



**University of Mining and Geology
"St. Ivan Rilski"**

THE FACULTY OF GEO-EXPLORATION

Curriculum

VOCATIONAL FIELD

4.4. EARTH SCIENCES

COURSE OF STUDIES

WASTE MANAGEMENT AND TREATMENT

MASTER'S DEGREE

VOCATIONAL QUALIFICATION

MASTER ECOLOGIST

FORM OF STUDY

FULL-TIME

DURATION OF STUDY

A YEAR AND A HALF (THREE SEMESTERS)

Adopted at a session of the Academic Council of the University of Mining and Geology "St. Ivan Rilski"

HEAD OF DEPARTMENT OF *ENGINEERING*
GEOECOLOGY :

(Assoc. Prof. An. Angelov, Ph.D.)

DEAN:

(Assoc. Prof. B. Valchev, Ph.D.)

Sofia, 2021

CURRICULUM
EDUCATIONAL QUALIFICATION DEGREE "MASTER"
SPECIALTY "WASTE MANAGEMENT AND TREATMENT"
PROFESSIONAL FIELD 4.4 "EARTH SCIENCES"

FORM OF TRAINING: REGULAR

DURATION OF STUDY: 1.5 YEARS

Duration of the semester: 15 weeks

Year	Semester	№	Discipline code	Full name of the course (course projects, internships)	Form of control	Weekly hours		Hours by type of exercise			Classroom employment	Credits	
						L	E	SE	LE	PE			
First	First	1	172127	Environmental chemistry	E	2	3	15	30		75	5	
		2	172170	Environmental risk assessment	E	2	2	15	15		60	5	
		3	172168	Ecotoxicology	E	2	3	30	15		75	6	
		4	172164	Environmental procedures and permit regimes	E	2	2	30			60	5	
		5	172171	Processing and recycling of household waste	E	2	2	15	15		60	5	
		6		Elective course from:	E	2	2	15	30		60	4	
		142216	Geophysical methods in ecology										
		132249	Ecological mineralogy										
	Total for the first semester					6	12	14	120	105	0	390	30
	Second	7	172172	Management and processing of industrial and especially hazardous waste	E	2	3	45			75	5	
		8	172167	Soil quality management	E	2	3	30	15		75	6	
		9	172166	Water quality management	E	2	3	30	15		75	5	
		10	272154	Sustainable Development	E	2	2	30			60	5	
		11	172136	Management of damaged terrains and landscapes from mining activities	E	2	2	15	15		60	4	
		12		Elective course from:	E	2	3	15	30		75	5	
		122244	Geocological modeling in GIS	CS	2	3	45						
		172258	Biosensors and bioindicators	E	2	3	15	30					
	Total for the second semester					5+1	12	16	165	75	0	420	30
Total for the first year					11+1	24	30	285	180	0	810	60	
Second	Third			Undergraduate internship and defense of Diploma Thesis	15 days x 6 hours						90	15	
Total for the second year											90	15	
TOTAL FOR THE ENTIRE TRAINING COURSE					11+1	24	30	285	180	0	900	75	

Signs: E -exam, CS- current assessment, L - lectures, LE - laboratory exercises, SE- seminar exercises, PE - practical exercises

Parameters of the learning process:

Total hours for the training course:	900
Classroom employment:	900
Lectures:	435
Exercises:	465
- seminar	285
- laboratory	180
Number of exams for the training course:	11
Number of current ratings:	1