



FGG

UNIVERZA V LJUBLJANI
Fakulteta za gradbeništvo in geodezijo

Presentation Brochure

Master's Study Programme – Second Cycle

CIVIL ENGINEERING (MSc)

INFORMATION ABOUT THE STUDY PROGRAMME

1. Basic data

Programme Name	Civil Engineering
Type	Master's programme
Cycle	Second cycle
KLASIUS-SRV	Master's education (second Bologna cycle) / master's qualification (17003)
ISCED	Architecture, urban planning, and civil engineering (58)
KLASIUS-P	Civil Engineering (not further specified) (5820)
KLASIUS-P-16	Civil Engineering (0732)
Frascati Field	Technical sciences (2)
SOK Level	Level 8
EQF Level	Level 7
EHEA Level	Second cycle
Programme Name	Civil Engineering
Fields / Majors / Modules	<ul style="list-style-type: none"> • No specialisation (general programme) • Geotechnics–Hydrotechnics (major) • Structural Engineering (major) • Interdisciplinary Project-Based Computer-Aided Structural Design (module) • Engineering Modelling (module) • Steel Structures (module) • Massive Structures (module) • Building Information Modelling – BIM A+ (major) • Transportation Infrastructure (major) • Municipal Engineering (module) • Organisation & Informatics (module) • Project Module • Traffic Engineering (module)
University of Ljubljana	Faculty of Civil and Geodetic Engineering (UL FGG), Jamova 2, Ljubljana
Duration	2 years
ECTS per Year	60
Modes of Study	Full-time, Part-time

2. Fundamental Objectives of the Programme

The Master's Programme in Civil Engineering aims to train experts capable of acquiring in-depth, focused knowledge and skills across core areas of civil engineering. Depending on the selected major and electives, students obtain advanced expertise in a specific civil-engineering field or in a field related to civil engineering.

Students learn traditional engineering principles enhanced with the latest research findings and modern technology. They become familiar with the particularities of Slovenia and Europe shaped by historical, socioeconomic, and geographical factors.

Through teamwork, project work, and problem-based tasks, students develop collaboration skills, public-speaking abilities, client interaction, and research engagement.

Practical exercises, theoretical problem solving, and demanding project assignments enable students to apply theoretical knowledge directly and prepare for professional challenges after graduation.

The programme emphasises: advanced scientific and technical knowledge, international comparability and mobility, alignment with FEANI requirements for the EUR ING title, strong tutoring and continuous learning support, workplace readiness via a two-week practical training period in civil-engineering companies.

Graduates acquire deep theoretical and professional knowledge and are qualified for independent professional and development tasks in Slovenia and across Europe.

3. General Competences (Learning Outcomes)

The general competences obtained through the programme include:

- general knowledge and familiarity with academic fields and scientific research methods,
- developing the ability to formulate, investigate, understand, and creatively solve problems, principles, and theories,
- critical reading and understanding of texts, independent acquisition of knowledge and searching for sources,
- developing critical, analytical, and synthetic thinking,
- competence for transferring and applying theoretical knowledge to practice and solving professional and work-related problems, and for interdisciplinary integration,
- developing professional and ethical responsibility,
- developing scientific literacy, public speaking skills, communication with clients, transmitting and presenting knowledge and results,
- ability to use foreign professional language in written and oral communication, communication in international and national scientific environments (besides reading literature, this competence is supported by lectures by visiting foreign professors, excursions abroad, and project work with foreign partners),
- ability to use information and communication technology,
- consideration of safety, functional, economic, environmental, and ecological aspects in one's work,
- development of moral–ethical standards (honesty in dealing with clients, impartial advice, independence and professionalism in accordance with valid legislation),
- creating an objective view of the environment and society.

4. Subject-Specific Competences (Learning Outcomes)

With the second-cycle Master's study programme in Civil Engineering, graduates acquire mainly the following subject-specific competences:

- fundamental and specific professional knowledge in the field of civil engineering: especially in the fields of design, organisation, management, leading and execution of construction works and production, construction informatics, ecology, spatial planning, land use planning and environmental policy,
- independent comprehensive design of demanding civil engineering structures,
- independent project management in the field of civil engineering,
- understanding the mutual influences of technical and environmental problems, and the ability to design and construct environmentally friendly civil engineering structures,
- performing demanding tasks in civil engineering independently and within a group in activities described in the first bullet point,
- organisation, leadership, and implementation of development activities in civil engineering,
- mastery of fundamental knowledge in civil engineering (natural sciences, mathematics, informatics, mechanics, materials), the ability to integrate knowledge from different fields and the ability to apply acquired knowledge,
- application of knowledge in specialised fields of civil engineering (hydraulic engineering, structural engineering, municipal engineering, organisation–informatics, and transportation engineering),
- understanding of the general structure of the discipline and the interconnection between its sub-disciplines,
- use of information and communication technology and systems most commonly used in civil engineering practice,
- management of construction and related companies and departments.

5. Conditions for Enrolment

A candidate may enrol in the second-cycle Master's study programme in Civil Engineering if they have completed:

- (a) a first-cycle study programme in civil engineering covering the entire content field of civil engineering,
- (b) a first-cycle study programme in operational construction, transportation, or other technical fields, provided the candidate completes, prior to enrolment, those study requirements essential for continuing studies, in the scope of 10–60 ECTS; these requirements depend on differences in professional fields and may be completed during first-cycle studies, in further training programmes, or by taking examinations prior to enrolment in the Master's programme,
- (c) a higher professional study programme (pre-Bologna) in civil engineering,
- (d) a higher professional study programme (pre-Bologna) in other technical fields, provided the candidate completes, before enrolment, the essential study requirements in the scope

of 10–60 ECTS, which may be completed during first-cycle studies, in further training programmes, or by taking examinations before enrolment.

The essential study requirements for continuation of studies are determined by the Study Committee of the Department of Civil Engineering at UL FGG, depending on differences in the field.

6. Criteria for Selection in Case of Limited Enrolment

If enrolment is limited, selection will be based on the grade point average from the first-cycle studies.

7. Criteria for Recognition of Knowledge and Skills Obtained Before Enrolment

The student may have recognised knowledge that, in content and scope, corresponds to the learning content of courses in the Civil Engineering programme. Recognition is decided by the Study Committee of the Department of Civil Engineering at UL FGG on the basis of a written application, attached certificates, and other documents proving successfully obtained knowledge and its content, and in accordance with the Rules on the Procedure and Criteria for Recognition of Non-formally Acquired Knowledge and Skills adopted by the Senate of the University of Ljubljana.

Recognition considers:

- certificates and other documents on completed courses and other forms of education,
- evaluation of products, services, publications, and other student works,
- evaluation of knowledge acquired by self-study or experiential learning (possibility of completing study requirements without attending lectures, tutorials, seminars),
- relevant work experience.

If recognised knowledge corresponds to the learning content of a course, it is evaluated with the same number of ECTS credits as the course.

8. Assessment Methods

Assessment methods are consistent with the Statute of the University of Ljubljana and are listed in the course syllabi.

9. Conditions for Progression in the Programme

A student may enrol in the next year if they have completed at least 45 ECTS of obligations prescribed by the curriculum by the end of the academic year. Exceptionally, a student may

request progression with at least 40 ECTS of the current year and justified reasons, determined in accordance with the Statute. The Committee for Student Requests at UL FGG decides on exceptional progression.

A student who has not completed all requirements for progression once may repeat a year if they have obtained at least 30 ECTS.

10. Conditions for Transferring Between Programmes

A transfer between study programmes is defined as the termination of a student's education in the study programme in which they were enrolled (the first programme) and the continuation of education in the Second-Cycle Master's Study Programme in Civil Engineering (the second programme), in which part of the study obligations that the student has already completed in the first study programme may be recognised as fulfilled.

Transfers are possible from second-cycle study programmes and, until their discontinuation, also from undergraduate university study programmes adopted before 11 June 2004, which, upon completion of studies, ensure the acquisition of comparable competences and for which, according to recognition criteria, at least half of the ECTS obligations related to compulsory courses of the second study programme may be recognised. Depending on the scope of recognised obligations from the first study programme in the Republic of Slovenia or abroad, the student may enrol in the same or a higher year of the second study programme. Students transferring must meet the conditions for enrolment in the second study programme.

Applications for transfer to the Second-Cycle Master's Study Programme in Civil Engineering and the scope of recognised study obligations in the study programme will be considered individually by the Study Committee of the Department of Civil Engineering. If, in the recognition procedure related to the transfer, the candidate has recognised at least the number and type of credit points required for enrolment in a higher year of the Second-Cycle Master's Study Programme in Civil Engineering, the candidate is permitted to enrol in the higher (second) year of the Second-Cycle Master's Study Programme in Civil Engineering.

11. Conditions for Completion of Studies

A student completes the programme when he/she fulfils all prescribed requirements totaling 120 ECTS credits.

12. Conditions for Completion of Individual Parts of the Programme, if Applicable

The programme is uniform (not divided into independent parts).

13. Qualification, professional or academic title

- Master of Science in Civil Engineering
- Master of Science in building information modelling (BIM)

14. Qualification, professional or academic title (abbreviation)

- M. Sc. Civ. Eng.
- M. Sc. BIM

15. Information on Elective Courses and Mobility

In the Structural Engineering track, two external elective courses of 4 ECTS each (in the 2nd and 3rd semester) are foreseen. In addition, the student chooses a Master module containing additional specialised elective courses in structural engineering.

In the Geotechnics–Hydraulic Engineering track, three external elective courses are foreseen (4+5 ECTS in the 2nd semester and 4 ECTS in the 3rd semester).

In the Transportation Infrastructure track, three elective courses are foreseen (4 ECTS in the 2nd semester and 4+5 ECTS in the 3rd semester). In addition, four elective Master modules are foreseen in the 4th semester. Due to the large structure of the curriculum, students of Transportation Infrastructure are recommended to select electives within their own track.

External elective courses may be selected from any study programme at the University of Ljubljana or other universities.

A student may transfer 30 ECTS credits (one semester of study, regardless of compulsory or elective units) from any civil-engineering-related programme at any faculty in Slovenia or abroad, provided UL FGG has a signed agreement with that institution.

SYLLABUS OF STUDY PROGRAMME WITH FORESEEN COURSE COORDINATORS

Geotechnics – Hydrotechnics (division)

1st year, mandatory

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0034917	Mathematics 3	Gašper Jaklič	45	0	30	0	0	75	150	5	Winter	no
2.	0034918	Finite Element Methods in Civil Engineering	Boštjan Brank	30	0	30	0	0	60	120	4	Winter	no
3.	0034916	Geotechnics of Infrastructural Facilities	Janko Logar	30	0	30	0	0	60	120	4	Winter	no
4.	0034920	Hydraulic Modelling	Gorazd Novak, Gašper Rak	45	15	45	0	0	105	210	7	Winter	no
5.	0034915	Hydrological Modelling	Mojca Šraj	30	0	60	0	0	90	180	6	Winter	no
6.	0038912	Elective course 1		30	0	30	0	0	60	120	4	Winter	yes
7.	0034921	Seismic Engineering	Matjaž Dolšek	45	0	30	0	0	75	150	5	Summer	no
8.	0034922	Modelling of Geotechnical Structures	Boštjan Pulko, Janko Logar	45	0	45	0	0	90	180	6	Summer	no
9.	0034924	Numerical Modelling of Solids	Jože Korelc	45	0	45	0	0	90	180	6	Summer	no
10.	0034923	Design of Building Structures	Drago Saje	30	0	30	0	0	60	120	4	Summer	no
11.	0034919	Theory of Probability and Statistics	Marjeta Kramar Fijavž	30	0	30	0	0	60	120	4	Summer	no
12.	0038913	Elective course 2		45	0	30	0	0	75	150	5	Summer	yes
		Total		450	15	435	0	0	900	1800	60		

2nd year, mandatory

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0037993	Project Management	Robert Klinc	30	0	30	0	0	60	120	4	Winter	no
2.	0037994	River Engineering	Matjaž Mikoš	60	30	15	0	15	120	240	8	Winter	no
3.	0037995	Hydraulic Structures	Andrej Kryžanowski	60	0	60	0	0	120	240	8	Winter	no
4.	0037996	Experimental Methods in Geotechnical Engineering	Matej Maček, Janko Logar	45	10	30	0	5	90	180	6	Winter	no
5.	0038914	Elective course 3		30	0	30	0	0	60	120	4	Winter	yes
6.	0037997	Practical training	Matevž Dolenc	6	0	0	0	80	34	120	4	Winter, Summer	no
7.	0037998	Torrent Control Engineering	Matjaž Mikoš	45	0	30	0	15	90	180	6	Summer	no
8.	0037999	Slope Stabilisation	Matej Maček, Matjaž Mikoš	20	5	30	0	5	60	120	4	Summer	no
9.	0038000	Rock Mechanics and Underground Structures	Janko Logar, Vojkan Jovičič	45	0	45	0	0	90	180	6	Summer	yes
10.	0034965	Master thesis		0	0	0	0	150	150	300	10	Summer	no
		Total		341	45	270	0	270	874	1800	60		

Elective professional courses from Geotechnics - Hydrotechnics

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038005	Hydraulic Machines and Devices	Gašper Rak, Marko Hočevar	30	0	30	0	0	60	120	4	Winter, Summer	yes
2.	0034914	Hydroelectric Power	Andrej Kryžanowski	30	0	30	0	0	60	120	4	Winter, Summer	yes
3.	0038007	Numerical Methods in Fluid Dynamics	Gorazd Novak	45	0	30	0	0	75	150	5	Winter, Summer	yes
4.	0034912	Environmental Geotechnics	Matej Maček	30	0	30	0	15	75	150	5	Winter, Summer	yes
5.	0644467	The use of Large Language Models for Engineers	Robert Klinc	15	15	30	0	0	60	120	4	Winter, Summer	yes
Total				150	15	150	0	15	330	660	22		

Structural engineering (division)

1st year, mandatory

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0034917	Mathematics 3	Gašper Jaklič	45	0	30	0	0	75	150	5	Winter	no
2.	0034918	Finite Element Methods in Civil Engineering	Boštjan Brank	30	0	30	0	0	60	120	4	Winter	no
3.	0034955	Building Physics	Zvonko Jagličič	30	0	15	0	0	45	90	3	Winter	no
4.	0034956	Non-linear Mechanics	Dejan Zupan, Igor Planinc	45	0	45	0	0	90	180	6	Winter	no
5.	0034957	Structural Analysis	Matija Gams, Tatjana Isaković	30	15	30	0	0	75	150	5	Winter	no
6.	0034958	Conception of Building Structures	Matija Gams	30	15	0	0	0	45	90	3	Winter	no
7.	0038915	Elective course 1		30	0	30	0	0	60	120	4	Winter	yes
8.	0034959	Repair and Testing of Structures	Vlatko Bosiljkov	30	15	30	0	0	75	150	5	Summer	no
9.	0034960	Non-linear Analysis of Structures	Jože Korelc	45	0	30	0	0	75	150	5	Summer	no
10.	0034961	Computer-Integrated Construction	Žiga Turk	45	0	30	0	0	75	150	5	Summer	no
11.	0034919	Theory of Probability and Statistics	Marjeta Kramar Fijavž	30	0	30	0	0	60	120	4	Summer	no
12.	0034963	Geotechnics of Buildings	Boštjan Pulko	60	0	45	0	0	105	210	7	Summer	no
13.	0034964	Practical Training	Matevž Dolenc	6	0	0	0	80	34	120	4	Summer	no
		Total		456	45	345	0	80	874	1800	60		

2nd year, mandatory

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0034966	Project Management	Robert Klinc	30	0	30	0	0	60	120	4	Winter	no
2.	0034967	Structural Dynamics and Earthquake Engineering	Matjaž Dolšek	60	0	45	0	0	105	210	7	Winter	no
3.	0034968	Selected Chapters from Concrete and Masonry Structures	Drago Saje, Jože Lopatič, Sebastjan Bratina	45	0	45	0	0	90	180	6	Winter	no
4.	0170226	Steel Structures II	Primož Može	45	0	30	0	0	75	150	5	Winter	no
5.	0034970	Probabilistic Methods and Reliability of Structures	Goran Turk	30	0	30	0	0	60	120	4	Winter	no
6.	0038916	Elective course 2		30	0	30	0	0	60	120	4	Winter	yes
7.	0034965	Master thesis		0	0	0	0	150	150	300	10	Summer	no
8.	0639884	Module - BII - CE SE		75	90	135	0	0	300	600	20	Winter, Summer	yes
Total				315	90	345	0	150	900	1800	60		

Elective professional courses from Structural engineering

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038456	Numerical Modelling of Solids	Jože Korelc	45	0	45	0	0	90	180	6	Summer	yes
2.	0038457	Coupled Problems	Dejan Zupan, Goran Turk	30	0	30	0	0	60	120	4	Summer	yes
3.	0038514	Technology of Material with Mineral Binders	Violeta Bokan-Bosiljkov	45	0	45	0	0	90	180	6	Summer	yes
4.	0034927	Advanced Construction and Building Materials	Violeta Bokan-Bosiljkov	15	15	30	0	0	60	120	4	Summer	yes
5.	0034928	Fire Safety	Tomaž Hozjan	45	0	45	0	0	90	180	6	Summer	yes
6.	0038504	Prestressed Concrete	Jože Lopatič, Sebastjan Bratina	45	0	45	0	0	90	180	6	Summer	yes
7.	0038507	Composite Structures	Primož Može	30	0	30	0	0	60	120	4	Summer	yes
8.	0034929	Engineering Timber Structures	Jože Lopatič	30	0	30	0	0	60	120	4	Summer	yes
9.	0034930	Shell Structures	Boštjan Brank	30	0	30	0	0	60	120	4	Summer	yes
10.	0038000	Rock Mechanics and Underground Structures	Janko Logar, Vojkan Jovičič	45	0	45	0	0	90	180	6	Summer	yes
11.	0038509	Modelling of Geotechnical Structures	Boštjan Pulko, Janko Logar	45	15	30	0	0	90	180	6	Summer	yes
12.	0034931	Nonlinear Seismic Analysis of Reinforced Concrete Bridges	Anže Babič, Tatjana Isaković	30	60	0	0	0	90	180	6	Summer	yes
13.	0170318	Masonry Structures	Matija Gams, Vlatko Bosiljkov	30	0	30	0	0	60	120	4	Winter	yes
14.	0644467	The use of Large Language Models for Engineers	Robert Klinc	15	15	30	0	0	60	120	4	Winter, Summer	yes
Total				480	105	465	0	0	1050	2100	70		

Interdisciplinary project study of computer-aided design of structures (module)

2nd year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038452	Interdisciplinary Seminar on Computer Aided Design of Structures	Matija Gams, Tatjana Isaković	0	90	60	0	0	150	300	10	Summer	yes
2.	0038453	Information and Communication Technology for Project Work	Tomo Cerovšek, Žiga Turk	20	10	30	0	0	60	120	4	Summer	yes
3.	0041665	Elective course SE		45	0	45	0	0	90	180	6	Summer	yes
		Total		65	100	135	0	0	300	600	20		

Engineering modelling (module)

2nd year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038456	Numerical Modelling of Solids	Jože Korelc	45	0	45	0	0	90	180	6	Summer	yes
2.	0038457	Coupled Problems	Dejan Zupan, Goran Turk	30	0	30	0	0	60	120	4	Summer	yes
3.	0038466	Numerical Modelling of Geotechnical Structures	Boštjan Pulko, Janko Logar	45	0	30	0	0	75	150	5	Summer	yes
4.	0038007	Numerical Methods in Fluid Dynamics	Gorazd Novak	45	0	30	0	0	75	150	5	Winter, Summer	yes
		Total		165	0	135	0	0	300	600	20		

Steel structures (module)

2nd year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038455	Design of Steel Structures - Seminar	Primož Može	0	90	60	0	0	150	300	10	Summer	yes
2.	0041666	Elective course SE 1		45	0	45	0	0	90	180	6	Summer	yes
3.	0041667	Elective course SE 2		30	0	30	0	0	60	120	4	Summer	yes
		Total		75	90	135	0	0	300	600	20		

Concrete and masonry structures (module)

2nd year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038454	"Design of Concrete	Drago Saje, Jože Lopatič, Sebastjan Bratina	0	90	60	0	0	150	300	10	Summer	yes
2.	0041668	and Masonry Structures - Seminar"		45	0	45	0	0	90	180	6	Summer	yes
3.	0041669	Elective course SE 1		30	0	30	0	0	60	120	4	Summer	yes
		Total		75	90	135	0	0	300	600	20		

Building information modelling - BIM A+ (division)

1st year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0034917	Mathematics 3	Gašper Jaklič	45	0	30	0	0	75	150	5	Winter	no
2.	0034918	Finite Element Methods in Civil Engineering	Boštjan Brank	30	0	30	0	0	60	120	4	Winter	no
3.	0034994	Geotechnics of Infrastructural Facilities	Janko Logar	45	30	45	0	0	120	240	8	Winter	no
4.	0034995	Quality Control and Quality Assurance	Žiga Turk	30	0	30	0	0	60	120	4	Winter	no
5.	0034996	Operative Planning and Monitoring of Projects	Robert Klinc	45	0	30	0	0	75	150	5	Winter	no
6.	0038914	Elective course 1		30	0	30	0	0	60	120	4	Winter	yes
7.	0034997	Real Estate Management	Daniel Kozelj	45	0	30	0	0	75	150	5	Summer	no
8.	0034923	Design of Building Structures	Drago Saje	30	0	30	0	0	60	120	4	Summer	no
9.	0034999	Intelligent Transport Systems	Marijan Žura	30	0	15	0	15	60	120	4	Summer	no
10.	0035000	Optimisation Methods in Civil Engineering	Marijan Žura	30	0	30	0	0	60	120	4	Summer	no
11.	0034919	Theory of Probability and Statistics	Marjeta Kramar Fijavž	30	0	30	0	0	60	120	4	Summer	no
12.	0116816	Elective course 2		30	0	30	0	0	60	120	4	Summer	yes
13.	0116817	Elective course 3		45	0	30	0	0	75	150	5	Summer	yes
		Total		465	30	390	0	15	900	1800	60		

2nd year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0118307	Management of information and collaboration in BIM	Tomo Cerovšek	30	15	30	0	0	75	150	5	Winter	no
2.	0118308	Modelling in Architecture and Engineering	Žiga Turk	30	15	30	0	0	75	150	5	Winter	no
3.	0116192	Parametric modelling in BIM	Matevž Dolenc, Vlado Stankovski	30	15	30	0	0	75	150	5	Winter	no
4.	0118310	Advanced BIM data-systems and interoperability	Tomo Cerovšek, Žiga Turk	30	15	30	0	0	75	150	5	Winter	no
5.	0116194	4D, 5D, 6D Modelling and Applications	asist. dr. Aleksander Srdić, Marijan Žura	30	15	30	0	0	75	150	5	Winter	no
6.	0118312	BIM based rehabilitation and sustainability analysis	Mitja Košir, Vlatko Bosiljkov	30	15	30	0	0	75	150	5	Winter	no
7.	0116196	Master thesis		0	0	0	0	450	450	900	30	Summer	no
		Total		180	90	180	0	450	900	1800	60		

Infrastructural engineering (division)

1st year, mandatory

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Druge obl. št.					
1.	0034917	Mathematics 3	Gašper Jaklič	45	0	30	0	0	75	150	5	Winter	no
2.	0034918	Finite Element Methods in Civil Engineering	Boštjan Brank	30	0	30	0	0	60	120	4	Winter	no
3.	0034994	Geotechnics of Infrastructural Facilities	Janko Logar	45	30	45	0	0	120	240	8	Winter	no
4.	0034995	Quality Control and Quality Assurance	Žiga Turk	30	0	30	0	0	60	120	4	Winter	no
5.	0034996	Operative Planning and Monitoring of Projects	Robert Klinc	45	0	30	0	0	75	150	5	Winter	no
6.	0038917	Elective course 1		30	0	30	0	0	60	120	4	Winter	yes
7.	0034997	Real Estate Management	Daniel Kozelj	45	0	30	0	0	75	150	5	Summer	no
8.	0034923	Design of Building Structures	Drago Saje	30	0	30	0	0	60	120	4	Summer	no
9.	0034999	Intelligent Transport Systems	Marijan Žura	30	0	15	0	15	60	120	4	Summer	no
10.	0035000	Optimisation Methods in Civil Engineering	Marijan Žura	30	0	30	0	0	60	120	4	Summer	no
11.	0034961	Computer-Integrated Construction	Žiga Turk	45	0	30	0	0	75	150	5	Summer	no
12.	0034919	Theory of Probability and Statistics	Marjeta Kramar Fijavž	30	0	30	0	0	60	120	4	Summer	no
13.	0034964	Practical Training	Matevž Dolenc	6	0	0	0	80	34	120	4	Summer	no
Total				441	30	360	0	95	874	1800	60		

2nd year, mandatory

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0034966	Road Construction Machinery and Technology	Robert Klinc	30	0	30	0	0	60	120	4	Winter	no
2.	0035003	Urban Roads	Matej Maček, Robert Rijavec	60	0	45	0	0	105	210	7	Winter	no
3.	0035004	"Information Modelling	Peter Lipar	45	0	30	0	0	75	150	5	Winter	no
4.	0035005	of Buildings"	Tomo Cerovšek	30	15	45	0	0	90	180	6	Winter	no
5.	0038917	Elective course 2		30	0	30	0	0	60	120	4	Winter	yes
6.	0038914	Elective course 3		30	0	30	0	0	60	120	4	Winter	yes
7.	0034965	Master thesis		0	0	0	0	150	150	300	10	Summer	no
8.	0639885	Module - BII - CE IE		120	45	135	0	0	300	600	20	Summer	yes
		Total		345	60	345	0	150	900	1800	60		

Elective professional courses from division Infrastructural engineering

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038585	Traffic Flow Theory and Capacity Analysis	Marijan Žura	45	0	15	0	0	60	120	4	Summer	yes
2.	0034979	Construction planning and road maintenance	Marijan Žura	30	0	30	0	0	60	120	4	Summer	yes
3.	0034978	Property Law	Ana Vlahek	30	0	30	0	0	60	120	4	Summer	yes
4.	0034981	Real Estate Valuation	Daniel Kozelj	30	0	30	0	0	60	120	4	Summer	yes
5.	0034980	Traffic Ecology	Peter Lipar	30	0	30	0	0	60	120	4	Summer	yes
6.	0034976	Urban Planning	Alma Zavodnik Lamovšek	30	0	30	0	0	60	120	4	Summer	yes
7.	0038588	Design and Construction of Steel Buildings	Primož Može	30	15	15	0	0	60	120	4	Summer	yes
8.	0109879	Engineering works and water Protection	Mario Krzyk, Nataša Atanasova	15	15	30	0	0	60	120	4	Winter, Summer	yes
9.	0644467	The use of Large Language Models for Engineers	Robert Klinc	15	15	30	0	0	60	120	4	Winter, Summer	yes
Total				255	45	240	0	0	540	1080	36		

Municipal engineering (module)

2nd year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038559	Municipal and Housing Economics	Daniel Kozelj	30	15	45	0	0	90	180	6	Summer	yes
2.	0038560	Water supply and sewage systems	Mario Krzyk	60	30	60	0	0	150	300	10	Summer	yes
3.	0038561	Project from Municipal Infrastructure	Daniel Kozelj	30	0	30	0	0	60	120	4	Summer	yes
Total				120	45	135	0	0	300	600	20		

Organisation - building informatics (module)

2nd year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Other					
1.	0038562	Process Modelling and Information Systems	Tomo Cerovšek	30	0	30	0	0	60	120	4	Summer	yes
2.	0038563	Selected Chapters of Building Informatics	Žiga Turk	45	0	45	0	0	90	180	6	Summer	yes
3.	0038564	Management in Civil Engineering	Robert Klinc	30	0	30	0	0	60	120	4	Summer	yes
4.	0038576	Organisational Planning of Construction	Robert Klinc	30	30	30	0	0	90	180	6	Summer	yes
Total				135	30	135	0	0	300	600	20		

Project (module)

2nd year

	UL Code	Course Name	Lecturer(s)	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Druge obl. št.					
1.	0038577	Construction Informatics Project	Tomo Cerovšek	0	60	0	0	0	60	120	4	Summer	yes
2.	0038578	Project from Traffic Infrastructure	Marijan Žura	0	120	0	0	0	120	240	8	Summer	yes
3.	0038579	Project from Municipal Economics	Daniel Kozelj	0	60	0	0	0	60	120	4	Summer	yes
4.	0038580	Project from Construction Organisation and Contracting	Robert Klinc	30	30	0	0	0	60	120	4	Summer	yes
Total				30	270	0	0	0	300	600	20		

Traffic engineering (module)

2nd year

	UL Code	Course Name	Nosilci	Contact hours					Independent Work	Total Hours	ECTS	Semester	Elective
				Lectures	Seminars	Exercises	Clinical Work	Druge obl. št.					
1.	0038581	Road Design	Peter Lipar, Robert Rijavec	30	0	15	0	0	45	90	3	Summer	yes
2.	0038582	Road Seminar	Peter Lipar, Robert Rijavec	0	60	45	0	0	105	210	7	Summer	yes
3.	0038583	Railway Design	Peter Lipar, Robert Rijavec, Marijan Žura	30	0	15	0	0	45	90	3	Summer	yes
4.	0038584	Railway Seminar	Peter Lipar, Robert Rijavec	0	45	60	0	0	105	210	7	Summer	yes
Total				60	105	135	0	0	300	600	20		