

CURRICULA
University year I

Studies duration: 4 years
Type of education: training day
Specialisation: Waste recovery engineering
Diplomat engineer

No	Disciplines	Discipline code	Semester : 14 weeks					Semesters: 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	2			E1	4							56	4
4	Physics	UN2DF2O4							2		2		E2	4	56	4
5	General and inorganic chemistry	UN2DF12O5	2		1		V1	3	2		1		E2	4	84	7
6	Computers	UN2DF2O6							2	2			V2	3	56	3
7	Topography and mapping	UN2DID1O7	2		1		V3	3							42	3
8	Environmental mineralogy	UN2DID1O8	2		1		E1	3							42	3
9	Elements of mechanical engineering	UN2DID1O9	2		1		E1	3							42	3
10	Thermotehnics and thermal machines	UN2DID2O10							2		1		E2	3	42	3
11	Mineral and energy resources	UN2DS1O11	2		1		E1	4							42	4
12	Geomorphology of waste deposit sites	UN2DS2O12							2		2		E2	4	56	4
13	Sports	UN2DC12O13		1				1		1			V2 (A/R)	2	28	3
14	Languages (English, French, German, Russian)	UN2DC12O14		2			V1	2		2			V2	2	56	4
15	Practice (3 weeks)	UN2DID2O15											V2	6	84	6
	TOTAL COMPULSORY DISCIPLINES		16	7	5	0	5E/4V	29	12	6	6	0	5E/4V	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 CREDITE: 60

CURRICULA
University year II

Studies duration: 4 years
Type of education: training day
Specialisation: Waste recovery engineering
Diplomat engineer

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		2		E3	4							56	4
18	Meteorology and climatology	UN2DID4O18							2		2		E4	4	56	4
19	Fundamentals of waste processing	UN2DS4O19							2		1		E4	3	42	3
20	General and applied ecology	UN2DID4O20							3		1		E4	4	56	4
21	Analysis and synthesis of technological processes	UN2DID3O21	2		1		E3	3							42	3
22	Hidrogeology and underground water engineering	UN2DID3O22	2		2		E3	4							56	4
23	Organic chemistry	UN2DF4O23							2		1		V4	3	42	3
24	Electrotechnics, electric machines and electronics	UN2DID3O24	2		1		V3	3							42	3
25	Information technology	UN2DID4O25									3		V4	3	42	3
26	Waste deposits environmental impact	UN2DS4O26							2		1	1	E4, P4	4	56	4
27	Sampling science and statistics	UN2DID4O27							2		1		E4	3	42	3
28	Analytical chemistry	UN2DF3O28	2		2		V3	3							56	3
29	Radiation sources and protection technics	UN2DID3O29	2		1		E3	3							42	3
30	Sports	UN2DC34O30		1				1		1			V4 (A/R)	2	28	3
31	Foreign languages (English, French, German, Russian)	UN2DC34O31		2			V3	2		2			V4	2	56	4
32	Practice (3 weeks)	UN2DID4O32											V4	6	84	6
TOTAL COMPULSORY DISCIPLINES			14	4	9		5E/3V	26	13	3	10	1	5E/5V/1P	34	840	60
FACULTATIVE DISCIPLINES																
3	Global problems of the world	UN2DC3F3	2	2			E3	5							56	
4	Tourism and environment	UN2DC4F4							2	2			E4	5	56	
TOTAL FACULTATIVE DISCIPLINES			2	2			1E		2	2			1E		112	

TOTAL CREDITS: 60

CURRICULA
University year III

Studies duration: 4 years
Type of education: training day
Specialisation: Waste recovery engineering
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	Credits transfer
COMPULSORY DISCIPLINES																
33	Environmental legislation	UN2DS6O33							2		1		V6	3	42	3
34	Special waste treatment technologies	UN2DS56O34	3		2		E5	5	2		2		E6	5	126	10
35	Methods and technologies for the management of domestic waste	UN2DS5O35	2		2	1	E5, P5	5							70	5
36	Management of radioactive and dangerous waste	UN2DS6O36							2		1		E6	3	42	3
37	Materials science and engineering	UN2DID5O37	2		2		E5	4							56	4
38	Instrumental analysis	UN2DF6O38							2		2		E6	3	56	3
39	Soil science	UN2DID6O39							2		2		E6	4	56	4
40	Ecotoxicology	UN2DID5O40	2		1		E5	3							42	3
41	Transfer phenomena and unitary operations	UN2DID6O41							2		2		E6	4	56	4
42	Electrochemistry and corrosion	UN2DID5O42	2		1		V5	3							42	3
43	Practice (3 weeks)	UN2DID6O43											V6	6	84	6
	TOTAL COMPULSORY DISCIPLINES		11	0	8	1	4E/1V/1P	20	12	0	10	0	5E/2V	28	672	48
OPTIONAL DISCIPLINE (Semester V will choose 2 of the 4 optional disciplines, necessary to achieve 6 credits, semester VI will choose 2 of the 4 optional disciplines necessary to achieve 6 credits)																
1	Work security and health protection	UN2DS5L1	2		2		V5	3							56	3
2	Gaseous waste depollution technics and equipments	UN2DS5L2	2		2		V5	3							56	3
3	ACAD design	UN2DS5L3	2		2		V5	3							56	3
4	Mineralogy of mining waste deposits	UN2DC5L4	2		2		V5	3							56	3
5	Soil depollution technologies	UN2DS6L5							2		1		V6	3	42	3
6	Major environmental changes	UN2DC6L6							2	1			V6	3	42	3
7	Politics and strategy of dangerous waste	UN2DS6L7							2		1		V6	3	42	3
8	Ecotourism	UN2DC6L8							2		1		V6	3	42	3
	TOTAL OPTIONAL DISCIPLINE		4		4		2V	6	4		2		2V	6	196	6
	TOTAL COMPULSORY DISCIPLINES + OPTIONALE		15	0	12	1	4E/3V/1P	26	16		12	0	5E/4V	34	868	60
FACULTATIVE DISCIPLINES																
5	Elements of micro- and macro- economy	UN2DC5F5	2	1			C5	4							42	
6	Renewable energy and energy recovery	UN2DC56F6							2	1			C6	4	42	
	TOTAL FACULTATIVE DISCIPLINES		2	1			1C		2	1			1C		84	

TOTAL CREDITS: 60

CURRICULA
University year IV

Studies duration: 4 years
Type of education: training day
Specialisation: Waste recovery engineering
Diplomat engineer

No	Disciplines	Discipline code	Semester VII 14 weeks						Semester VIII 14 weeks						Total	
			C	S	L	P	Verification Forms	Credits transfer	C	S	L	P	Verification Forms	Credits transfer	Hours	Credits transfer
COMPULSORY DISCIPLINES																
44	Waste management	UN2DS7O44	2		1	1	E7, P7	4							56	4
45	Waste monitoring	UN2DID8O45							2		2		V8	4	56	4
46	Waste recycling and reused	UN2DS4O46	2		1	1	E7, P7	4							56	4
47	Depollution waste waters technics and equipments	UN2DS8O47							3		1	1	E8, P8	5	70	5
48	The management of metallurgic, energetic and construction industry-derived waste	UN2DS8O48	3		2		E7	5							70	5
49	The management of the mining and chemical industry-derived waste	UN2DS9O49							2		1		E8	3	42	3
50	Ecological rehabilitation of degraded sites	UN2DS9O50							2		1		E8	3	42	3
51	Waste processing equipments and tools	UN2DS9O51							3		1	1	E8, P8	5	70	5
52	Geomechanics	UN2DID8O52	2		1		V7	3							42	3
53	Environmental and health risk assesement at waste deposit sites	UN2DS8O53	2		2		E7	4							56	4
54	Diploma project preparation 3 weeks	UN2DID8O54												8	84	8
	TOTAL COMPULSORY DISCIPLINES		11	0	7	2	4E/1V/2P	20	12	0	6	2	4E/1V/2P	28	644	48
DISCIPLINE OPTIONALE (semester VII will choose 2 of the 4 optional disciplines, necessary to achieve 6 credits, semester VIII will choose 2 of the 4 optional disciplines, necessary to achieve 6 credits)																
9	Biotechnologies in waste processing and use	UN2DS7L9	2		1		V7	3							42	3
10	Geotechnologies in waste management	UN2DS7L10	2		1		V7	3							42	3
11	General economics	UN2DC7L11	2		1		V7	3							42	3
12	Clean technologies	UN2DS7L12	2		1		V7	3							42	3
13	Building and exploitation methods of tailing ponds	UN2DS8L13							2		1		V8	3	42	3
14	Politics and strategies of integrated waste management	UN2DS8L14							2		1		V8	3	42	3
15	Applied informatics in waste using engineering	UN2DS8L15									3		V8	3	42	3
16	Ecoengineering	UN2DC8L16							2		1		V8	3	42	3
	TOTAL DISCIPLINE OPTIONALE		4	2			2V	6	4	2			2V	6	168	12
	TOTAL COMPULSORY DISCIPLINES + OPTIONALE		15	9	2		4E/3V/2P	26	16	8	2		4E/3V/2P	34	812	60

TOTAL CREDITS: 60