

Study programme "Civil Engineering"

Main attributes

Title	Civil Engineering
Identification code	BDB0
Education classification code	51582
Level and type	Doctoral (Third Cycle) Studies
Higher education study field	Architecture and Civil Engineering
Head of the study field	Uģis Bratuškins
Deputy head of the study field	Juris Smirnovs
Department responsible	Faculty Of Civil And Mechanical Engineering
Head of the study programme	Sandris Ručevskis
Professional classification code	
The type of study programme	Full time
Language	Latvian
Accreditation	16.11.2022 - 17.11.2028; Accreditation certificate No 2022/31-A
Volume (credit points)	192.0
Duration of studies (years)	Full time studies - 4,0
Degree or/and qualification to be obtained	Doctor of Science (Ph.D.) in Engineering and Technology / –
Qualification level to be obtained	The 8th level of European Qualifications Framework (EQF) and Latvian Qualifications Framework (LQF)
Programme prerequisites	Professional master degree in transportation engineering, or professional master degree in civil engineering, or comparable education

Description

Abstract	The study programme shall, in lectures, practical and laboratory activities and in independent studies, provide for: - obtaining the fundamental science foundations associated with the construction sector; - studying the appropriate methods of analytical and experimental research and scientific processing of the results obtained; - acquiring the skills to defend their opinions in scientific discussions and to prepare scientific publications in the relevant scientific sectors.
Aim	The aim of the study programme is the preparation of highly qualified specialists for research activities, the preparation of academic staff for teaching at the university level in the area of civil engineering and the preparation of scientists for independent undertaking and supervision of research projects.
Tasks	Tasks of the study programme: - gain mastery of scientific research methods; - complete a promotional paper (dissertation); - publish articles in quotable sources and deliver research results at scientific conferences.
Learning outcomes	Doctoral studies are intended to complement knowledge, skills and abilities gained in the previous level studies to independent research work in civil engineering, as well as to prepare for independent research and teaching activities. Defended doctoral thesis. Ability to perform independent scientific research work.
Final/state examination procedure, assessment	Promotion work. Submission, defence and awarding of promotion work. See Regulations and Procedures of the Cabinet of Ministers of the Republic of 27 December 2005, Regulation No 1001.
Description of the future employment	Doctors can work in higher educational establishments, scientific research institutions, design and construction companies in Latvia and abroad.
Special enrollment requirements	English language proficiency equivalent to at least CEFR B2 level.
Opportunity to continue studies	

Courses

No	Code	Name	Credit points
A		Compulsory Study Courses	15.0
1	BBK606	Application of of Numerical Methods in Civil Engineering	10.0
2	BKA609	Advanced Materials in Civil Engineering	5.0
B		Compulsory Elective Study Courses	21.0
B1		Field-Specific Study Courses	21.0
		<i>Construction of civil buildings</i>	<i>21.0</i>
1	BKA611	The Finite Element Method	10.0
2	BBK608	Timber Materials and Structures	5.0
3	BKA608	Material Damage and Fracture Mechanics, Advanced Course	5.0
4	BBK611	Specialized Research Seminars	6.0
5	BKA610	Structural Optimization	5.0
6	BKA604	Laminate and Sandwich Composite Structures	5.0
7	BKA605	Vibration Damping	5.0
8	BTG601	Research Seminars in Specialization	6.0
9	BKA612	Research Seminars in Specialization	6.0
		<i>Building materials and construction technology</i>	<i>21.0</i>
1	BMT601	Concrete Science	10.0
2	BBR747	FiberconcreteTechnology	5.0
3	BMT615	Specialized Research Seminars	6.0
4	BBR746	Specialized Research Seminars	6.0
		<i>Structural Analysis</i>	<i>21.0</i>
1	BBM601	Cement- based Composites and Structures	10.0
2	BBM602	Creep of Structural Elements	5.0
3	BBM603	Specialized Research Seminars	6.0
		<i>Geodesy and geoinformatics</i>	<i>21.0</i>
1	BGE602	Advanced geodesy (special course)	10.0
2	BGE601	Theory of errors and theory of geodetical measurements equalization	10.0
3	BGE604	Photogrammetry and Remote Sensing	8.0
4	BGE603	Geodynamics	7.0
5	BGE607	Global Navigation Satellite Systems in Geodesy	5.0
6	BGE608	Geographical Information systems (special course)	5.0
7	BGE609	Specialized Research Seminars	6.0
		<i>Land transport and infrastructure</i>	<i>21.0</i>
1	BTB626	Transportation System and Logistics	10.0
2	BTB602	Traffic Roads	5.0
3	BTB603	Bridges	5.0
4	BTB698	Computer Aided Design of Transport Engineering Infrastructure	10.0
5	BTB604	Traffic Planning	5.0
6	BTB605	Specialized Research Seminars	6.0
C		Free Elective Study Courses	6.0
E		Final Examination	150.0
1	BTB009	Research Work	150.0
2	BGE009	Research Work	150.0
3	BMT009	Research Work	150.0
4	BKA009	Research Work	150.0
5	BBK009	Research Work	150.0
6	BBR009	Research Work	150.0
7	BTG009	Research Work	150.0
8	BBM009	Research Work	150.0