

SYLLABUS

STUDY YEAR 2024/2025

Master Programme in Exploration and Environmental Geosciences

Enrollment semester Autumn 2023

DATE

2020-11-10

REFERENCE NO.

LTU-3825-2020

DECISION MAKER

Dean of the Faculty of Science and Technology

Programme content and structure

For a Master of Science degree, major Geosciences, with specialization in ore geology and environmental geochemistry, is required:

For students admitted 2016 and onwards

- 90 Credits advanced courses in the main field Geosciences.
- Master Thesis project (30 credits) at the advanced level in the main field.

For students admitted before 2016

- 82.5 credits advanced courses in the main field Geosciences.
- 7.5 credits optional courses
- Master Thesis project (30 credits) at the advanced level in the main field.

The programme is given entirely in English.

Swedish for beginners is offered to overseas students. The course is not included in the degree, and is read in addition to the obligatory courses

Credits

120 credits

Degree

- Degree of Master of Science (120 credits) - Major; Geosciences

Specialisations

Specialisation

- Environmental Geochemistry
- Ore Geology

Entry requirements

Bachelors degree of minimum 180 ECTS with at least 60 ECTS in the area of nature resource technology, geology or geoscience.

Good knowledge in English, equivalent to English 6

Selection

The selection procedure is based on academic qualifications, quality and quantity aspects

Selection group

Academic: 100%

Compulsory courses

Compulsory courses 97.5 credits

Course code	Course	Cr	Level	Comment
L7016K	Mine Waste	7.5	Master's level	
L7017K	Geochemical Exploration	7.5	Master's level	
L7021K	Freshwater Geochemistry	7.5	Master's level	
L7026K	Sampling and Evaluation of Environmental Data	7.5	Master's level	
O7007K	Exploration and Environmental Geophysics	7.5	Master's level	
O7008K	Quantitative Interpretation of Geophysical Data	7.5	Master's level	
O7021K	GIS in Geoscience	7.5	Master's level	
O7022K	Mining Geology	7.5	Master's level	
O7025K	Isotope Geology	7.5	Master's level	
X7001K	Degree project in Exploration and Environmental Engineering, Master	30	Master's level	

Course offered outside the obligatory courses - not compulsory - For non Scandinavian students

Course code	Course	Cr	Level	Comment
S0046P	Swedish for International Students 1	3	Bachelor's level	Selectable

Specialisation: Environmental Geochemistry

Compulsory courses 22.5 credits

Course code	Course	Cr	Level	Comment
G7012B	Geohydrology	7.5	Master's level	
L7013K	Geochemical Modelling	7.5	Master's level	
L7022K	Senior Design Project in Applied Geology	7.5	Master's level	

Specialisation: Ore Geology

Compulsory courses 22.5 credits

Course code	Course	Cr	Level	Comment
O7009K	Ore Genetic Models	7.5	Master's level	
O7016K	Senior Design Project in Ore Geology	7.5	Master's level	
O7018K	Exploration	7.5	Master's level	

Study schedule

Year of study 1 Enrollment semester Autumn 2023, Is offered in 2023/2024

Study-period	Course code	Course	Cr	Comment
1	L7026K	Sampling and Evaluation of Environmental Data	7.5	
1	O7007K	Exploration and Environmental Geophysics	7.5	
1	S0046P	Swedish for International Students 1	3	Selectable
2	L7021K	Freshwater Geochemistry	7.5	
2	O7025K	Isotope Geology	7.5	
3	O7021K	GIS in Geoscience	7.5	
4	L7016K	Mine Waste	7.5	
4	O7008K	Quantitative Interpretation of Geophysical Data	7.5	

Year of study 2 Enrollment semester Autumn 2023, Is offered in 2024/2025

Study-period	Course code	Course	Cr	Comment
1	L7017K	Geochemical Exploration	7.5	
2	O7022K	Mining Geology	7.5	
3-4	X7001K	Degree project in Exploration and Environmental Engineering, Master	30	Entry requirements

Specialisation: Environmental Geochemistry

Year of study 1 Enrollment semester Autumn 2023, Is offered in 2023/2024

Study-period	Course code	Course	Cr	Comment
3	G7012B	Geohydrology	7.5	

Year of study 2 Enrollment semester Autumn 2023, Is offered in 2024/2025

Study-period	Course code	Course	Cr	Comment
1	L7022K	Senior Design Project in Applied Geology	7.5	
2	L7013K	Geochemical Modelling	7.5	

Specialisation: Ore Geology

Year of study 1 Enrollment semester Autumn 2023, Is offered in 2023/2024

Study-period	Course code	Course	Cr	Comment
3	O7009K	Ore Genetic Models	7.5	

Year of study 2 Enrollment semester Autumn 2023, Is offered in 2024/2025

Study-period	Course code	Course	Cr	Comment
1	O7018K	Exploration	7.5	
2	O7016K	Senior Design Project in Ore Geology	7.5	