Metalliferous and non-metalliferous mineral resources	UN2DS7O13							2		1		V8	3	42	3
14	Technologies, pollutants and environmental protection in food industry, zootehnic and agriculture	UN2DS7O14	2		1		V7	4							42	4
15	Stability of tailing ponds and waste dumps	UN2DS7O15							2		1		V8	3	42	3
16	Ecological rehabilitation of degraded sites	UN2DS7O16	2		1		V7	4							42	4
17	Materials Biodegradation	UN2DS8O17							2		1		V8	3	42	3
18	Technologies, pollutants and environmental protection in wood and textile industry	UN2DS8O18							2		1		V8	3	42	3
19	National and international reglementations in environmental field	UN2DS8L19	2		1		V7	4							42	4
20	Protected areas	UN2DS8L20	2		1		V7	4							42	4
	TOTAL OPTIONAL DISCIPLINES		6	3			3V	12	6	3			3V	9	168	21
	TOTAL COMPULSORY+ OPTIONAL DISCIPLINES		15	7	4		4E/3V21P	28	18	12	2		4E/3V/2P	18	826	60

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