



RTU Course "Bachelor Thesis"
15016 Siltumenerģētisko sistēmu katedra

General data

Code	MSE001
Course title	Bachelor Thesis
Course status in the programme	Graduation Test
Course level	Undergraduate Studies
Course type	Academic
Responsible instructor	Turlajs Daniels
Volume of the course: parts and credits points	1 part, 10.0 Credit Points, 15.0 ECTS credits
Language of instruction	LV, EN, RU, DE
Possibility of distance learning	Not planned
Abstract	The Bachelor Thesis is completed in the Syllabus Heat Power and Thermal Engineering that goes in power industry, heat power branch. The Syllabus Heat Power and Thermal Engineering covers a wide variety of topics: starting with combustibles, the regulation of combustion processes in furnaces and burners; heat utilization: steam, hot water, hot air production; as well as district heating of cities, its design and regulation; cogeneration plants, boiler houses; design, construction and use of district heating points. The applicant acquires the tasks and aims of Latvian power branch in the framework of EU.
Goals and objectives of the course in terms of competences and skills	The main aim of the Bachelor Thesis is to prepare the applicant to be able to solve the current questions and goals of the power branch in the Republic of Latvia with the help of the background knowledge collected during the studies. Among the assignments might be strategic and technical questions.
Recommended literature	1.LR Enerģētikas likums 2.LR Atjaunojamo energoresursu enerģijas likums 3.Visi uz enerģētiku attiecināmie pasaules, ES, Latvijas: likumi direktīvas, noteikumi, standarti. 4.Pasaules Enerģētikas Padomes (WEC) izdotie materiāli, t.sk. konferenču, sapulču, semināru materiāli. 5.RTU zinātnisko rakstu krājumi (kā arī citu nozares konferenču materiāli). 6.Barkans J., Žalostība D. On the Global Climate Change. World Energy Council, RTU Publishing House, R.:2010. 7.Periodiskais izdevums „Enerģētika un Pasaule” 8.Periodiskais izdevums „Enerģētika un automatizācija” 9.RTU un katedras metodiskie norādījumi galā pārbaudījuma darbu noformēšanai.

Learning outcomes and assessment

Learning outcomes	Assessment methods
Ability to work with literature sources and to formulate the assignment of the work in accordance to world achievements in the branch and industry.	The positive review from the supervisor and reviewer on the analysis of literature sources.
The ability to analyze the background of the outlined problem.	The positive review from the supervisor and reviewer on the background of the outlined problem.
The ability to be competent in solving the problem and offer optimal solutions.	The positive review from the supervisor and reviewer on offered solutions of the problem.
The ability to compile solution schemes and complete calculations.	The positive review from the supervisor and reviewer, as well as the decision of the final exam defense commissions valuation of the compiled solution schemes and completed calculations.
The ability to offer a solution for the given project.	The positive review from the supervisor and reviewer, as well as the decision of the final exam defense commissions valuation of the solution for the given project.
The ability in public to defend worked out technologies and solutions at conferences and seminars.	The positive result of the public defense.

Study subject structure

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	10.0	15.0	0.0	0.0	0.0			*