

STUDY PROGRAMME CURRICULUM

WATER SCIENCE AND ENVIRONMENTAL ENGINEERING

2026/2027

Name of study programme	Water science and environmental engineering
Programme characteristics	
Type	academic
Cycle	bachelor
University of Ljubljana members	• Faculty of Civil and Geodetic Engineering, Jamova 2, 1000 Ljubljana, Slovenija

Year 1, obvezni

1st semester

				Contact hours								
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Elective
1.	0033791	Mathematics I	Gašper Jaklič, Marjeta Kramar Fijavž	75	0	75	0	0	150	300	10	no
2.	0033792	Physics	Zvonko Jagličić	75	15	45	0	0	135	270	9	no
3.	0038800	Fundamentals of freshwater ecology	Gorazd Urbanič	30	0	20	0	10	60	120	4	no
4.	0038801	Introduction to Environmental Engineering	Dušan Žagar, Nataša Atanasova, Simon Rusjan	45	15	30	0	0	90	180	6	no
Total				225	30	170	0	10	435	870	29	

2nd semester

				Contact hours								
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Elective
1.	0033793	Mathematics II	Marjeta Kramar Fijavž, Nik Stopar	60	0	60	0	0	120	240	8	no
2.	0038803	Basic chemistry	Romana Cerc Korošec	30	0	30	0	0	60	120	4	no

3.	0038804	Geodetic engineering	Dušan Kogoj	30	0	30	0	0	60	120	4	no
4.	0038805	Hydrology	Mojca Šraj	30	25	30	0	5	90	180	6	no
5.	0038806	Construction and Building Materials	Violeta Bokan-Bosiljkov, Vlatko Bosiljkov	30	0	30	0	0	60	120	4	no
6.	0038807	Digital Design and Programming	Tomo Cerovšek	15	0	60	0	0	75	150	5	no
Total				195	25	240	0	5	465	930	31	

Year 2, obvezni

1st semester

				Contact hours								
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Elective
1.	0038808	Hydromechanics	Gorazd Novak	45	0	30	0	0	75	150	5	no
2.	0038809	Introduction to Structural Mechanics	Dejan Zupan	75	0	45	0	0	120	240	8	no
3.	0038810	Mathematics III	Marjeta Kramar Fijavž	60	0	45	0	0	105	210	7	no
4.	0038811	Secondary and Waste Materials Management	Violeta Bokan-Bosiljkov	45	0	45	0	0	90	180	6	no
5.	0038887	Elective course Statistics		30	0	30	0	0	60	120	4	yes
Total				255	0	195	0	0	450	900	30	

2nd semester

				Contact hours								
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Elective
1.	0038812	Introduction to Sanitary Engineering	Mario Krzyk, Nataša Atanasova	30	0	30	0	0	60	120	4	no
2.	0038813	Hydraulics	Gašper Rak	30	15	30	0	0	75	150	5	no

3.	0038815	Soil Mechanics and Engineering Geology	Boštjan Pulko, Petra Štukovnik	60	0	40	0	5	105	210	7	no
4.	0038816	Communal Technical Infrastructure	Daniel Kozelj, Mario Krzyk	30	0	30	0	0	60	120	4	no
5.	0038817	Organization of Construction Works and Operation	Robert Klinc	45	0	45	0	0	90	180	6	no
6.	0643634	Fundamentals of steel structures	Jože Korelc, Primož Može	30	0	30	0	0	60	120	4	no
Total				225	15	205	0	5	450	900	30	

Year 3, obvezni

1st semester

				Contact hours								
University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Elective	
1.	0038821	Roads and Traffic	Peter Lipar	45	0	45	0	0	90	180	6	no
2.	0038823	Geotechnical Engineering	Janko Logar	45	10	30	0	5	90	180	6	no
3.	0038825	Fundamentals of Spatial Planning	Alma Zavodnik Lamovšek	45	0	60	0	0	105	210	7	no
4.	0643631	Fundamentals of earthquake engineering	Matjaž Dolšek	30	0	30	0	0	60	120	4	no
5.	0643629	Elective course economic analysis		45	0	0	0	0	45	90	3	yes
6.	0643632	Introduction to Timber Structures	Jože Lopatič	30	0	30	0	0	60	120	4	no
Total				240	10	195	0	5	450	900	30	

2nd semester

				Contact hours								
University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Elective	

1.	0038824	Introduction to Drainage Engineering	Andrej Kryžanowski, Matjaž Mikoš	40	0	15	0	5	60	120	4	no
2.	0038826	Introduction to Concrete and Masonry Structures	Jože Lopatič, Sebastjan Bratina	45	0	45	0	0	90	180	6	no
3.	0038827	Practical Training	Andreja Istenič Starčič	6	0	0	0	80	34	120	4	no
4.	0038819	Diploma Work		0	0	0	0	75	75	150	5	no
		Total		91	0	60	0	160	259	570	19	

All-year

				Contact hours								
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Elective
1.	0643633	Elective courses		90	0	75	0	0	165	330	11	yes
		Total		90	0	75	0	0	165	330	11	

Izbirni predmeti

1st semester

				Contact hours								
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Elective
1.	0038892	Basic Statistics in Water Science	Dejan Zupan, Goran Turk	30	0	30	0	0	60	120	4	yes
2.	0038896	Advanced Statistical Methods in Water Science	Dejan Zupan, Goran Turk	30	0	30	0	0	60	120	4	yes
3.	0038898	Natural Disasters and their Impact on Environment and Society	Andrej Kryžanowski, Primož Banovec	60	30	0	0	0	90	180	6	yes
4.	0038820	Introduction to Economic Analysis	POLONA DOMADENIK MUREN	45	0	0	0	0	45	90	3	yes

5.	0643630	Advanced Methods of Economic Analysis	POLONA DOMADENIK MUREN	45	0	0	0	0	45	90	3	yes
Total				210	30	60	0	0	300	600	20	

2nd semester

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study				
1.	0038892	Basic Statistics in Water Science	Dejan Zupan, Goran Turk	30	0	30	0	0	60	120	4	yes
2.	0038896	Advanced Statistical Methods in Water Science	Dejan Zupan, Goran Turk	30	0	30	0	0	60	120	4	yes
3.	0038788	Construction Technologies in Water Works	Andrej Kryžanowski	30	0	30	0	0	60	120	4	yes
4.	0038897	Operational Research in Civil Engineering	Goran Turk, Marijan Žura	45	0	30	0	0	75	150	5	yes
5.	0038789	Hydroinformatics	Mateja Škerjanec	10	10	40	0	0	60	120	4	yes
6.	0038787	Hydrometry	Matjaž Mikoš , Simon Rusjan	30	0	20	0	10	60	120	4	yes
7.	0038898	Natural Disasters and their Impact on Environment and Society	Andrej Kryžanowski, Primož Banovec	60	30	0	0	0	90	180	6	yes
8.	0106791	Introduction to Environmental Technologies	Mario Krzyk, Nataša Atanasova	20	10	30	0	0	60	120	4	yes
9.	0038814	Applied Ecology and Ecotoxicology	Damjana Drobne	30	0	30	0	0	60	120	4	yes
Total				285	50	240	0	10	585	1170	39	