



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

THE FACULTY OF GEO-EXPLORATION

Curriculum

VOCATIONAL FIELD

4.4. EARTH SCIENCES

COURSE OF STUDIES

**ENVIRONMENTAL RISK ASSESSMENT AND SUSTAINABLE
DEVELOPMENT**

MASTER'S DEGREE

VOCATIONAL QUALIFICATION

MASTER ECOLOGIST

FORM OF STUDY

PART-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 "ENVIRONMENTAL RISK ASSESSMENT AND SUSTAINABLE DEVELOPMENT"
PROFESSIONAL FIELD 4.4 "EARTH SCIENCES"

FORM OF TRAINING: distance learning

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 | 15 | 23 | 8 | 15 | | 38 | 5 | |
| | | 2 | 172170 | Environmental risk assessment | E | 15 | 15 | 7 | 8 | | 30 | 5 | |
| | | 3 | 172168 | Ecotoxicology | E | 22 | 23 | 15 | 8 | | 45 | 5 | |
| | | 4 | 172164 | Environmental procedures and permit regimes | E | 15 | 15 | 15 | | | 30 | 5 | |
| | | 5 | 172135 | Atmosphere and environment | E | 15 | 15 | 15 | | | 30 | 5 | |
| | | 6 | | Elective course from: | E | 15 | 15 | | | | | | |
| | | 142216 | Geophysical methods in ecology | | 15 | 15 | 7 | 8 | | 30 | 5 | | |
| | | 172231 | Radioecology | | 15 | 15 | | | | | | | |
| | Total for the first semester | | | | | 6 | 97 | 106 | 67 | 39 | | 203 | 30 |
| | | 7 | 272154 | Sustainable Development | E | 15 | 15 | 15 | | | 30 | 4 | |
| | Second | Second | 8 | 172169 | Waste management | E | 15 | 23 | 15 | 8 | | 38 | 5 |
| | | | 9 | 172167 | Soil quality management | E | 15 | 23 | 15 | 8 | | 38 | 6 |
| | | | 10 | 172158 | Biosensors and bioindicators | E | 15 | 23 | 8 | 15 | | 38 | 5 |
| | | | 11 | 172166 | Water quality management | E | 15 | 23 | 8 | 15 | | 38 | 5 |
| 12 | | | | Elective course from: | E | | | | | | | | |
| | | | 122244 | Geoecological modeling in GIS | CS | 7 | 23 | 23 | | | 30 | 5 | |
| | 172236 | Management of damaged terrains and landscapes from mining activities | E | 15 | 15 | 7 | 8 | | | | | | |
| Total for the second semester | | | | | 5+1 | 90 | 122 | 68 | 54 | | 212 | 30 | |
| Total for the first year | | | | | 11+1 | 187 | 228 | 135 | 93 | | 415 | 60 | |
| Second | Third | | | Undergraduate internship and defense of Diploma Thesis | 15 days x 6 hours | | | | | 45 | 15 | | |
| Total for the second year | | | | | | | | | | | 45 | 15 | |
| TOTAL FOR THE ENTIRE TRAINING COURSE | | | | | 11+1 | 187 | 228 | 135 | 93 | | 460 | 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: | 460 |
| Classroom employment: | 460 |
| Lectures: | 187 |
| Exercises: | 228 |
| - seminar | 135 |
| - laboratory | 93 |
| Extracurricular activities (study practices): | |
| Number of exams for the training course: | 11 |
| Number of current ratings: | 1 |