

STUDY PROGRAMME CURRICULUM GEOTECHNOLOGY

2025/2026

Name of study programme	Geotechnology
Programme characteristics	
Type	master's
Cycle	master
University of Ljubljana members	• Faculty of Natural Sciences and Engineering, Aškerčeva cesta 12, 1000 Ljubljana, Slovenija

Year 1

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0067878	Data processing in geosciences	doc. dr. Damjan Hann, doc. dr. Goran Vižintin	45	0	45	0	0	90	180	6	1st semester	no
2.	0067881	Mineral Resource Processing	doc. dr. Jože Kortnik	45	0	45	0	0	90	180	6	1st semester	no
3.	0067882	Machines and Equipment in Geotechnology	prof. dr. Željko Vukelić	45	0	45	0	0	90	180	6	1st semester	no
4.	0067883	Extraction of Mineral Resources	doc. dr. Damjan Hann, Janez Rošer, prof. dr. Željko Vukelić	45	15	30	0	0	90	180	6	1st semester	no
5.	0069217	Special Blasting and Drilling Works	doc. dr. Jože Kortnik	30	15	30	0	15	90	180	6	1st semester	no
6.	0067876	Geothermal Energy	prof. dr. Željko Vukelić	45	0	45	0	0	90	180	6	2nd semester	no

7.	0067877	Tunnel Construction and Risk Assessment	Janez Rošer, prof. dr. Željko Vukelić, Vojkan Jovičić	45	15	45	0	15	120	240	8	2nd semester	no
8.	0067879	Environmental Engineering	doc. dr. Jože Kortnik	60	15	30	0	15	120	240	8	2nd semester	no
9.	0067880	Practical Work	doc. dr. Jože Kortnik	0	0	0	0	60	60	120	4	2nd semester	no
10.	0086882	Optional Courses		30	0	30	0	0	60	120	4	2nd semester	yes
Total				390	60	345	0	105	900	1800	60		

Year 2

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0067885	Engineering Geophysics	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4	1st semester	no
2.	0067887	Model Analysis	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4	1st semester	no
3.	0069221	Risk assessment in geotechnology	doc. dr. Goran Vižintin, prof. dr. Željko Vukelić	45	0	45	0	0	90	180	6	1st semester	no
4.	0067889	Planning, Organization and Management of Geotechnological Companies	Janez Rošer, Jurij Šporin, prof. dr. Željko Vukelić	30	0	30	0	0	60	120	4	1st semester	no
5.	0067890	Waste Treatment	doc. dr. Jože Kortnik	30	15	0	0	15	60	120	4	1st semester	no
6.	0086883	Optional courses		60	0	60	0	0	120	240	8	1st semester	yes
7.	0067886	Master Thesis		0	0	0	0	450	450	900	30	2nd semester	no

	Total	225	15	195	0	465	900	1800	60	
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Izbirni strokovni predmeti

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0069207	Clean Technologies	doc. dr. Jože Kortnik	30	15	15	0	0	60	120	4		yes
2.	0069208	Selected Chapters from Engineering Geophysics	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4		yes
3.	0075676	Reinforced Concrete Constructions	Vojkan Jovičić	30	15	15	0	0	60	120	4		yes
4.	0075680	Security and Management of Underground Structures	Janez Rošer, prof. dr. Željko Vukelić, Vojkan Jovičić	30	0	30	0	0	60	120	4		yes
5.	0075682	Landfill Areas	doc. dr. Jože Kortnik	30	0	30	0	0	60	120	4		yes
6.	0075685	Energy Politics	prof. dr. Željko Vukelić	30	15	15	0	0	60	120	4		yes
7.	0075693	Deformational Monitoring Networks	doc. dr. Goran Vižintin	30	0	15	0	15	60	120	4		yes
8.	0075695	Geostatistics	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4		yes
9.	0075713	Geothermal Research and Underground Fluid Modelling	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4		yes
10.	0075716	Least-Squares Method	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4		yes
11.	0075720	Geomodelling and GIS	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4		yes

12.	0075721	Geophysical Methods of Potential Fields	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4		yes
13.	0075724	Mineral Resources and Law	prof. dr. Senko Pličanič	30	0	30	0	0	60	120	4		yes
Total				390	45	330	0	15	780	1560	52		