

## STUDY PROGRAMME CURRICULUM GEOTECHNOLOGY AND MINING

2026/2027

Name of study programme	<b>Geotechnology and mining</b>
Programme characteristics	
Type	higher professional
Cycle	bachelor
University of Ljubljana members	• Faculty of Natural Sciences and Engineering, Aškerčeva cesta 12, 1000 Ljubljana, Slovenija

Year 1, obvezni

	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.	0067636	Applied Geology in Geoengineering	doc. dr. Goran Vižintin, izr. prof. dr. Barbara Čenčur Curk	60	30	0	0	0	90	180	6	1st semester	no
2.	0067637	Economy of Business in Geotechnological Companies	Jurij Šporin, prof. dr. Željko Vukelić	45	30	45	0	0	120	240	8	1st semester	no
3.	0067638	Physics	Matej Komelj	45	0	30	0	0	75	150	5	1st semester	no
4.	0067640	Chemistry	Romana Cerc Korošec	60	0	15	0	0	75	150	5	1st semester	no
5.	0067641	Mathematics I	izr. prof. dr. Janko Bračič	45	0	45	0	0	90	180	6	1st semester	no
6.	0068544	Geometry in Engineering	doc. dr. Goran Vižintin, prof. dr.	45	0	30	0	0	75	150	5	2nd semester	no

			Željko Vukelić										
7.	0067642	Mathematics II	izr. prof. dr. Janko Bračić	45	0	45	0	0	90	180	6	2nd semester	no
8.	0067643	Surveying in Geotechnology I	doc. dr. Damjan Hann, doc. dr. Goran Vižintin	45	0	45	0	0	90	180	6	2nd semester	no
9.	0068549	Technical English	Barbara Luštek Preskar, prof. angl. in nem.	30	15	15	0	0	60	120	4	2nd semester	no
10.	0067645	Technical Mechanics	George Mejak	45	0	30	0	0	75	150	5	2nd semester	no
11.	0067646	Technology and Quality of Construction Materials	doc. dr. Damjan Hann	30	30	0	0	0	60	120	4	2nd semester	no
		Total		495	105	300	0	0	900	1800	60		

Year 2, obvezni

	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.	0067649	Soil Mechanics and Structure Foundations	prof. dr. Željko Vukelić, Vojkan Jovičić	45	0	30	0	15	90	180	6	1st semester	no
2.	0067650	Mineral Processing	doc. dr. Jože Kortnik	45	0	45	0	0	90	180	6	1st semester	no
3.	0067652	Basics of Electrotechnics	Jurij Šporin, prof. dr. Željko Vukelić	30	0	30	0	0	60	120	4	1st semester	no

4.	0067653	Basics of Mechanical Engineering	prof. dr. Željko Vukelić	30	0	30	0	0	60	120	4	1st semester	no
5.	0067654	Computer Science and Information Technology	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4	1st semester	no
6.	0068561	Extraction of Mineral Resources I	doc. dr. Damjan Hann, Janez Rošer, prof. dr. Željko Vukelić	60	0	15	0	15	90	180	6	1st semester	no
7.	0559442	Engineering Geophysics I	doc. dr. Goran Vižintin	45	0	45	0	0	90	180	6	2nd semester	no
8.	0067648	Rock Mechanics	prof. dr. Željko Vukelić, Vojkan Jovičić	45	15	30	0	15	105	210	7	2nd semester	no
9.	0068556	Surveying in Geotechnology II	doc. dr. Damjan Hann, doc. dr. Goran Vižintin	45	0	45	0	15	105	210	7	2nd semester	no
10.	0067655	Environmental Management and Clean Tehnologies	doc. dr. Jože Kortnik	30	30	0	0	0	60	120	4	2nd semester	no
11.	0086889	General Optional Course I		45	0	45	0	0	90	180	6	2nd semester	no
Total				450	45	345	0	60	900	1800	60		

Year 3, obvezni

	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.	0067659	Management of Waste Materials	doc. dr. Jože Kortnik	30	15	0	0	15	60	120	4	1st semester	no

2.	0067660	Landfills for Waste Materials	doc. dr. Jože Kortnik	30	15	0	0	15	60	120	4	1st semester	no
3.	0067662	Practical Training	doc. dr. Jože Kortnik	0	0	0	0	120	120	240	8	1st semester	no
4.	0067663	Research Drilling I	prof. dr. Željko Vukelić	30	0	30	0	0	60	120	4	1st semester	no
5.	0067665	Technology and Environment	doc. dr. Goran Vižintin, prof. dr. Željko Vukelić	30	0	30	0	0	60	120	4	1st semester	no
6.	0086891	Professional Optional Course I		45	0	45	0	0	90	180	6	2nd semester	no
7.	0067657	Ore Dressing and Recycling	doc. dr. Jože Kortnik	45	15	15	0	15	90	180	6	2nd semester	no
8.	0067661	Underground Structures I	Janez Rošer, prof. dr. Željko Vukelić	45	0	30	0	15	90	180	6	1st semester	no
9.	0067664	Research Drilling II	prof. dr. Željko Vukelić	30	0	15	0	15	60	120	4	2nd semester	no
10.	0086892	General Optional Course II		30	0	30	0	0	60	120	4	2nd semester	no
11.	0086893	Professional Optional Course II		30	0	30	0	0	60	120	4	2nd semester	no
12.	0068563	Diploma Thesis		0	0	0	0	90	90	180	6	2nd semester	no
		Total		345	45	225	0	285	900	1800	60		

#### 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.	0068571	Extraction of Mineral Resources II	doc. dr. Damjan Hann, Janez Rošer, prof.	45	0	45	0	0	90	180	6		yes

			dr. Željko Vukelić										
2.	0561566	Engineering Geophysics II	doc. dr. Goran Vižintin	30	0	15	0	15	60	120	4		yes
3.	0075569	Underground Structures II	Janez Rošer, prof. dr. Željko Vukelić	45	15	15	0	15	90	180	6		yes
4.	0075570	Utilization of Geothermal Energy	prof. dr. Željko Vukelić	30	0	15	0	15	60	120	4		yes
5.	0075574	Basics of Reinforced Concrete Structures	prof. dr. Željko Vukelić, Vojkan Jovičić	30	0	30	0	0	60	120	4		yes
6.	0075579	Underground Landfills for Waste Materials	doc. dr. Jože Kortnik	45	0	30	0	15	90	180	6		yes
7.	0075635	Measurements Encyclopedia	doc. dr. Goran Vižintin	45	0	30	0	15	90	180	6		yes
8.	0075641	Basics of Underground Fluids Modelling	doc. dr. Goran Vižintin	30	0	30	0	0	60	120	4		yes
9.	0075651	Advanced Strength of Materials	Pino Koc	45	0	45	0	0	90	180	6		yes
10.	0643408	Holistic Thinking and Acting	prof. dr. Andrej Demšar	30	30	0	0	0	60	120	4		yes
11.	0643409	Business Communication	prof. dr. Andreja Jaklič	30	30	0	0	0	60	120	4		yes
12.	0643981	Information competences	doc. dr. Danica Dolničar	30	15	15	0	0	60	120	4	2nd semester	yes

13.	0643973	Circular economy of materials	doc. dr. Jože Kortnik, prof. dr. Jožef Medved	30	15	15	0	0	60	120	4	2nd semester	yes
Total				465	105	285	0	75	930	1860	62		