RĪGAS TEHNISKĀ UNIVERSITĀTE

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Study programme "Heat, Gas and Water Technology"

Main attributes

Title	Heat, Gas and Water Technology
Identification code	BDS0
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	Lana Migla
Department responsible	Faculty of Civil and Mechanical Engineering
Head of the study programme	Lana Migla
Professional classification code	
The type of study programme	Full time
Language	Latvian, English
Accreditation	16.11.2022 - 17.11.2028; Accreditation certificate No 2022/31-A
Volume (credit points)	288.0
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 heat, gas and water engineering systems or professional master degree in transportation engineering, or professional master degree in civil engineering, or comparable education

Description

Abstract	The study programme is based on learning balance between the development of creative skills and advanced knowledge of practical research tools and methods. Skill in specialized study courses is learned and improved by individual consultation with lead researchers in the field of heat, gas and water technology. Classes are regularly improved by modern and innovative theoretical scientific materials. During the implementation of the study programme, it is intended to continue active work with such actual topics as the energy efficiency of buildings and their engineering systems and problems of microclimate and water systems.
Aim	The main objective of the study programme is to prepare highly qualified specialists in the field of heat, gas and water technology, which can address the scientific challenges and work as lecturers, assistants, researchers at universities and research institutes. In addition, the study programme is designed to prepare experts for private, public and municipal companies which provide centralized heat supply, gas supply, water supply and sewerage.
Tasks	The tasks of the study programme: - to enhance the development of the heat, gas and water technology field; - to prepare students for in-depth individual scientific research in the selected field; - to develop the skillset to individually carry out scientific problem solving, report and publish research results, as well as obtain the required skillset and experience to conduct pedagogical work.
Learning outcomes	Doctoral studies are intended to supplement the knowledge, skills and abilities acquired in previous level studies for independent research work in the field of heat, gas and water technology, as well as to prepare for independent research and teaching activities. Successfully defended doctoral thesis. Ability to conduct independent scientific research work.
Final/state examination procedure, assessment	In order to obtain a doctor's scientific degree, one must complete a doctoral study programme and defend a promotion (doctoral) thesis. For the rules and procedures for submitting, defending and awarding a scientific degree (doctorate), see Regulations and Procedures of the Cabinet of Ministers of the Republic of 27 December 2005, Regulation No 1001.
Description of the future employment	Graduates of the study programme can work in higher education institutions, scientific research centres, both locally and internationally.
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**	**23.0**
1	BM0832	Advanced Solutions in Energetics	8.0
2	BM0841	Automatic Control of Heat, Gas and Water Technological Systems	15.0
B		**Compulsory Elective Study Courses**	**31.0**
0	BM0839	Specialized Research Seminars	8.0
0	DA1201	Water Treatment Technology	8.0
1	BM0835	Optimisation of Indoor Climate	8.0
2	DA1301	Advanced Course of Water Supply	15.0
3	DA1302	Advanced Course of Wastewater Treatment	15.0
4	BM0836	Special Studies of Gas Supply	15.0
5	BM0834	Special Studies of Heat Technology	15.0
C		**Free Elective Study Courses**	**9.0**
E		**Final Examination**	**225.0**
1	DA1300	Research Work	225.0
2	BM0833	Research Work	225.0